

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

SN	Part	Section	Clause	Original Bid Condition	Bidder's Query	Response
1	P1	II	4.7 (b)	Nomination of one of the Members of the Joint Venture to be in-charge ("Lead member"); and this authorization shall be covered in the Power of Attorney signed by the legally authorized signatories of all Members of Joint Venture.	As per our understanding- Authorised Representative/Signatory of Lead Member can only be the Authorised Signatory of JV/ Consortium. Please confirm if our understanding is correct.	Authorized Representative/Signatory of Lead Member can only be the Authorized Signatory of JV/ Consortium
2	P1	II	ITB 4.1	A Bidder may be a firm that is a single entity or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent.	We kindly request you to clarify the total no of entities allowed for forming JV / Consortium for this bid	Please refer Addendum 2 for revised bid condition.
3	P1	III	2.4.2 (a) Specific Experience	<p>1. Experience in the capacity of Telecom System Integrator (without Specialist subcontractor) either as Single entity or JV member(iv)) OR</p> <p>2. Experience in the capacity of Telecom System Integrator as Specialist Subcontractor(i) must have been substantially(iii) completed between 1st January 2012 and the bid submission deadline, A minimum number of;</p> <p>1. One Telecommunication work involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; of value INR 126 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or</p> <p>2. Two Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 79 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or</p> <p>3. Three Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 63 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work.</p>	<p>Request you to kindly modify the clause as below:</p> <p>1. Experience in the capacity of Telecom System Integrator (without Specialist subcontractor) either as Single entity or JV member(iv)) OR</p> <p>2. Experience in the capacity of Telecom System Integrator as Specialist Subcontractor(i) must have been substantially(iii) completed between 1st January 2012 and the bid submission deadline, A minimum number of;</p> <p>1. One Telecommunication work involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; of value INR 126 110 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or</p> <p>2. Two Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 79 70 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or</p> <p>3. Three Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 63 60 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work.</p>	Tender Condition shall prevail.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

4	P1	III	2.4.2 a	<p>1. Experience in the capacity of Telecom System Integrator (without Specialist subcontractor) either as Single entity or JV member(iv)) OR 2. Experience in the capacity of Telecom System Integrator as Specialist Subcontractor(i) must have been substantially(iii) completed between 1st January 2012 and the bid submission deadline, A minimum number of; 1. One Telecommunication work involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; of value INR 126 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or 2. Two Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 79 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or 3. Three Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 63 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work.</p>	<p>We understand for FOTS, Optical Backbone Fibre/ Bandwidth scope can be considered please confirm</p>	<p>End to end FOTS network scope shall be required i.e. Optical fiber Backbone along with Switching system for Ethernet or SDH network.</p>
5	P1	III	2.4.2 a	<p>1. Experience in the capacity of Telecom System Integrator (without Specialist subcontractor) either as Single entity or JV member(iv)) OR 2. Experience in the capacity of Telecom System Integrator as Specialist Subcontractor(i) must have been substantially(iii) completed between 1st January 2012 and the bid submission deadline, A minimum number of; 1. One Telecommunication work involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; of value INR 126 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or 2. Two Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 79 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or 3. Three Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 63 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work.</p>	<p>We understand for PIDS, for city wide deployments- Variable Message Sign Boards scope can be considered, please confirm.</p>	<p>PIDS with similar features as used in passenger transportation project or with capability to update messages online automatically and manually on real-time basis shall be considered.</p>

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

6	P1	III	2.4.2 a	<p>1. Experience in the capacity of Telecom System Integrator (without Specialist subcontractor) either as Single entity or JV member(iv)) OR 2. Experience in the capacity of Telecom System Integrator as Specialist Subcontractor(i) must have been substantially(iii) completed between 1st January 2012 and the bid submission deadline, A minimum number of; 1. One Telecommunication work involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; of value INR 126 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or 2. Two Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 79 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work. Or 3. Three Telecommunication works involving Design, Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; each of value INR 63 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work.</p> <p>Notes for the Bidder (i) A Specialist Sub-contractor is the one who has executed Design, Supply, Installation, Testing and commissioning of telecommunications works with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS as a turnkey Project. (ii) Summation of number of small value Contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.</p>	We understand the value of works mentioned to be complied is the overall contract value & not specifically for 4 sub-systems, please confirm.	Total value of the works completed by the Bidder in the Contracts which involves at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in their scope of the work, will be considered for Evaluation.
7	P1	III	2.4.2.a	One Telecommunication Supply, Installation, Testing and commissioning in Metro Rail / Mono Rail/ Mainline Railway projects/ Large Infra Projects; of value INR 126 Cr.(ii) or above; with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS, Master Clock in the scope of the work.	We being an Indian subsidiary of a Foreign Company had participated & executed similar works along with our Foreign Parent Company previously. Currently we have participated & successfully executed similar works directly as an independent single entity. To encourage more local participation we request you to allow the Indian subsidiary company to use the experience & credential of its Foreign Parent Company in lieu of the value of the required Tendered Pre-Qualification	Please refer revised bid conditions for 2.3 and 2.4 in Addendum 2
8	P1	III	EQC 1.1.1	The Bidder shall provide details of the proposed personnel and their experience records in Forms PER-1 and PER-2 in Section IV, Bidding Forms.	We understand, all the key personnel whose CV's will be evaluated shall be full-time employees / Contractual employee / OEM employee wherever required of the sole bidder or any member in case of a Consortium. Kindly Confirm	CV's will be evaluated shall be full-time employees / Contractual employee / OEM employee wherever required of the sole bidder or any member in case of a Consortium.
9	P1	III	EQC 2.4.2 (a)	2. Experience in the capacity of Telecom System Integrator as Specialist Subcontractor(i)	We would like to bring to your kind notice that for a single project , both Master System Integrator and its speciality Subcontract shall claim the Experience. Hence Kindly request you to accept the Certificate provided by the End Customer only . Completion Certificate issued by the System Integrator to Specialist Subcontractor shall not be considered for qualification.	Tender condition shall prevail. Specialist Sub-contractor is the one who has executed Design, Supply, Installation, Testing and commissioning of telecommunications works with at least 4 (four) subsystems out of FOTS/MAN, Tetra, PABX, CCTV, PAS, PIDS, ACIDS as a turnkey Project. If the end-user certificate does not mention the Bidder name as a specialist subcontractor, the same can be evidenced through the contract details between the overall integrator and specialist subcontractor fully describing the work scope.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

10	P1	IV	4.2.1 S. No. 4 Pg.No 90	Cost for deputing Supervisory experts in various sub-systems of Telecom for on-the-job training, supervise maintenance & troubleshooting, as per Employer's requirements	Request you to kindly elaborate on the requirement and when is it required to be delivered. Kindly provide reference in Contract for better understanding.	Please refer 4.1.14 (xiii) of Part-1, Section – IV Bidding Forms
11	P1	V	General	nil	Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder/OEM is registered with the Competent Authority. While participating in bid, Bidder or has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.	Restrictions on procurement from a bidder of a country which shares a land border with India is not applicable to this Tender.
12	P2	VI A	5 SITE ACCOMMODATION FOR THE ENGINEER	Office construction shall be from new , durable material. The building shall be weatherproof and well insulated externally and internal walls shall be acoustically lined.	Please confirm the space for Office site is in whose scope and if rented office space can be taken into consideration.	The space for SITE ACCOMMODATION FOR THE ENGINEER is within the scope of this tender. Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.
13	P2	VI A	1. Building Information Modelling (BIM)	1.15 Hardware The Contractor shall provide one (1) set of software license to the Employer to carry review and clash detection analysis of the Coordinated Combined Services model till Completion of Whole Works. The software shall be in accordance with the software format adopted by the Employer's Consultant during the design stage. The specifications of the hardware and software shall be submitted to the Employer for acceptance.	Kindly clarify whether the hardware/workstations for BIM/Primavera/Project Monitoring for use by CMRL shall be designated by CMRL as per 2. Planning, Programme and Progress Monitoring, 2.1.4 The Employer and the Engineer shall designate 3 nos. of each of their computers for installation, by the Contractor at the Contractor's cost, of software programmes that the Contractor intends to use for the design, programming, production of drawings, etc. All software shall be originals and licensed by the manufacturer and issued at the Contractor's cost. Whereas the hardware/workstations for BIM/Primavera/Project Monitoring for use by Telecom Contractor shall be arranged by Contractor. Please confirm.	Hardware/workstations for BIM/Primavera/Project Monitoring for use by the Employer and the Engineer shall be designated by Employer and the Engineer. Whereas the hardware/workstations for BIM/Primavera/Project Monitoring for use by Telecom Contractor shall be arranged by Contractor
14	P2	VI A	10.1 Authentication	PKI-based (strong authentication) shall be implemented based on the environment addressed. For the different core network solutions, some of the following methods shall be used: OTP, token, PKI certificate, smartcard, biometric, machine certificates.	Please elaborate more on smartcard and machine certificates requirement and it's use case	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment. However the Telcom designs and infrastructure (Hardware and Software) supplied under the scope of ASA-05 shall comply to the following standards as minimum i) ISO/IEC 13335. ii) ISO/IEC 27005. iii) ISO/IEC 31000. iv) ISO/IEC 15408. v) ISO 27032. vi) IEC 62443-2 vii) TS 50701-2021 viii) Any other relevant standards The overall Telecom infrastructure shall undergo periodic cyber security audits from Independent agency engaged by the Employer. Please refer revised Bid condition in Addendum 2
15	P2	VI A	10.3 Authorization and Access Control	i. Privileged user access shall be managed with Privileged access management technology.	Please provide the exact number of privileged users to be on boarded in PAM solution	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment. Please refer revised Bid condition in Addendum 2

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

16	P2	VI A	12.3 Rolling Stock On-board Systems	C. The rolling stock systems which are related to the OCN network shall be separated from the rolling stock systems which are related to the SCN network (in terms of hardware, software and infrastructure). The separation between the networks should be based on a Firewall that will establish an encrypted tunnel which will be connected to a DMZ on the OCC side, and from the DMZ, will be securely connected to the relevant network.	Understanding is bidder to provide VPN support from firewall end to ensure encrypted traffic. Is there also PKI based solution consideration to be done.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
17	P2	VI A	13.5 Document format	13.5.5 All documentation supplied electronically shall be suitable for use by the Employer's Project Management Information system. The Contractor shall have the obligation to upgrade, at his own cost, all the relevant software to the latest version upon instruction by the Employer or Engineer, after the new version of the relevant software has been launched for more than six months in Chennai.	Software and other application required to fulfil Contractual conditions will be provided by the Contractor and will remain functional throughout the project life. Any upgradation or migration to new version of the Software or application which will incur additional cost, please confirm.	Please refer added bid condition 6.1.5 in Addendum 2.
18	P2	VI A	2.3	Gartner magic Quadrant referred	Please note gartner magic Quadrant is very Restrictive approach and its avoided by of the RFP in India	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment
19	P2	VI A	4.4.9	"The Contractor shall have ERP/SAP for this Contract Management for all the related activities"	Kindly provide more clarity on the Requirement of ERP/SAP for contractor? We understand this shall be provided by CMRL. Please confirm if our understanding is correct. Also kindly let us know how many user login licenses will be provided by CMRL to contractor. And bidder scope is limited to fill the information in the ERP provided by CMRL. Please confirm if our understanding is correct.	Please refer Addendum 2 for revised bid condition.
20	P2	VI A	6.18	Personal Firewalls shall be installed on Workstations.	Kindly specify the no of Workstations which firewall has to be installed ? . Please add the Firewall requirement in BOQ.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment
21	P2	VI A	8.2	H. "For each layer, the following shall be addressed as part of the ISS: Network segmentation; Demilitarized Zones (DMZ); Intrusion Detection System (IDS); Intrusion Prevention System (IPS); Virtual Private Network (VPN); Firewalls (hardware/software); AV/Anti-malware software; Authentication and password security; Encryption; Sandboxing; Hashing passwords; Timed access control; Logging and auditing; Multi-factor authentication; Vulnerability scanners; Physical security (VSS), Central control (NOC, CSOC, SIEM); Audits and logs, Policies; cyber security procedures, including change management."	We understand all these equipments and systems needs to be installed at OCC/BCC. And as per the RFP the current scope does not include OCC/BCC. So all these systems and cyber security requirements shall be offered by separate contractor. Please confirm if our understanding is correct.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
22	P2	VI A	8.3	Endpoint (data-in-use) agents or clients shall run on internal end-user Workstations and DC servers. End point shall be used to control information flow between groups or types of users.	Kindly specify the no of Workstations which DLP has to be installed ?	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment
23	P2	VI A	Appendix 19 2.8	This document addresses the minimal security considerations and measures in the following areas: a) Authentication and identification b) Authorization and access control c) Network security d) Data security e) Security architecture f) Security administration g) Network devices h) Server, host and end-point security i) Application and database security j) Audit and monitoring k) System availability and continuity l) Physical security	ISS & CYBER SECURITY TECHNICAL REQUIREMENTS are given under Tender No. C4-ASA05. Please clarify do MSI need to consider this requirement in this phase or it will be covered in the separate RFP in the next phase	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

24	P2	VI A	Appendix 19 10.1.	D. Security event logs shall be generated and kept for each device and system and shall be sent to Security Information and Event Management (SIEM) for further analysis, correlation, and evaluation in order to identify and respond to suspicious activity. The event logs shall be kept for a minimal period of 1 (one) year. The proposed SIEM system shall support exporting the SIEM event logs to an external/detachable storage device.	Please confirm the online log retention period?	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
25	P2	VI A	Appendix 19 10.1.	H. SIEM platform shall be implemented for centrally collecting, analysing and correlating generated audit information. The correlation engine shall be capable of generating real time alerts (SMS, email) and reports for detected suspicious events and security violation.	Please confirm the number of locations (e.g. - DC and DR) from where the log will be collected. Do we need to provision hardware and software for all the locations?	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
26	P2	VI A	Appendix 19 10.1.	I. The Physical Security Information Management (PSIM) System and the Incident Management System (IMS) shall be capable of interfacing with the SIEM solution in the Metro System, using standard interfaces such as syslog or equivalent.	Please share the details of PSIM and IMS solution details like - Make and Model etc.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
27	P2	VI A	Appendix 19 10.1.	J. SIEM collectors shall be installed in the operational networks. The unidirectional transmission of the SIEM data shall be secured.	Please clarify the meaning of Operational Network. Are you referring to install collector inside OT environment like - Sensors, Cameras etc.? If Yes, please share details of the field gateway servers e.g. - Make, model, OS etc.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
28	P2	VI A	Appendix 19 10.11.	C. Critical security controls shall be built for resilience and high availability.	Please confirm if the SIEM solution needs to be deployed in HA at all the location (e.g.. - DC and DR). If Yes, do you need HA at all the layers or only for Collection layer?	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
29	P2	VI A	Appendix 19 14.2 Penetration Testing (PT), Subsection -A, Page 339	The Concessionaire shall periodically conduct a PT (multiple testing) in order to assess the capability of an external or an internal hacker to compromise the project systems, network and applications. The PT shall comply with the following requirements: a. PT for critical components of the Chennai Metro – every 12 months. b. PT for non-critical components – every 18 months.	Request to clarify -PT will be conducted by Concessionaire by using its own resources exclusively or contractor/MSI has to arrange the resources for carrying out the PT assessment	Arrangement of resources for carrying out the PT assessment shall not be under scope of this RFP. The Telecommunication system shall undergo periodic cyber security audits from independent agency engaged by the Employer.
30	P2	VI A	Appendix 19 2.4.3	Notwithstanding that security-related risks are not always predictable, and notwithstanding that security-related considerations, means, methods, and/or solutions are constantly developing and evolving, the Concessionaire shall be deemed to have evaluated, assessed, and taken into account all risks and costs associated with complying with its security-related obligations under and pursuant to such procedures and requirements, the Agreement and Law.	Please confirm Concessionaire will be appointed by CMRL. Also, will it be exclusive responsibility of only concessionair to ensure the cyber security requirement such as Designing, monitoring, testing and maintaining or Contractor (MSI) will be responsible to any part of it, please confirm	Concessionaire shall be appointed or nominated by CMRL. All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment
31	P2	VI A	Appendix 19 6.17	Anti-malware, anti-spam, anti-spyware, etc. software shall be installed on all computers.	Kindly specify the no of computers which software(Anti-malware, anti-spam, anti-spyware, etc. software)has to be installed? . Please add the requirement of Anti-malware, anti-spam, anti-spyware in BOQ.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
32	P2	VI A	Appendix 19 6.17	Anti-malware, anti-spam, anti-spyware, etc. software shall be installed on all computers	Single solution can achieve all the requirement. Will it require to propose single solution for all the function asked or separate solution required for each function, , please confirm	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
33	P2	VI A	Appendix 19 8.2 Information and Cyber Security Concept -Defense-In-Depth (DID), Sub section-F, Page no. 310	The Concessionaire shall provide an interface between the Chennai Metro CSOC (HN CSOC's SIEM) and the CMRL SIEM-SOC. The Concessionaire shall provide, operate and maintain a secure communication medium between Chennai Metro's CSOC and the CMRL SIEM-SOC. The communication and solution and interface required the prior approval of TIS and CMRL.	Does Chennai Metro CSOC (HN CSOC's SIEM) is already exist and contractor (MSI) only require to propose SIEM for CMRL or two instances of SIEM need to be propose for each entity, please confirm	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

34	P2	VI A	Appendix 19 8.3 Data Leak Prevention (DLP), Subsection-E, Page 311	DLP shall include data identification techniques, to identify confidential or sensitive structured data in fixed fields within a file or unstructured data, to support content analysis, and contextual analysis	Does Bidder need to consider Data classification tool along with DLP solution to classify data of CMRL, please confirm	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
35	P2	VI A	Appendix 19 8.5.C. Information Security requirements for design outputs Sub section-B, Page 311	Sensitive information shall be stored in encrypted and compartmentalized folders, accessed only by users with access authorizations.	Please clarify, does Bidder need to consider Information Rights Management(IRM) solution to accomplish this requirement	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
36	P2	VI A	Appendix 19 8.5.F. Installation, integration, testing and handover of systems Subsection -a, page 312	The Concessionaire shall fully comply with CMRL's and its Information Security procedures during the installation, integration, testing and handover of the systems, as well as throughout the Term of the Agreement.	Request to clarify, Concessionaire will perform testing by using its own resources or it shall be performed by contractor/MSI and Concessionaire will only supervise, review and approve the test cases	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
37	P2	VI A	Appendix-19	Chapter 14 A-61 IS & CYBER Security Technical Requirements Indicative IS & Cyber security requirements (but not limited to) for entire CMRL phase II systems and is placed as Appendix -19 of this GS document. Contractor shall comply with given Cyber security requirements as applicable to their respective system. As a part of Cyber security requirements, Employer/Engineer will appoint/nominate a Concessionaire (CISO & associates) with whom Contractor shall liaise for receiving further guidelines and instruction and necessary compliance. Contractor shall refer Technical Specification document also for compliance with other additional Cyber security requirement. 7.2 Concessionaire's Cyber Security Professional Team,19-11 B. Additional personnel dedicated to cyber security. The providers of the following systems and disciplines shall each appoint an Information Security lead: a. Rolling Stock. b. Signalling and Train Control. c. Communication and Data Center. C. The areas of responsibility of the above providers' Information Security leads include: a. Managing the Information Security and cyber protection aspects in the providers' offices, to provide and ensure a safe and secure project work environment. b. Implementing the guidelines dealing with the providers' areas of responsibility and reporting to the organizational CISO on a regular basis. c. Managing the design, installation, assimilation and operation of the Information Security System (ISS) components associated with their activity and scope of work D. The qualifications required of the sub-contractors' Information Security leads for the systems mentioned above are: a. A following valid certificates – CISO, CISSP, CISM, CISA, CSSA or equivalent. b. More than 3 (three) years of experience in managing Information	We understand CISO & any related manpower is not applicable to Bidder scope, please confirm	CISO and manpower pertain to Concessionaire shall not be under scope of Telecom Contractor.
38	P2	VI A	APPENDIX-19 10.10 Application Security	10.10 Application Security	Please add Application Security solution in BOQ list.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

39	P2	VI A	APPENDIX-19 10.10 Application Security B. Monitoring	H. SIEM platform shall be implemented for centrally collecting, analyzing and correlating generated audit information. The correlation engine shall be capable of generating real time alerts (SMS, email) and reports for detected suspicions events and security violation.	Please add siem solution in BOQ list.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
40	P2	VI A	APPENDIX-19 10.1 Authentication /10.2 Identification/10.3 Authorization and Access Control	10.1 Authentication /10.2 Identification/10.3 Authorization and Access Control	Please add the IDAM requirement in BOQ.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
41	P2	VI A	APPENDIX-19 10.3 Authorization and Access Control	i. Privileged user access shall be managed with Privileged access management technology	Kindly specify the no of Privileged user count for this requirement ?	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
42	P2	VI A	APPENDIX-19 10.4 Network Security	A. Firewall – Firewall devices capable of traffic stateful inspection and certified for ISO 15408 shall be implemented. The Firewalls shall support traffic separation at interface level, through IEEE 802.1Q VLAN, for logical network partitioning, policy and management separation.	Please add Firewall solution in BOQ list. Kindly specify the no of quantity in detail/HA requirement.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
43	P2	VI A	APPENDIX-19 10.4 Network Security	C. An Intrusion Prevention System (IPS) and an Intrusion Detection System (IDS) (internally) shall be deployed both externally and internally to the firewall technology implemented, protecting the network environments. The proposed IPS/IDS systems shall support signature-based, anomaly-based and stateful protocol analysis.	Please add IPS & IDS solutions in BOQ list. Kindly specify the no of quantity in detail.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
44	P2	VI A	APPENDIX-19 10.4 Network Security	D. Network Application Firewall – Malicious code protection based on network application firewalling (e.g., content filtering technologies, application gateway firewalls) shall be implemented at the relevant interfaces as described in the following Reference Architecture and information flow Diagram.	Please add WAF solutions in BOQ list. Kindly specify the no of quantity in detail.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
45	P2	VI A	APPENDIX-19 10.4 Network Security	H.NAC – NAC or equivalent system shall be implemented on every network in the CBN. NAC shall ensure that only the required and approved network connections are allowed. In addition, updated industry standard protocols, encryption mechanisms, mutual authentication and credential protection shall be used.	Please add NAC solutions in BOQ list. Kindly specify the no of quantity in detail/HA requirement	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
46	P2	VI A	APPENDIX-19 10.4 Network Security	i.VoIP Security – the proposed VoIP security solution shall follow industry best practices for VoIP security.	Please add VoIP security solution in BOQ list. Kindly specify the no of quantity in detail	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
47	P2	VI A	APPENDIX-19 10.9 Server, Host and End-point Security	B. ISS shall incorporate EDR technology (Endpoint Detection and Response) and EPP capabilities, including host Firewall, device control configuration management, disk encryption and Host based IPS, to meet the need for continuous monitoring of and response to advanced threats.	Please add Endpoint Detection and Response solution in BOQ list. Kindly specify the no of quantity in detail	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
48	P2	VI A	APPENDIX-19 10.9 Server, Host and End-point Security	h. An AAA mechanism shall be defined for access purposes, user identification and authentication.	Please add AAA solution in BOQ list.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
49	P2	VI A	APPENDIX-19 8.3 Data Leak Prevention (DLP)	DLP technology shall be examined based on the criticality level of the information and data that reside in each of the networks. B. The ISS shall implement and deploy strong DLP technology products. C. DLP shall pertain to the CBN (data-in-motion) analysis of data traffic, to detect sensitive data sent in violation of Information Security policies. DLP shall be centralized, with distributed agents. D. Endpoint (data-in-use) agents or clients shall run on internal end-user Workstations and DC servers. End point shall be used to control information flow between groups or types of users.	Please add DLP solution in BOQ list. Kindly specify the no of Workstations in detail.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

50	P2	VI A	APPENDIX-19 8.5.D. Information Security for sensitive technical documents	Access to the server shall be based on access authorizations, and server folders shall be encrypted in accordance with the documents' security classification.	Kindly elaborate more on authorizations/IDAM requirement in detail. And add the IDAM requirement in BOQ.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
51	P2	VI A	APPENDIX-19 9.2 Potential Risk Types	Threat prevention and management shall pertain to all known threats at the time of delivery such as the following: Access rate control; Authentication bypass; ARP poisoning; Broken access control; Brute force login; Buffer overflows; Cross site scripting; Cross site request; Denial of Service (DoS); Data Loss Prevention (DLP); Distributed Denial of Service (DDoS); Directory traversal; DHCP spoofing; DNS poisoning; Forms tampering; Hidden field manipulation; Session hijacking; SQL injection; Site reconnaissance; Schema poisoning; XML parameter tampering; WSDL scanning.	Please add the Threat prevention and management requirement in BOQ.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
52	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	Kindly let us know how many applications will be integrated with Identity and Access Management solution for Single Sign-On (SSO) functionality?	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
53	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	Total number of expected users for Identity and Access Management Solution and expected YoY growth.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
54	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	In each application which will be integrated with IAM, expected user base per application?	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
55	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	Please confirm the applications Type (Web/ Thick Client/Thin Client) which will be integrated for SSO	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
56	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	What will be YoY expected growth in user base per application wise?	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
57	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	What is the Directory used (like open LDAP, MS AD etc.)	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
58	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	Whether newly joined user's will be first on boarded on IAM or respective client application	Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.
59	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	Whether any external users (like vendors, citizens, etc.) need to access the applications through SSO?	Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.
60	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	Please confirm the number of environments required for this project such as (DC, DR, UAT, and SIT etc.). Also, whether HA is required in the Production and DR site kindly confirm	Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.
61	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	Is there any homegrown applications that have to be integrated with IAM. If yes, does the client has a development team for integration in homegrown applications	Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.
62	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	General	Please confirm the required authentication modes (password/OTP/DSC etc.) for this project.	Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

63	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	PAM Component	Please provide the device counts.	Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.
64	P2	VI A	APPENDIX-19 ISS & CYBER SECURITY TECHNICAL REQUIREMENTS	PAM Component	Please provide the type of devices.	Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.
65	P2	VI B	1.0.	General : FOTS	Scope with respect to Station Workstation, Monitor, KVM extender, preview speaker (PAS/PIDS) for station controller for CCTV, ACS & PAS/PIDS is not clear. Kindly provide more clarity on the scope of the same. Also clearly outline which contractor will offer which system as part of the project requirements.	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
66	P2	VI B	1.0.	General	System OEM/bidder service requirements are not required as they are not providing software, hence their supervision is required only for installation. Please confirm if our understanding is correct.	Bidders understanding is not correct. ASA 06 Contractor shall provide training and will only do the testing (PAT, SAT & Integrated tests of ISMS, PIS, FOTS, Telecom Scada, CDRS) and commissioning at first 2 stations and rest of the stations testing, installation and commissioning shall be done by ASA 05 Contractor by his own resources. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
67	P2	VI B	1.0.	General	Commissioning of installed equipment is not in the scope of the RFP. As software for all the package shall be provided by other contractor. Please confirm if our understanding is correct.	Bidders understanding is not correct. ASA 06 Contractor shall provide training and will only do the testing (PAT, SAT & Integrated tests of ISMS, PIS, FOTS, Telecom Scada, CDRS) and commissioning at first 2 stations and rest of the stations testing, installation and commissioning shall be done by ASA 05 Contractor by his own resources. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
68	P2	VI B	1.0.	General	As software and functions are not being provided by ASA-05 hence only installation testing will be performed by ASA-05, No clarity on Partial acceptance test (local level location software testing), System Acceptance Test (Includes OCC & BCC) & Integrated testing & commissioning for systems.	Bidders understanding is not correct. ASA 06 Contractor shall provide training and will only do the testing (PAT, SAT & Integrated tests of ISMS, PIS, FOTS, Telecom Scada, CDRS) and commissioning at first 2 stations and rest of the stations testing, installation and commissioning shall be done by ASA 05 Contractor by his own resources. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
69	P2	VI B	1.0.	General	Kindly provide detail with respect to cabling for Video wall . Eg. No. of cables, type of cables (HDMI, etc.) distance from controller to display etc.	Video wall is not under scope of this tender. Please refer revised bid condition 1.6.5.1 in addendum 2.
70	P2	VI B	1.0.	General	As software and functions are not being provided by ASA-05 hence only installation testing will be performed by ASA-05, No clarity on Partial acceptance test (local level location software testing), System Acceptance Test (Includes OCC & BCC) & Integrated testing & commissioning for systems. Please confirm if our understanding is correct.	Bidders understanding is not correct. ASA 06 Contractor shall provide training and will only do the testing (PAT, SAT & Integrated tests of ISMS, PIS, FOTS, Telecom Scada, CDRS) and commissioning at first 2 stations and rest of the stations testing, installation and commissioning shall be done by ASA 05 Contractor by his own resources. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
71	P2	VI B	1.0.	General	We understand the required internet /MPLS bandwidth for the Video Conferencing unit and PRI lines shall be provided by client . Please confirm if our understanding is correct	The required internet /MPLS bandwidth for the Videoconferencing unit and PRI lines shall be provided by client at OCC/BCC. The OAIT network shall facilitate the end point connections.
72	P2	VI B	1.0.	General	We understand NMS shall be installed at OCC/BCC so same shall be provided by separate contractor. Please confirm if our understanding is correct.	Please follow tender conditions and for more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
73	P2	VI B	1.0.	Design spare capacity	Any spare capacity to be considered during design? Is it to be on total capacity or station wise ?	Spare capacity shall be based on final approved design. It shall be total capacity
74	P2	VI B	1.0.0		Please share CAD layouts.	Please refer Annexure A - STATION AND DEPOT BUILDING DRAWINGS for sample station CAD layouts in Addendum 2.

Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022

75	P2	VI B	1.1	APPENDIX – D FOTS : Laptop with network Management software	We understand contractor of ASA05 scope do not include provision of network Management software. So we have to only provide laptop while the network Management software software shall be installed and provided by others. Please confirm if our understanding is correct.	Laptop shall be provided with required applicable software for system maintenance activities which shall be provided by this Contractor. Software applications which are under scope of other (OCC/BCC) Contractor need not to be provided by this contractor. Please follow tender conditions and for more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
76	P2	VI B	1.10, 1.11	1.10 Proof of Concept, 1.11 Integrated Test, Training and Repair Facility	The items/equipment provided should be a part of BoQ. Please confirm.	The Bid price is inclusive of Proof of Concept, Integrated Test, Training and Repair Facility” Please refer clauses 1.10.1, 13.21.1.2, additionally added clause 13.21.1.3, 1.11.2 (d) and updated 14 APPENDIX G for details. Please refer Addendum 2 for revised bid condition.
77	P2	VI B	1.10.	Proof of Concept	We understand POC is required only for those equipment for which satisfactory performance / provenness certificate has not been submitted in the Bid. Please confirm if our understanding is correct.	Contractor shall perform POC as per the clause 1.10.1.
78	P2	VI B	1.10.1	Proof of concept setup onsite	Possibility of demonstrating Proof of concept offsite please clarify	POC location shall be agreed mutually. In case of any disagreement in location, Employer decision shall be final.
79	P2	VI B	1.14.1.20	Interior of cabinets or boxes, all exposed screws shall be Stainless steel flat or oval head.	Please explain in brief on the boxes which you have mentioned in this clause.	Please refer revised bid condition in Addendum 2
80	P2	VI B	1.14.1.24	All cable laying, cable termination, containment laying, fixture and equipment installation to be done as per approved method statements. CAT 6A STP Cable shall comply with all standards of structural cabling.	We shall design & offer Cat6 cables as per the clause 8.3.1.4.5, since there is a contradiction under this Clause & Also Clause no. 8.1.1.1, Clause no. 9.4.4 as it is mentioned as Cat6A & CAT6E respectively. Kindly confirm.	Please refer revised bid condition in Addendum 2.
81	P2	VI B	1.14.6.4 In Elevated / At-Grade Sections, in case Optic Fiber cable is laid on the viaduct in the cable duct, then the Contractor shall provide it in a rugged “permanently solid lubricated” HDPE telecom duct of minimum diameter of 40 mm (Outer) / 33 mm (Inner) with material characteristic as per TEC Specifications along with the accessories. HDPE Telecom duct as per TEC specifications shall be buried at a depth of 1.2 meters in the At Grade Sections or properly laid over Cable Hangers / Trenches and suitably supported / fixed on Elevated Sections (where the duct is not available).	This clause is contradicting with the Clause No. 1.14.6.1, kindly clarify the scope of HDPE duct works.	Please refer revised bid condition in Addendum 2.
82	P2	VI B	Appendix B 1.2.13 13.	1.2.13 13.The VMS platform must have Indian certification from agency like STQC or International agency like UL with valid Cyber Security certification under the Physical Security and emergency communication category.	Please remove	VMS is not under scope of this tender. Appendix B is included for reference purpose.
83	P2	VI B	Appendix B 1.2.13 14	The VMS platform must be an ISO27001 certified.	Please remove	VMS is not under scope of this tender. Appendix B is included for reference purpose.
84	P2	VI B	1.2.33	1.2.33 The system shall support multicasting of video feeds to client workstations in order to conserve network resources. Multicasting shall send a single stream of video to multiple clients, where the stream may be decoded and displayed on all clients simultaneously. While the camera(s) is (are) communicated on a pre-configured protocol, it shall be possible to manually switch to unicast/multicast features to ensure stability of video stream. The OEM shall provide the Software Development Kit for smooth integration of CCTV system with other telecommunication systems specified in this technical Specification.	The system shall support multicasting of video feeds to client workstations in order to conserve network resources. Multicasting shall send a single stream of video to multiple clients, where the stream may be decoded and displayed on all clients simultaneously. While the camera(s) is (are) communicated on a pre-configured protocol, it shall be possible to manually switch to unicast/multicast features to ensure stability of video stream.. The OEM shall provide the necessary support like SDK,API or other industry standard or custom development for smooth integration of CCTV system with other telecommunication systems specified in this technical specification This will ensure more choice of integration to meet functional requirement and all reduce cost	The CCTV system shall comply the ONVIF requirements. The OEM shall provide the necessary support like SDK, API or other industry standard for smooth integration of CCTV system with other telecommunication systems specified in this technical specification The detailed interface responsibilities are updated. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
85	P2	VI B	1.2.6	The VMS Application shall be capable to handle both IP v4 and IP v6 Unicast and Multicast traffic with both PIM - SM and PIM - DM support.	Please remove traffic with both PIM - SM and PIM - DM support.	VMS is not under scope of this tender. Appendix B is included for reference purpose.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

86	P2	VI B	1.4 (m) Key Challenges for Telecommunication systems	3) ASA 06 - Design, Manufacture, Supply, Installation, Testing and Commissioning of Telecommunication System for CMRL Phase II - Corridor3(Sholinganallur to SIPCOT 2) & Corridor 5 (From CMBT to Sholinganallur) including OCC & BCC	Please confirm our understanding that ASA 05 Contractor to supply sub-system wise NMS for corridor 4, whereas supply of centralised NMS / AAA / T-SCADA / P-SCADA / F-SCADA / IBMS for Phase-2 Corridors 3, 4 and 5 shall be the scope of ASA 06 Contractor.	ASA-05 contractor shall supply the NMS software for the Hardware supplied under ASA-05 contract. Please refer system wise chapters of tender document for respective NMS requirements. Common centralized NMS & Centralized T-SCADA for OCC/BCC shall be under scope of other designated OCC/BCC Contractor. Also, P-SCADA/F-SCADA/IBMS shall not be part of ASA 05 tender. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
87	P2	VI B	1.4.m	OCC & BCC shall be common for for all three corridors of CMRL phase II i.e. Corridor 3,4 & 5.OCC shall be located at Koyembedu and BCC shall be located at Nandanam.	Need detail scope of OCC & BCC with proper details.	Tender document covers all requirement for interfacing and integration with OCC/BCC. Please refer all chapters, Appendices of document. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
88	P2	VI B	1.4.m	Telecommunication system shall be required for having interface by using open standards, protocols API'S and SDK's for successful integration	Detailed Integration Scope at Central Level.	Tender document covers all requirement for interfacing and integration with OCC/BCC. Please refer all chapters, Appendices of document. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
89	P2	VI B	1.4.m. Key Challenges for Telecommunication systems)	ASA 05- Design, Manufacture, Supply, Installation, Testing and Commissioning of Telecommunication System for CMRL Phase II- Corridor 4 (Lighthouse to Poonamalle Bypass) including Poonamalle Depot	It is assumes ASA 5 has no role in OCC/BCCC end applications and its integrations to station systems. In this case how station level design and integration would happen with central systems.	Tender document covers all requirement for interfacing and integration with OCC/BCC. Please refer all chapters, Appendices of document. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
90	P2	VI B	1.4.m. Key Challenges for Telecommunication systems)	For smooth interface and integration, Majority of OCC and BCC requirement including central system management solution requirement is planned to be in scope of ASA 06 for successful integration of security Management system(cctv & acids).PIS(PAS/PIDS),Telephone. OCC/BCC FOTS Core requirements,CDRS,Telecom SCADA etc. ASA 05 & ASA 08 scope is planned to provide all Telecom system at stations and depot of respective packages including part of system required for successful interface with OCC,BCC for Central Core and management solutions as defined in this TS document.	Need clarity on how two separate systems 1) One at OCC/BCC end in control of ASA 6 will work in coordination with 2) Station Level systems which may be from different OEM/Manufacturer	Tender document covers all requirement for interfacing and integration with OCC/BCC. Please refer all chapters, Appendices of document. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
91	P2	VI B	1.6.3.2 (b)	Design, Supply, and Installation of Base Frame, under False Floor Cable Trays with required risers for wall mounted units in TER of Stations/ Depot and under false floor cable trays in SCR.	We shall be providing only the cable trays required for our systems in the TER, SCR of stations and not be providing the Base Frame, False flooring, etc. The base frame & false flooring shall be provided by Civil Contractor, please confirm.	Base frame is for the cubicles, racks or any floor mounted cabinets supplied under ASA-05 package. False flooring shall be provided by Civil Contractor
92	P2	VI B	1.6.3.4	Once Permanent OCC is made available for installation and commissioning of systems, Telecom Contractor shall interface with designated OCC/BCC Contractor for remobilizing all equipment from temporary OCC to permanent OCC without any disruption to services in priority section and without any extra cost to CMRL.	Kindly mention the location of temporary OCC.	Please refer Addendum 1 for revised bid condition.
93	P2	VI B	1.6.3.4	1.6.3.4 In The Priority Section, Telecom Contractor shall interface with OCC/BCC designated contractor to establish temporary OCC (with full functionality) and associated central control sub systems / servers, work station, client terminals ,consoles, MS , dispatchers , control panels and interfaces along with stations' Telecom Sub systems as mentioned in relevant GS & PS . Telecom contractor to install, commission and configure all functionalities as per specifications and offer acceptance tests for validation as per approved test procedures. Once Permanent OCC is made available for installation and commissioning of systems, Telecom Contractor shall interface with designated OCC/BCC Contractor for remobilizing all equipment from temporary OCC to permanent OCC without any disruption to services in priority section and without any extra cost to CMRL	Information provided about the creation of temporary OCC and shifting of hardware to permanent OCC when it will be available. But no information available for BCC, please confirm whether a temporary BCC shall also be created ?	Please refer Addendum 1 for revised bid condition.
94	P2	VI B	1.6.3.4	Once Permanent OCC is made available for installation and commissioning of systems, Telecom Contractor shall interface with designated OCC/BCC Contractor for remobilizing all equipment from temporary OCC to permanent OCC without any disruption to services in priority section and without any extra cost to CMRL.	Timeline for Temporary OCC,Sizing details with details of it will remain as Temporary.	Please refer Addendum 1 for revised bid condition.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

95	P2	VI B	1.6.3.4	In The Priority Section, Telecom Contractor shall interface with OCC/BCC designated contractor to establish temporary OCC (with full functionality) and associated central control sub systems / servers, work station, client terminals, consoles, MS , dispatchers , control panels and interfaces along with stations' Telecom Sub systems as mentioned in relevant GS & PS	Clarity on Dispatcher requirement as RADIO system is not included.	Please refer Addendum 1 for revised bid condition.
96	P2	VI B	1.6.3.4	In The Priority Section, Telecom Contractor shall interface with OCC/BCC designated contractor to establish temporary OCC (with full functionality) and associated central control sub systems / servers, work station, client terminals ,consoles, MS , dispatchers , control panels and interfaces along with stations' Telecom Sub systems as mentioned in relevant GS & PS . Telecom contractor to install, commission and configure all functionalities as per specifications and offer acceptance tests for validation as per approved test procedures. Once Permanent OCC is made available for installation and commissioning of systems, Telecom Contractor shall interface with designated OCC/BCC Contractor for remobilizing all equipment from temporary OCC to permanent OCC without any disruption to services in priority section and without any extra cost to CMRL.	Please suggest as there is no central level hardware and software in OCC/BCC are in this RFP scope then what telecom contractor need to commission and interface with the other OCC/BCC designated contractor to setup the temporary OCC and shifting of hardware to Permanent OCC/BCC.	Please refer revised bid condition 1.6.3.4 in Addendum 1. Also refer all chapters, Appendices of document. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
97	P2	VI B	1.6.5.1	Telecom Contractor will lay all kind of data cable, OFC and power cable or any other cable required for telecom equipments, third party telecom interfaces and for functioning of video wall, however supply of videowall shall not be under scope of this RFP.	Clarity on Cabling of the Video wall systems along with requirement for each stations.	Please refer Addendum 2 for revised bid condition.
98	P2	VI B	1.6.5.2As per technical requirement mentioned in GS & PS all the Telecom sub systems' Servers, controllers, consoles, HMIs, NMS work stations, Client Terminals, telecom equipments, end devices, licenses, software, firm ware, switching & processing capacity, and corresponding interfaces provisioned for OCC, same shall be replicated in BCC .	1.We understand that the HMI such as PC / Workstation for station level & its application software shall not be in scope of this RFP and shall be provided by OCC/BCC Contractor. Please confirm. 2.Without knowing the hardware specifications for the HMI, which is required for the OCC/BCC contractor. If it is going to be provided as a part of this RFP, we will have reliability issues between two different contractors. 3.Alternativley please provide the hardware specifications requirement for the same.	1. The hardware and software for all Telecommunication systems for C4 corridor stations and Depots are under the scope of this contract except for those which are specifically excluded as per tender requirements. For more details, please refer Respective chapters, Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3. 2. Please follow the tender conditions for HMI hardware. 3. Please refer Chapter 10 'HMI, Servers & Workstations' for detailed HMI specifications. Please refer revised bid condition 10.7.3 in Addendum 1 for revised HMI specifications.
99	P2	VI B	1.6.7	The Contractor will be provided a space at suitable place for Contractor to set up its Site office cum Storage shed / building for storage of telecom equipment and material.	Clause- -9.1 Material and Equipment Storage (Page-A-26 of Part 2 - Section VI A Employer's Requirements) is contradicting to the subjected clause as quoted here "The Contractor shall provide and maintain acceptable storage facilities exclusively for the CMRL Phase 2 Permanent Works, equipment and materials of all kinds intended for use in carrying out the Works or for incorporation into the Works. Contractor." Please clarify the scope for space for storage.	Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.
100	P2	VI B	1.6.7	The Contractor will be provided a space at suitable place for Contractor to set up its Site office cum Storage shed / building for storage of telecom equipment and material	MSI will not be liable to give premises if land allocation is not there within timelines/Need clarity on time required for land Allocation.	Please refer Addendum 2 for revised bid condition 1.6.7 & 1.6.7.1.
101	P2	VI B	1.7.1.5 1.7 Performance Requirements	1.7.1.5 Single Point of Failure Telecom Contractor shall propose for all the sub system, a design and topology without any single point of failure. Redundancy at every level have to be maintained.	Is this applicable for the end systems connected to stations.Please clarify.	This is applicable for systems connected up to station level including TER, SCR, Switch Cabinets etc. This is not applicable for the end equipment like Telephone, Display, Speaker etc.
102	P2	VI B	1.7.3 Availability Requirements	Detailed availability requirements are given below: Table 1.3: Availability Requirements	Penalties in case of non availability/ downtime of sub-system or breach is not properly defined. Request to clarify the same during bidding stage. Also, CMRL is requested to limit the liability/Penalty in case of SLA breach, that shall be applicable on Bidder.	Please refer clause 8.7,11 of Part 3 Particular Conditions
103	P2	VI B	1.7.4.15	Alarms, health status & displays generated by the System shall be shown locally, as well as at remote location in OCC & BCC.	Please clarify on the location meaning locally & remote location in OCC & BCC. If in OCC & BCC, whether it is part of this RFP.	OCC/BCC HMI's for Controllers are not in scope of this contractor, however all alarms, Health status and Displays shall be transferred to OCC/BCC by providing FOTS network for Corridor 4 and interfacing it with FOTS network of OCC & BCC. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

104	P2	VI B	1.9 Design Requirements	1.9.8.4 All MMIs in the SCR, Security room, shall be extended through Line Extenders from their respective Severs / PCs / Workstations kept in the TERs/CERs.	We are unable to locate the MMI provision schedule for Telecom Systems in the Bidding Documents. Request is being made to kindly issue the same with following minimum details: Location, Position, Workstation / Control Panel Type, Quantity, Supply Contractor (i.e. ASA 05 / ASA 06 / Other Contractor)	Tender is based on Design and built requirement. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
105	P2	VI B	1.9.3	Design review	Design review timeline mentioning is expected to avoid delays in design part	Query not clear. Please follow tender conditions.
106	P2	VI B	1.9.8.4	All MMIs in the SCR, Security room, shall be extended through Line Extenders from their respective Severs / PCs / Workstations kept in the TERs/CERs.	As per this clause instead of keeping the PCs / Workstations / Servers in the TER / CER, we suggest placing the MMIs in the SCR / Security room directly.This avoids failure point (KVM switch/ KVM Extender) and provide better RAMS. Kindly confirm.	Please refer Addendum 2 for revised bid condition.
107	P2	VI B	10.1.	General Workstations, servers and laptops will be required for the following: (a) Operational HMIs for various operational & maintenance staff. (b) Network Management System with Management software for different subsystems (c) Element Control / Local Craft Terminal (LCT)	Request to share the detailed technical specifications and minimum quantities of Servers, HMI for each telecom system	Please refer Chapter 10 'HMI, Servers & Workstations' for detailed HMI specifications. Please refer revised bid condition 10.7.3 in Addendum 1 for revised HMI specifications
108	P2	VI B	10.3.11	Video management software	Please note RFP part 2 section VI B 4.1.5.1.3where is mention VMS server is not part of the RFP , Please clarify 10.3.11 section whoes responsibility ?	Please refer Chapter 4, 5, Chapter 12, Chapter 13 and reference Appendix B of Technical specification for detailed functional and interface requirements. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
109	P2	VI B	10.3.2.5	In the Maintenance Centre, workstations shall host the network management software for individual sub-systems. Every NMS workstation shall be provided by other designated Telecom Contractor equipped with high-resolution colour graphics display, keyboard, pointing device and display monitor.	There is contradiction in the clause. It says that NMS workstation shall be provided by other designated Telecom Contractor. Kindly clarify whether supply of NMS Hardware is in current bid scope or under OCC/BCC contractor scope.	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
110	P2	VI B	10.3.6	Data Transmission System Management Software	Kindly confirm whether bidder has to provision for NMS Software or only provide integration support to OCC/BCC Contractor	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
111	P2	VI B	10.3.7.2	Shall be integrated with OCC/BCC Management software which shall be provided by other Designated Telecom Contractor. Contractor shall interface on open API's for successful integration.	The telephone system shall support the same OEM NMS, generally it doesn't integrate with other OEM NMS, we request you to kindly amend the same.	Please refer addendum 2 for additional bid conditions
112	P2	VI B	10.3.7.2	Shall be integrated with OCC/BCC Management software which shall be provided by other Designated Telecom Contractor. Contractor shall interface on open API's for successful integration.	The telephone system shall support the same OEM NMS, it cannot integrate with other, we request you to kindly amned the same.	Please refer Addendum 2 for additional bid condition.
113	P2	VI B	10.3.9.1	The PA system shall be controlled and managed remotely from the Stand alone software.	Kindly confirm whether bidder has to provision for NMS Software or only provide integration support to OCC/BCC Contractor	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3. Contractor shall supply Configuration and management software for the PAS system supplied under the scope of ASA-05. Further ASA-05 Contractor shall be required to integrate with PIDS/PA application and TSCADA supplied by ASA-06 for operational requirements and integration of alarms respectively.
114	P2	VI B	11.2.1.1	In addition to the requirements specified in FOTS chapter of this PS, following specifications shall be complied with by Optical Fiber Cables for Underground Section used inside the tunnel, if any. For the Elevated/At-Grade Section and for any Optical Fiber Cable being laid outside the station limits and which is either buried under the earth or is laid on the via-duct, the Specifications shall be in accordance with the armored OFC TEC/RDSO specifications no. IRS TC/55:2006 with latest amendments. The Contractor shall get these cables inspected from RDSO /TEC and all cost of inspection shall be borne by the Contractor.	Cable as per IRS TC/55:2006 is with HDPE sheath and shall not meet Fire and Smoke requirements. The cable should be complied with LSZH material. Hence, as per our understanding, instead of IRS TC/55: 2006, specifications as laid down herein shall be complied and Inspection testing shall be carried out by Third Party inspection agency and Not by RDSO/TEC. Kindly confirm if our understanding is correct.	Tender condition shall prevail. For the Elevated/At-Grade Section and for any Optical Fiber Cable being laid outside the station limits and which is either buried under the earth or is laid on the via-duct, the Specifications shall be in accordance with the armored OFC TEC/RDSO specifications no. IRS TC/55:2006 with latest amendments. The cables for installation in underground/tunnel areas shall be manufactured from fire retardant/ resistant, low smoke, zero halogen materials. (FRLSOH) Please refer revised bid condition 11.2.1.8 in Addendum 2
115	P2	VI B	11.2.1.4	Optical Requirements–Multi Mode Fiber	Kindly verify that specifications given in clause 11.2.1.3 and 11.2.1.4 are of Single mode fiber. However clause 11.2.1.4 is meant for multi mode fiber. Kindly confirm and share the specification for Multi Mode Fiber.	Please refer revised bid condition 11.2.1.4 in Addendum 1
116	P2	VI B	11.2.1.8	The thickness of stainless steel tape to alloy AISI 304 or 305 shall not be less than 0.125 mm. The height of the corrugation shall be minimum 0.6mm and the pitch shall be 2.5 mm maximum. Outer jacket of 1.8 mm minimum thickness HDPE shall be provided over the steel tape throughout the length of the cable.	Since HDPE is not flame retardant material, Intermediate LSZH sheath shall be provided to comply IEC 60332-1 & IEC 60332-3 Cat C requirements. Kindly confirm.	Please refer revised bid condition in Addendum 2.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

117	P2	VI B	11.7.2	RS232 connectivity cable& software	Request to amend the clause as RS232 connectivity or USB Connectivity for wider OEM participation	Please refer revised bid condition 11.7.2 in addendum 1
118	P2	VI B	11.7.3	Buttons: LCD touch-screen, Single momentary contact push button	Request to generalize the clause for wider OEM participation	Please refer Addendum 2 for revised bid condition.
119	P2	VI B	11.7.3	Remote Identifier 2000 ft.(609.6 m) max distance	Request to amend it to 1500 ft, for wider OEM participation	Please refer revised bid condition in Addendum 2.
120	P2	VI B	11.7.4	Output Power -4.0 dBm	Request to amend the specification with output power range for wider OEM participation	Please refer revised bid condition in Addendum 2.
121	P2	VI B	11.7.4	Output Stability +/- 0.05dB after 15 mins,+/-0.03dB after 1 hour warm-up	Kindly validate and amend the specification, generally stability will be better in short term	Please refer revised bid condition in Addendum 2.
122	P2	VI B	11.7.6	Visual Fault Locator In-Built,3mW,650nm	In general Visual Fault Locator In-Built o/p power around 1mW 650nm, please amend the clause for wider OEM participation	Please refer revised bid condition in Addendum 2.
123	P2	VI B	11.7.6	Fiber Analysis Software Version 3.2	Request to generalize the clause for wider OEM participation	Please refer revised bid condition in Addendum 2.
124	P2	VI B	12.11.1.4 External interfaces	12.11.1.4 External interfaces 12.11.1.4.1 The external interface with T-SCADA is the following: UPS (Interfacing has to be done with MEP Contractor). Telecom contractor shall supply and install all required cables and equipments at stations, depot RSS etc. for smooth integration of station and depot system to OCC/BCC Telecom SCADA. 12.11.1.4.2 T-SCADA operators shall monitor the faults that occur at the UPS/SMPS through this interface. To receive all faults from this interface, T-SCADA has first to establish a connection with UPS. After the connection is established, UPS shall send information about the occurred fault to T-SCADA through protocol viz. MODBUS. (Require info from MEP)	1) Kindly confirm if Telecom Contractor has to provision switch ports to connect with the UPS. 1.1) If yes, Kindly confirm the location and number of UPS to determine the number of ports in the switches at that location. 1.2) As per understanding the interface to connect with UPS will be standard Ethernet Copper interface. Kindly confirm	Please refer revised bid condition in Addendum 2.
125	P2	VI B	12.6.1.11.1	The Radio system shall interface with the Telephone system to permit selected Hand- portable radios to initiate radio-to-telephone calls and vice versa without the intervention OCC and also for Radio to PAS call through EPABX link.	How many switch ports required for integration? Whether it is Ethernet ports? Please confirm	Shall be finalized during design stage. Please revised bid condition in Addendum 2.
126	P2	VI B	13.16.6	S&TC Contractor shall provide necessary inputs of signalling equipments (point machines,ESP etc) to be covered by CCTV Cameras	Bidder will require at least some tentative quantities of CCTV Cameras required to meet this interface requirements. Kindly provide the BoQ accordingly.	This tender is based on Design and Built. Bidders need to propose quantities for complying all tender requirements.
127	P2	VI B	2.1.12	2.1.12 This is Telecom Contractor's responsibility to interface with S&TC Contractor to realize integrated PAS / PIDS information for scenario based train movement e.g. bunching of Trains, Bi-directional Train Movement, short loop train movement, Non Stopping Trains, intermediate station as terminal station etc. The details shall be finalized during detailed design / interface design	As per TS clause 2.1.6 and 2.1.7, if the Central and Station management software in other contractor scope then the interface with the S&TC contractor shall also be scope of other contractor. It is requested to kindly accept the changes in clause 2.1.6 , 2.1.7 and include the Central and Station Management software as part of this contract scope.	Please refer Addendum 2 for revised clause 2.1.6, 2.1.7, 13.21.1.2 and additionally added clause 13.21.1.3.
128	P2	VI B	2.1.6	OCC & BCC PAS/PIDS and its application software shall not be in scope of this RFP and shall be provided by other Contractor	From the clause given in the RFP we understand bidders scope for the PIDS is limited to supply and installation of "Display + Cabling required at the station " While all front end application software and related hardware such as servers , OS, DB workstation at station & depot and any other related equipments shall be provided by other contractors. Similarly for Public address system too bidders scope for PAS is limited to supply and installation of "Speakers, Amplifier+zone controllers+ call station+ Cabling required at the station " While all front end application software and related hardware such as servers , OS, DB workstation at station & depot and any other related equipments shall be provided by other contractors. Please confirm if our understanding is correct	Please refer revised bid condition in Addendum 2. Hardware HMI's, Corridor Server and Passenger information Displays for Stations and Depot including licensed windows OS shall be under scope of this contractor. These Hardware shall support the functionalities of PIDS/PA application supplied by the OCC/BCC Contractor. Similarly, ASA-05 contractor shall supply PAVA hardware with capability to store, record and dispatch the audio based on the commands from PIDS/PA HMI. ASA-05 contractor along with ASA-06 contractor shall integrate the PAVA hardware with PIDS/PA HMI. For more details, please refer Addendum 2 for revised clause 2.1.6, 2.1.7, 13.21.1.2 and additionally added clause 13.21.1.3.
129	P2	VI B	2.1.6 and 2.1.7	2.1.6 OCC & BCC PAS/PIDS and its application software shall not be in scope of this RFP and shall be provided by other Contractor 2.1.7 PAS/PIDS system at stations shall be interfaced for integration with Centralised Management Software and station client application, which shall be provided by Other Designated contractor.	It is requested to kindly revisit the clause and modify, as If both PAS/PIDS Central Management Software (at OCC/BCC) and PAS/PIDS Station Management Software (at Station) shall be in other contractor scope. In general, the contractor who supply, Install, commission the system, he only provides the PAS/PIDS integrated Central and Station Management software along with interfaces with the other Telecom and ATS system.	Please refer addendum 2 for the revised bid condition

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

130	P2	VI B	2.2.	OCC & BCC PAS/PIDS and its application software shall not be in scope of this RFP and shall be provided by other Contractor PIDS/PAS central server for all 3 Corridors of CMRL phase 2 shall be located in the OCC & BCC TER, which shall be connected to the PIDS/PAS Corridor server (for each corridor) and further to PAS/PIDS work station at station via the data transmission system. Details of Centralised Passenger Information System is given for reference in Appendix A of this TS.	It will be a challenging situation for any contractor to provide the OCC & BCC Central software for all three corridors because there is a possibility where different contractors may be awarded work on different corridors. Therefore it is suggested to please include the designated contractor to provide both central and station management software for their awarded work corridors. In case if it is required to make a common OCC and BCC at any designated location then there is a possibility where each designated contractor of different corridor may shift their OCC and BCC hardwares to the common central OCC and BCC and can operate their respective corridor.	Please refer addendum 2 for the revised bid condition. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
131	P2	VI B	2.2.1	Corridor Server shall be capable to provide redundancy for minimum three stations in case of station HMI fails.	Since OCC/BCC Contractor is providing the Servers, the redundancy in the Stations of Corridor 4 shall also be taken care by the same OCC/BCC Contractor. Please confirm.	Please refer revised bid condition in Addendum 2.
132	P2	VI B	2.2.1	2.2.1 Corridor Server shall be capable to provide redundancy for minimum three stations in case of station HMI fails.	In general, corridor server is a second level interface point for stations (first level interface is OCC/BCC). So in case of failure of OCC/BCC servers, still it is possible to make a centralised announcement to all stations of the corridor using the corridor server but in case of station HMI failure, station operator can not make software level announcement as the HMI which operator using is in Fail condition at station. So a corridor server can not be a redundancy point for station HMI but it can be a redundancy point to make a central level announcement to all stations in case OCC/BCC servers not available. So it is requested to kindly modify the clause as "2.2.1 Corridor Server shall be capable to make broadcast at all stations in the corridor in case of OCC/BCC server fails. Corridor server and its associated HMI shall be installed at the first station of corridor."	Please refer revised bid condition in Addendum 2.
133	P2	VI B	2.2.2	2.2.2 PAS/PIDS central server shall be interfaced to the S&TC system as the source of train timetable data.	It is requested to kindly revisit the other clauses of the chapter and modify to include the PAS/PIDS central server supply and software along with interfaces in this contract scope.	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
134	P2	VI B	2.3	1.PAS Speakers locations - Stations - Sky walks, Station boundaries, Entry to viaduct and viaduct, Cross passage in tunnel area, 2.PAS Speakers locations - Depot - Depot boundaries (Perimeter), Train Entry / Exit from main line (viaduct), Level Crossings, Test Track.	Since the PAS Controllers are far away from these locations, request you to remove from the requirement.	Tender condition shall prevail.
135	P2	VI B	2.3.1.1	Platforms, Concourses (both Paid & Unpaid), Commercial Areas, Ticket Gates, Gate Lines, Elevators, Escalator Landings, Staircases, Entrances, Exits, Sky walks (wherever applicable), Security Checking Machines, Cash Transfer Routes, Evacuation Routes, Parking areas, Front of the house areas, Back of House Rooms, washrooms, Equipment, Operational & Administrative rooms, Station Control Room, Station boundaries, Entry to viaduct and viaduct, vicinity of station area (entry / exit structures, road side, nearby areas etc.) Technical Rooms, SCR, Security Room, ASS, Walk Ways, Station Manager Room, Cross passage in tunnel area, TOM etc.	Our understanding is that PA system will be not provided in RSS and related buildings. Please confirm the scope of PA system in RSS buildings.	PA System shall be provided at RSS. Please refer 2.7.2.12.6 clause for clarification
136	P2	VI B	2.5.7.4	The PAS shall have two audio matrix switches/controller (as Matrix Switch A & Matrix Switch B) in at each node with each controller controlling separate PAS circuits	Request to modify as follows: The PAS shall have two or more audio matrix switches/controller (as Matrix Switch A & Matrix Switch B) in at each node with each controller controlling separate PAS circuits. Justification:- Each controller consist 4 amplifier channels, in case of more than 4 speaker circuits more that two controller will be required to cater speaker circuits	Please refer addendum 2 for the revised bid condition

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

137	P2	VI B	2.5.8.1	All equipment must comply with and be installed in accordance with ISO/IEC 17065:2012, IEC 364 and to current safety standards applicable in India.	All equipment must comply with and be installed in accordance with EN54 Part 24 or part 16 Justification:- EN54 certified system is comply all ISO/IEC stan ISO/IEC standards	Please refer revised bid condition 2.5.8.1 in Addendum 1.
138	P2	VI B	2.6.14.1.1	2.6.14.1.1 The PAS / PIDS NMS shall monitor system alarm status on real time basis; alarm data shall also be stored for future inquiries. It is envisaged that one NMS and a corresponding workstation shall be provided. The NMS at OCC / BCC shall have jurisdiction over all corridors and shall extend a workstation to OCC/BCC. The NMS should not be available for access in other than CSS / CER. The PAS and PIDS NMS shall be on the same server / workstation. However, monitoring or control of depot PAS system shall be done from MMI / Client terminal installed in Depot Control Centre at respective Depot.	System NMS is a part of central OCC/BCC level requirement and can monitor the system alarms for there designated corridor only. A common NMS can not monitor all corridor system, where there is a possibility that different contractor may be awarded with different contractors. It is requested to please modify the clause as "The NMS at OCC / BCC shall have jurisdiction over the corridor and shall extend a workstation to OCC/BCC."	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
139	P2	VI B	2.6.14.1.1	2.6.14.1.1 The PAS / PIDS NMS shall monitor system alarm status on real time basis; alarm data shall also be stored for future inquiries. It is envisaged that one NMS and a corresponding workstation shall be provided. The NMS at OCC / BCC shall have jurisdiction over all corridors and shall extend a workstation to OCC/BCC. The NMS should not be available for access in other than CSS / CER. The PAS and PIDS NMS shall be on the same server / workstation. However, monitoring or control of depot PAS system shall be done from MMI / Client terminal installed in Depot Control Centre at respective Depot.	As Central OCC/BCC are not a part of this RFP, and Central servers and workstation are not a part of this RFP then please confirm whether the supply of NMS server/workstation shall be a part of this RFP or not ? As it shall be installed at OCC and BCC level.	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
140	P2	VI B	2.7.1.8 & 2.7.2.12.5	(c) All Speakers should be complaint to IP 65 rating and installation to be done to protect inside circuitry and cable termination from water and dust ingress All speakers shall be compliant to following Room Speaker - IP 34, Indoor Speaker - IP 54 and Outdoor and Platform (Elevated Stations) Speaker -IP65 rating and installation to be done to protect inside circuitry and cable termination from water and dust ingress. 2.7.2.12.5 In areas with coverings (Platforms, sheds etc.) the loudspeakers shall be dust proof and water proof to IP 54 standard. But in open areas where loudspeakers will be exposed to rain, the loudspeaker shall be dust proof and waterproof to IP 65 standard.	TS clause 2.6.14 & 2.7.2.12.5 are contradictory to each other . Kindly remove clause 2.6.14 (C) for better understanding.	Please refer revised bid condition in Addendum 2.
141	P2	VI B	2.7.2.1.9	The audio matrix switch shall be fail safe and shall be capable of being manually/automatically bypassed to maintain all zone broadcast availability, if necessary on failure of the audio matrix switch. There should be 2 Audio Matrix Switch at every station for redundancy.	Request to modify as follows: The audio matrix switch shall be fail safe and shall be capable of being manually/automatically bypassed to maintain all zone broadcast availability, if necessary on failure of the audio matrix switch. There should be 2 Audio Matrix Switch at every station for redundancy based on Matrix Switch A & Matrix Switch B) Justification:- Two or more matrix switches/controllers required for achieving 50% redundancy on Speaker circuits.	Please refer Addendum 2 for revised clause
142	P2	VI B	2.7.2.13	Management System	1.We understand that the Management System such as PC / Workstation for station level & its application software shall not be in scope of this RFP and shall be provided by OCC/BCC Contractor. Please confirm. 2.Without knowing the hardware specifications for the HMI, which is required for the OCC/BCC contractor. If it is going to be provided as a part of this RFP, we will have reliability issuesbetween two different contractors. 3.Alternativley please provide the hardware specifications requirement for the same.	1. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3. 2. Please follow the tender conditions for HMI hardware. 3. Please refer Chapter 10 'HMI, Servers & Workstations' for detailed HMI specifications. Also, refer revised bid condition 10.7.3 in Addendum 1.
143	P2	VI B	2.7.2.13.1	The management system shall be equipped with a proven operating system to support the specified management functions. The NMS at OCC & BCC shall have jurisdiction over entire station depot station line. NMS should be available for access in other than CSS / CER. The PAS and PIDS NMS shall be on the same server / workstation.	As we understood , NMS software and hardware supply is not under this RFP scope. Kindly clarify	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

144	P2	VI B	2.7.2.5.1	The monitor speaker with volume adjustment control on the PAS control panel shall be used for real time monitoring of any message being broadcast to the pre-defined zones. There can be a separate Monitoring speaker, which can be provided in SCR for continuous monitoring of Broadcast messages.	Request to modify as follows: The monitor speaker with On/Off functionality on the PAS control panel shall be used for real time monitoring of any message being broadcast to the pre-defined zones. There can be a separate Monitoring speaker, which can be provided in SCR for continuous monitoring of Broadcast messages. Justification:- Monitor speaker is required in control room should have on/off facility to reduce the feedback	Tender condition shall prevail
145	P2	VI B	2.7.2.8.2	A power amplifier shall be provided for each audio distribution line feeding alternate speakers in a zone.	Request to modify as follows: A power amplifier/ separate amplifier channel shall be provided for each audio distribution line feeding alternate speakers in a zone. Justification:- In case of multichannel amplifier speaker circuit distribution will be through different channel of amplifiers	Please refer revised bid condition in Addendum 2.
146	P2	VI B	3.0.		As Central servers are not included in this RFP but the corridor servers are included. It is requested to please confirm if there is any Local ATS (LATS) shall be available as part of S&TC contract to interface with the corridor servers ? or ATS shall be available to interface at OCC/BCC central level only.	No Interface is envisaged at Local ATS level. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
147	P2	VI B	3.1.2	The following major types of messages shall be provided by the PIDS as a minimum: (1) Fixed; (2) Pre-formatted with data to be added; and (3) Instantly constructed. (4) Advertisements & other information (5) Clocks, etc. (6) Trains information received from TC&S etc.	As we understood , all the messages should be part of PIDSPAS integrated software and can be broadcasted in the PIDS via HMI. PIDS vendor will provide the hardware at corridor stations and API to integrate the same with PIDSPAS software. Kindly clarify .	The text messages for PIDS shall be part of PIDSPAS integrated software and shall be broadcasted in the PIDS via HMI. ASA-05 contractor shall supply the hardware HMIs, Corridor Server and the PIDS displays which shall host the PIDS software from ASA-06. The audio messages for PIDS/PA HMI shall be provided by the ASA-06 contractor. ASA-05 contractor shall supply PAVA hardware with capability to store, record and dispatch the audio based on the commands from PIDS/PA HMI. ASA-05 contractor along with ASA-06 contractor shall integrate the PAVA hardware with PIDS/PA HMI.
148	P2	VI B	3.2	3.2 Contractor's Scope of Supply and Services The Contractor shall design, supply, install, test and commission all stations and Depot equipment., cables, materials and interfaces required to complete the Works for the Passenger Information Display system, as described herein. OCC & BCC PAS/PIDS and its application software shall not be in scope of this RFP and shall be provided by other Contractor PAS/PIDS system at stations shall be interfaced for integration with Centralised Management Software and station client application, which shall be provided by Other Designated contractor.	PAS/PIDS Integrated software shall be provided by the other contractor but the interface supporting requirements such as API, DLL etc. required for PIDS interface with the PAS/PIDS Integrated software needs to be provided by the PIDS supplier. Therefore, kindly modify the respective highlighted clause as below: OCC & BCC PAS/PIDS and its application software shall not be in scope of this RFP and shall be provided by other Contractor but the required interface inputs such as API, DLL etc. shall be provided by the PIDS supplier for interface of the PIDS display with PAS/PIDS Integrated software.	Please refer revised bid condition 3.2 in Addendum 1.
149	P2	VI B	3.3 & 3.3	The major PIDS components shall include, as a minimum, the following elements and can be customized as appropriate for each type of site. The PAS/PIDS central server shall be interfaced to the S&TC system as the source of train timetable data.	We understand that the PAS/PIDS central server & its application software shall not be in scope of this RFP and shall be provided by OCC/BCC Contractor. Our responsibility is to provide hardware which is the PIDS Displays at the required locations & the interface (API) required for integration with the PIDS software & its related PC/Workstation/Server supplied by the OCC/BCC Contractor. Please confirm.	PAS/PIDS central server & its application software shall not be in scope of this RFP. Hardware HMI's, Corridor Server and Passenger information Displays for Stations and Depot including licensed windows OS shall be under scope of this contractor. These Hardware shall support the functionalities of PIDS/PA application supplied by the OCC/BCC Contractor. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
150	P2	VI B	3.3.1.2	Contractor shall propose integrated servers and HMIs for PAS & PIDS System. Contractor to ensure all functional requirement and RAMS requirement as mentioned in the Technical Specification.	Do we need to consider server and HMI both or only HMI at stations. Please clarify.	This clause is related to Central PIS server located at OCC & BCC which is provided here for reference only. At Station Bidder is allowed to combine HMI and station server functionality without affecting functional requirements.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

151	P2	VI B	3.3.1.6	Corridor server shall act as redundant machine for station HMI and capable to provide redundancy for minimum 3 stations in case of station HMI fails PIDS/PAS Station Work Station/Client Terminal	Kindly clarify whether bidder has to supply just the hardware for Corridor server? Also should bidder design one corridor server for 3 stations as an average. Pls confirm supply of software for the corridor server will be in other contractor's scope.	Hardware for Corridor server shall be provided under the scope of this tender. One corridor server shall be provided for ASA-05 Package. Corridor server shall be able to act as redundant of OCC & BCC server and as well as redundant to station HMI (Minimum 3 stations) for station standalone operation in case of OCC/BCC link failure. Software for Corridor server shall be under the scope of OCC/BCC Contractor. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
152	P2	VI B	3.3.14.2	One Local server will be installed at TERs in each station.	In number of other PIDS RFP clauses it is mentioned to provide the station management workstation at station level. Please confirm at each station, one workstation will be required or one server will be required or both server and workstation required ?	One HMI only shall be required at each station. Bidder is allowed to combine HMI and station server functionality without affecting functional requirements. Please refer revised bid condition in Addendum 2
153	P2	VI B	3.3.14.2	One Local server will be installed at TERs in each station.	As we understood , required to consider local server and HMI at each station . Kindly clarify	One HMI only shall be required at each station. Bidder is allowed to combine HMI and station server functionality without affecting functional requirements. Please refer revised bid condition in Addendum 2
154	P2	VI B	3.3.14.3	3.3.14.3 (i) Indicative quantity of Display Boards to be provided at stations is as under: (a) 01 no double sided 52 " TFT/LED Backlit LCD Full HD of IP65 rating per Platform (b) 2 Nos. Single Sided, 52 " TFT/LED Backlit LCD Full HD of IP 54 rating for station any other areas such as concourse /mezzanine ,TOM /Entry/exit with IP 54 Housing & Accessories (ii) Interchange/Double stack Station: (a) other than station's each platform and each concourse as per above (i) mentioned quantities ,01 single sided 52 " TFT/LED Backlit LCD Full HD of IP65 Displays at each walkways, entry/ exit, multimodal / other metro line transfer area/ interchange station	Kindly provide the PIDS BOQ for elevated and underground station.	Please refer Chapter 3 for understanding the PIDS requirements. Tender is based on Design and built requirement. Please follow the tender conditions. Also refer revised bid condition in Addendum 2.
155	P2	VI B	3.3.15.15.2	Application Software shall be provided by other designated OCC/BCC Contractor. Station PIDS system shall be interfaced with OCC/BCC PIDS Management system and Application software for smooth integration	As we understood , PIDS hardware supplier to provide API to interface with PIDSPAS software. Rest other functionality related to software including integration with other system to be ensure by PIDSPAS software provider. Please clarify.	Hardware HMI's, Corridor Server and Passenger information Displays for Stations and Depot including licensed windows OS shall be under scope of this contractor. These Hardware shall support the functionalities of PIDS/PA application supplied by the OCC/BCC Contractor. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
156	P2	VI B	3.3.15.16.3	Specifications of TFT/LED Backlit LCD Full HD Display Panel: a) Minimum size for active area of the PIDS display for concourse and platform shall be minimum 52 inches	Shall we propose 43" display, since the same has been approved & implemented in CMRL Phase-I & Phase-I Extension. Kindly confirm.	Please refer Addendum 2 for revised bid condition
157	P2	VI B	3.3.2.1	Template should be configurable among the multiple options and contractor shall obtain approval of Engineer/Employer for finalization of template.	We understand that these functions are just for our reference and the related MMI such as PC / Workstation for station level & its application software shall not be in scope of this RFP and shall be provided by OCC/BCC Contractor. Please confirm	Hardware HMI's, Corridor Server and Passenger information Displays for Stations and Depot including licensed windows OS shall be under scope of this contractor. These Hardware shall support the functionalities of PIDS/PA application supplied by the OCC/BCC Contractor. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
158	P2	VI B	3.3.2.2	Each platform shall be equipped with a minimum of one double sided LED Backlit LCD/TFT Full HD Display Panels. Display Panels shall be installed at suitable locations (as per the approved design) .The cabling lay- out along with enclosures and mounting arrangements shall be designed to facilitate the station aesthetics.	We shall consider one number of double sided display as per the 3 CAR train setup. Kindly confirm.	The proposed display shall comply the Viewing distance of 15m for concourse and 35m for platform.
159	P2	VI B	3.3.6.3	Notebook Computers loaded with appropriate software for field maintenance shall be supplied as per Appendix D. The notebook computers shall be powered by an internal rechargeable battery supporting more than 4 hours continuous operation without recharging	Pls confirm whether the bidder has to provide only Laptops since software will be in OCC/BCC Contractor	Notebook computer shall be provided as per Appendix D of TS with OS and other applicable software (except PIS application software) required for maintenance purpose as per scope of supply.

Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022

160	P2	VI B	3.3.7 , 3.3.8, 3.3.15	System Administration and Management / Fault and Alarm Monitoring / Functional Requirement	As per 3.3.1.1, OCC & BCC Software are in scope of other supplier. So this clause is not valid for this project. Hence, request you to delete these clauses	Please refer revised bid condition 3.3.1.1 in Addendum 1.
161	P2	VI B	3.3.8.3.m	Message priority conflict, Loss of interface link with Fire Management System.	Please confirm the mode/protocol of PIDS and Fire Interface. Generally in all metro projects, PIDS system don't have interface directly with the fire management system.	PAS system shall extend the Fire alarm inputs to PIDS system. The mode/protocol of PIDS and PA shall be finalized during the design stage.
162	P2	VI B	3.4.2.1	The PIDS management system shall be equipped with Linux/ WINDOWS based operating system to support the specified management functions. This is contractor's responsibility to commission., test and handover (after DLP) the system with latest Operating system, firm wares and software versions as scope of work	1. Please confirm the supply of PIDS Management workstation shall be in the PIDS RFP scope ? Or it is an another contractor scope as Central server in other contractor scope in accordance of clause 3.3.15.24.1 2. Also we would like to inform that the OS will be as per the system functional OS/firmware/software requirements, while we handover the system after DLP. Please confirm.	1. Hardware HMI's for Stations and Depot including licensed windows OS shall be under scope of this contractor. Provision of PIS software application shall be under scope of OCC/BCC Contractor. 2. Please refer revised bid condition in Addendum 2.
163	P2	VI B	3.4.2.1	The PIDS management system shall be equipped with Linux/ WINDOWS based operating system to support the specified management functions. This is contractor's responsibility to commission., test and handover (after DLP) the system with latest Operating system, firm wares and software versions as scope of work	Our understanding is that central server in other contractor scope in accordance of clause 3.3.15.24.1 of this tender	PIDS central management server is in the scope of OCC/BCC contractor. Please refer revised bid condition in Addendum 2. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
164	P2	VI B	4. Software Management and Control	4.4.9The Contractor shall have ERP/SAP for this Contract Management for all the related activities.	Request to remove this clause, as we understand Project Management tool is already being shared by CMRL - Employer's Project Management Information System (PMIS).	Employer's Project Management Information System (PMIS) can be used. Please refer revised bid condition in Addendum 2.
165	P2	VI B	4.0.	BOX camera, Dome Camera, PTZ Camera , Fisheye Camera , Bullet Camera , IR Illuminator, Housing for Box camera, Joystick	CCTV OEM should be active company and should have direct presence in India from last ten years (not as joint venture, partnership firms or through any other association) & manufacturing in India since last Five years (not as joint venture, partnership firms or through any other association) and Foreign CCTV OEM should have manufacturing unit globally from last 10 Years at the time of bidding. Documentary evidence should be submitted	Tender condition shall prevail.
166	P2	VI B	4.0.	BOX camera, Dome Camera, PTZ Camera , Fisheye Camera , Bullet Camera , IR Illuminator, Housing for Box camera, Joystick	The camera OEM Should be a genuine manufacturer and should be an official valid H.265 HEVC Certificate and should be listed on HEVC website at the time of submitting bid. They should be paying the licensed fee for using the genuine HVEC Compression legally. The same will be verified at the time of bidding	Tender condition shall prevail.
167	P2	VI B	4.0.	Add	NVR must support Mask Compliance Detection feature detects the people who are with and without Masks in a given scene. This feature detects in a real time scenario and generates an event for People with/without mask. It helps in monitoring the people those who are violating the compliance of not wearing a mask in public places.	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.
168	P2	VI B	4.0.	Add	NVR must support Social Distancing Violation detection feature detects distance between two people and raises an alarm if the social distance norm is violated. This feature helps to ensure social distancing is followed in your premises.	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.
169	P2	VI B	4.0.	Add	This feature helps user to identify the areas in which the sub regions/areas of camera views where the most number of Non-complaint social Distancing violations are happening.	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

170	P2	VI B	4.0.	Add	NVR must support Bulk camera configuration feature which allows you to perform for main and sub stream's, to ease the effort of configuring multiple cameras at the customer site. This feature improves the productivity for dealers and system integrators while configuring many NVRs.	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.
171	P2	VI B	4.0.	Add	NVR must support Anonymization feature which help the business owner to meet the EU GDPR compliance standards easily. The objective of this feature is to hide the identifiable personal data or personal identity in a video surveillance system using masking techniques.	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.
172	P2	VI B	4.0.	Add	NVR must support Netwrk Throttling Feature which automatically measures the latency in streams periodically and man-ages the stream with lower resolution and lower frame rate in low network band-width sites. This enables user to view smooth video without fluctuations.	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.
173	P2	VI B	4.0.	Add	NVR must support On Demand live Streaming (VOD): On Demand Live Streaming / recording feature enables you to configure and store recordings at camera level. This feature saves the bandwidth for remote sites with limited and costly connectivity (e.g. using 4G).	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.
174	P2	VI B	4.0.	Add	NVR must Support Low Bandwidth sreaming feature allows user to receive and view only I Frame considering the band-width at the site. User needs configure the low resolution and choose to render only I Frame in NVR. This enables user to view the required clips even with low band-width.	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.
175	P2	VI B	4.0.	Add	NVR must support Enable stream switch featre which automatically switches between low and high resolution streams in the salvo layout based on the current video panel size.	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.
176	P2	VI B	4.0.	Add	NVR must Support 3D Positioning feature which enables you to view a specific object in a live video in 3- dimensional view. On a live video you need to draw a region to view a specific object.	Only recording hardware system is under scope of this tender. VMS and associated Recording software is not part of this Tender.
177	P2	VI B	4.1.10Contractor shall interface and provide all necessary inputs in desired format to OCC/BCC ISMS system.	We shall provide the interface on ONVIF / SNMP. Also request you to give more clarity on what is the desired format.	The VMS at OCC/BCC is ONVIF compliant and shall support open interfaces. The details shall be finalized during design stage. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
178	P2	VI B	4.1.10	4.1.10 The 'Detailed design for Telecommunication systems' for Corridor 4 including OCC, BCC & Depot involves substantially the obligations and ongoing activities including but not limited to the following: (i) Complete functional specifications for various sub-systems such as FOTS, PAS/PIDS, CCTV, ACIDS, Telephone, CVRS etc. for complete Contract, for the entire Corridor 4. (ii) Final design for Telecommunication Systems, FOTS, PAS/PIDS, CCTV, ACIDS, Telephone, CVRS, etc., (iii) Final drawings for the accepted Final designs submitted by the Contractor including Station equipments, Wayside equipments and OCC equipment including HMI details.	Scope of HMI, severs, for all sub-systems for C4 in OCC, BCC, shall be scope of which contractor.	Hardware HMI's for Stations and Depot including licensed windows OS shall be under scope of this contractor. Subsystem specific software application shall be under scope of OCC/BCC Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
179	P2	VI B	4.1.2.3	(e) Minimum 3 nos. cameras shall be provided at each parking area/skyways in P & C area at stations and shall be connected to the associated station CCTV server. Wherever required number of cameras shall be increased based on the parking area size.	Kindly provide the parking / skyway architecture drawing in AutoCAD format including all the area for camera qty estimation . Also please share the station name which has parking and skywalk.	Please refer Annexure A - STATION AND DEPOT BUILDING DRAWINGS for sample station CAD layouts in Addendum 2.
180	P2	VI B	4.1.2.3	Minimum 3 nos. cameras shall be provided at each parking area/skyways in P & C area at stations and shall be connected to the associated station CCTV server. Wherever required number of cameras shall be increased based on the parking area size.	Please provide the list of total no. of parking area / skyways in P & C at stations of Corridor 4.	Parking details are provided in the drawings. Please refer drawings

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

181	P2	VI B	4.1.2.3 (e)	Minimum 3 nos. cameras shall be provided at each parking area/skyways in P & C area at stations and shall be connected to the associated station CCTV server. Wherever required number of cameras shall be increased based on the parking area size.	Please provide the list of total no. of parking area/skyways in P&C at stations.	Parking details are provided in the drawings. Please refer drawings
182	P2	VI B	4.1.2.3(d)	Long range PTZ/Fixed CCTV cameras with night vision facility shall be provided at the edge of the platforms with SOD Compliance which would be pointing towards the viaduct covering min. 150 mtrs. on each side of viaduct/tunnel of station.	As per our understanding long range cameras with night vision facility should be at edge of the platforms at every station which would be pointing towards the viaduct on each side of station. We suggest please use Fixed box cameras instead of PTZ cameras.	Please refer revised bid condition in Addendum 2.
183	P2	VI B	4.1.2.4	For efficient space management inside control rooms, Workstations with integrated CPU and monitor shall be preferred else items such as workstation (CPU) shall be located only in the TER or CER and the videos to SCR/ SSCR/ Controllers are to be extended by using suitable KVM extender without compromising the video quality.	As per this clause instead of keeping the PCs / Workstations / Servers in the TER / CER, we suggest placing the MMIs in the SCR / Security room directly. This avoids failure point (KVM switch / KVM Extender) and provide better RAMS. Kindly confirm.	Please refer Addendum 2 for revised bid condition
184	P2	VI B	4.1.2.4	The station (including RSS, Parking & specifically identified theft prone track area) surveillance CCTV system both live and recorded videos shall be accessed simultaneously from the following locations as a minimum. (a) At station from Station Control Room & Station Security Control Room (b) At OCC/BCC from OCC/BCC controllers (traffic controllers / Chief Controller / Asst Chief Controllers etc.) & Security Controller of the concerned OCC / BCC Failure of one of them shall not affect the monitoring at the others. For efficient space management inside control rooms, Workstations with integrated CPU and monitor shall be preferred else items such as workstation (CPU) shall be located only in the TER or CER and the videos to SCR/ SSCR/ Controllers are to be extended by using suitable KVM extender without compromising the video quality	Please provide the list of RSS, parking & specially identified theft prone area at stations.	Two RSS's are Provided in Corridor 4 One is at Alwarthiru Nagar and Other is at Poonamalle Depot. Please refer Annexure A - STATION AND DEPOT BUILDING DRAWINGS for depot building drawings in Addendum 2. Parking details are provided in the drawing. Please refer drawings Please refer revised bid condition in addendum 2.
185	P2	VI B	4.1.2.6	Any other locations identified outside the station or depot: Nearest or adjacent station, OCC and BCC controllers (traffic controllers / Chief Controller / Asst Chief Controllers/ security controller)	Kindly specify the no of such location to consider the camera qty .	The referred clause is continuation of previous clause which talks about the accessibility of Depot surveillance system from various locations. In this contest, the CCTV HMI in any other location with credentials shall access the depot CCTV system. This clause is not for the planning of CCTV cameras. Please refer drawings for assessment of such camera quantities. Please refer Annexure A - STATION AND DEPOT BUILDING DRAWINGS for depot building drawings in Addendum 2.
186	P2	VI B	4.1.2.8	Video Recording system provision shall not be in scope of this RFP and shall be provided by other designated OCC/BCC contractor.	Kindly provide the details of OCC/BCC Contractor and the Video Recording System installed	Video Recording system hardware provision shall be in scope of this RFP and shall interface with by other designated OCC/BCC contractor during design in line with storage requirements. Please refer revised bid condition 4.1.2.7 in Addendum 1. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
187	P2	VI B	4.1.2.8	Video Recording system provision shall not be in scope of this RFP and shall be provided by other designated OCC/BCC contractor.	Need more clarification to understand the requirement.	Video Recording system hardware provision shall be in scope of this RFP and shall interface with by other designated OCC/BCC contractor during design in line with storage requirements. Please refer revised bid condition 4.1.2.7 in Addendum 1. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
188	P2	VI B	4.1.3.2.1	Provision of CCTV Cameras at Depot – Mainline train Entry/Exit for UVSS (Under vehicle surveillance) facility both for up and down tracks	Kindly clarify whether the bidder has to provide the complete Under Vehicle Surveillance system or just the cameras for taking feed. Also clarify the number of locations for installation of UVSS	Please refer revised bid condition in Addendum 2.
189	P2	VI B	4.1.3.2.1.1	CCTV control equipment at Stations, Depot, RSSs.	Need clarity on RSS scope and if there RSS scope need locations and their respective drawings.	Please refer 4.1.2.3 for CCTV locations at RSS. Please refer Addendum 1 for RSS Layout.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

190	P2	VI B	4.1.3.2.1.22	Vehicle Depot Entry/Exit CCTV cameras with ANPR facility and it shall be monitor and record information of entry/exit of vehicles.	Please provide detail requirement ANPR UVSS for Vehicle Entry	Please refer revised bid condition Addendum 2
191	P2	VI B	4.1.3.2.1.23	One UVSS camera at depot entry for visitor's vehicles.	UVSS is a separate system and the same will not be part of CCTV System. Kindly confirm.	Please refer revised bid condition Addendum 2
192	P2	VI B	4.1.3.2.1.23	One UVSS camera at depot entry for visitor's vehicles.	Requirement of Specifications of UVSS camera to be installed at depot.	Please refer revised bid condition Addendum 2
193	P2	VI B	4.1.3.2.1.24	Provision of CCTV Cameras at Depot – Mainline train Entry/Exit for UVSS (Under vehicle surveillance) facility both for up and down tracks.	Please provide detail requirement ANPR UVSS Depot Entry UP Track and Down Track	Please refer revised bid condition Addendum 2
194	P2	VI B	4.1.3.2.1.24	Provision of CCTV Cameras at Depot – Mainline train Entry/Exit for UVSS (Under vehicle surveillance) facility both for up and down tracks.	Please clarify what provision of CCTV is required at Depot. Also UVSS is a system, which is predominantly used for checking 4 wheelers [Road transport]. Here it is asked for checking the Metro Train Coaches, kindly confirm whether the same is required.	Please refer revised bid condition Addendum 2
195	P2	VI B	4.1.3.3.2	For RSS connectivity, HDPE pipe / duct (2 x 100 mm diameter) shall be provided by Telecom contractor for laying of optical fiber cable from RSS to the nearest station for RSS CCTV video integration. Telecom contractor shall coordinate timely with electrical contractor for laying of fiber cables for the RSS connectivity. In case Telecom fails to coordinate / interface with electrical contractor, then trenching, ducting, road cutting and related approvals from the local authorities, for laying of optical fiber cable from RSS to the nearest station etc. to be done totally by Telecom as part of this contract.	The required HDPE pipe / duct shall be provided by the Civil Contractor, the specifications for the same shall be provided by the Telecom contractor. Kindly confirm.	Please refer Addendum 2 for revised bid condition
196	P2	VI B	4.1.3.3.5	CCTV Cameras (1 No. per zone) Shall be assigned to record ambience audio announcement.	Kindly elaborate the requirement	There shall be separate zone for PF 1, PF 2, Staff zone and each level of concourse Staff Zone based on station design which shall be finalized during detail design. One camera in each of these zones shall record ambience audio. Each station shall have 4 or more such cameras depending on the audio zoning. Please refer Addendum 2 for revised bid condition
197	P2	VI B	4.1.3.3.5	CCTV Cameras (1 No. per zone) Shall be assigned to record ambience audio announcement.	Kindly clarify the requirement. Pls let us know th locations of the camera to be placed in stations & buildings. In technical specification of CCTV Cameras, having mic facility is not mentioned in the camera. Kindly update the clause.	There shall be separate zone for PF 1, PF 2, Staff zone and each level of concourse Staff Zone based on station design which shall be finalized during detail design. One camera in each of these zones shall record ambience audio. Each station shall have 4 or more such cameras depending on the audio zoning. Please refer Addendum 2 for revised bid condition Please refer Addendum 2 for revised bid condition
198	P2	VI B	4.1.3.3.5	CCTV Cameras (1 No. per zone) Shall be assigned to record ambience audio announcement.	Please quantify the number of Zones per station	There shall be separate zone for PF 1, PF 2, Staff zone and each level of concourse Staff Zone based on station design which shall be finalized during detail design. One camera in each of these zones shall record ambience audio. Each station shall have 4 or more such cameras depending on the audio zoning. Please refer Addendum 2 for revised bid condition Please refer Addendum 2 for revised bid condition
199	P2	VI B	4.1.4.2	The Contractor shall ensure that the CCTV system equipment supplied under the Contract shall comply with the reliability figures here in: a) CCTV System Equipment MTBF(Hours) per unit Station and central equipment > 50,000 b) Video recording equipment > 50,000	a) Kindly clarify whether Central Equipment has to be supplied by bidder. If Central Software is being provided by other contractor, the hardware should also be procured by him considering the sizing requirements of both corridors. B) Video Recording Equipment is not part of this project. Kindly remove the clause.	a) Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3. b) Please refer Addendum 1 for revised clause 4.1.2.7. ASA-05 shall comply with the MTBF requirements as per revised bid condition 1.7.4.12 in Addendum 2.
200	P2	VI B	4.1.5.1.10	In depot there are many building which are geographically scattered i.e. DCC, workshop, DCO office, time office, security gate, watch towers, etc. These building / locations are far from the Telecommunication Equipment Rooms (TER) where CCTV system will be installed. For the installation of CCTV cameras in these building / locations suitable optical fiber connectivity arrangements have to be made by the Telecom Contractor.	Kindly clarify how the cameras will be powered in the remote locations. Pls provide nearest location details where UPS is available in Depot	For the installation of CCTV cameras in these building / locations suitable Power arrangements have to be made by the Telecom Contractor.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

201	P2	VI B	4.1.5.1.16	CCTV Camera resolution shall be automatically adjustable while selecting/deselecting screens in CCTV HMI. For single screen/Image, full camera resolution shall be available for viewing at full HD HMI monitor and Video wall.	Request you to please change the camera resolution selection manually instead of automatically.	Please refer Addendum 2 for revised bid condition
202	P2	VI B	4.1.5.1.8	System shall use video signals from various types of indoor / outdoor IP cameras installed at different locations, process them for viewing on workstations / monitors simultaneously at Central Control Room (OCC & BCC) and local control rooms (SCR and at Station Security room) at each station. Network Video Recording system shall provide local recording at OCC itself and mirrored recording (at BCC) for all CMRL Corridor 4 stations. Joystick and mouse-keyboard controllers shall be used for Pan, Tilt, Zoom and other functions of desired PTZ cameras. The configuration of the cameras, monitors / workstations shall be provided from the OCC, BCC and any other locations simultaneously.	Does Joystick and mouse-keyboard controllers required for PTZ cameras ?	Please refer Addendum 2 for revised bid condition
203	P2	VI B	4.1.7	4.1.7 CCTV Standards 4.1.7.1 The TV standard to be employed shall be ITU-T, PAL, 30 frames per second with progressive scan.	Please Modify to: 25 Frames as PAL supports 25 Frames The TV standard to be employed shall be ITU-T, PAL, 25 frames per second with progressive scan.	Please refer Addendum 2 for revised bid condition
204	P2	VI B	4.1.8	the camera at platform shall be planned keeping in view the boarding /deboarding of trains at maximum platform capacity	Does All train doors needed to be covered under surveillance please clarify	Clause is self-explanatory. Please refer Chapter 4 for detailed coverage requirements.
205	P2	VI B	4.1.9	Video Recording system provision shall not be in scope of this RFP and shall be provided by other designated OCC/BCC contractor. Contractor shall interface with OCC/BCC Contractor and provide Station and Camera feeds in desirable format to OCC/BCC Recording system.	Need Overall clarity on Video Recording & Retrieving	Please refer Chapter 4, Chapter 12, Chapter 13 and reference Appendix B of Technical specification for detailed functional and interface requirements. Please refer revised Bid condition for clause 4.1.2.7 in Addendum 1
206	P2	VI B	4.2.1.2	4.2.1.2 All control equipments e.g. servers / workstation (CPU), storage devices etc. shall be placed in TER of stations and depot in standard racks.	Request to share the detailed technical specifications and minimum quantities of Storage and Backup for each telecom system	It shall be finalized during design and interface stage
207	P2	VI B	4.2.1.8	The CCTV system shall be designed for viewing simultaneously at the SCR, Security Room at the station. Depot Control Centre / Depot Security Control at the depot, Metro Headquarter and from the OCC / BCC at full frame rate. Frame rates shall be variable from 1 to 25 frames per second and resolution values shall be fully selectable to include CIF and 4CIF or better. The ability to select the frame rate (1 to 25 fps) and resolution (1 to 4 CIF or better) will apply to monitoring as well as recording. The viewing shall be variable at 4CIF 25 fps or better. Camera recording resolution shall be at Full HD. The normal full HD 25 fps shall determine the size of the storage device. Recording shall be mirrored at stand by site NVR at the same frame rate and resolution.	Do bidder need to consider HMI for metro headquarter or same to be provided by other contractor. If yes please provide the actual HMI qty for consideration. Please clarify.	Provision of HMI for Metro Bhawan Headquarter shall not be under scope of this tender. Please refer Addendum 2 for revised bid condition
208	P2	VI B	4.2.2.1.7	Focal Length should be of following as minimum. Lens 2.8-12mm, Lens 3-50mm & Lens 8-80mm. Vendor to indicate the focal length range for both wide & Telephoto dynamic range, Particular lens and allocation as per coverage area shall be finalized in detailed design stage PAN Tilt Adjustment as minimum.	Please change the lens size as per below lens and camera specifications. 9-40 mm lens size is used in clause 4.2.3 for fixed box camera, 3.8-8 mm lens is used for fixed dome camera as per clause 4.2.6.1 and 5-9.4 mm lens is used for bullet camera as per clause 4.2.6.2.	Tender condition shall prevail.
209	P2	VI B	4.2.3 Varifocal Lenses	Iris range F 1.5 to F 8	Please allow for Iris range F 2.0 for Major OEM Participation.	Tender condition shall prevail.
210	P2	VI B	4.2.6(i)	Telnet, FTP, TCP/IP, UDP/IP (Unicast, Multicast IGMP), IPv4/IPv6, SNMP, SNT, RSTP, ONVIF etc. or as required to fulfil the functional requirement of project.	Request you to remove the telnet and RSTP protocol as it is not required as per CCTV Standard applications and security reasons.	Please refer Addendum 2 for revised bid condition
211	P2	VI B	4.2.6.1	22. Storage Temp : -20°C to +70°C	The storage temperature range seems to be high & the same is limited to less OEMs & the cost of the cameras are very high. Kindly request to change the range to 0 to +60 deg C.	Please refer Addendum 2 for revised bid condition

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

212	P2	VI B	4.2.6 - E	Video resolution - Minimum 5 Mega pixels for 16:9 format, it shall be possible to configure camera in lower resolution	Camera installation height and angle are the two major factors for the field of view and aspect ratio, wherein sometimes horizontal angle and sometimes more vertical angle is required for the detailed view/ information. Hence we request kindly allow 16:9 / 4:3 format for 5MP Cameras	Please refer Addendum 2 for revised bid condition
213	P2	VI B	4.2.6.2 High Definition IP Fixed Bullet Camera (Day / Night):	Angular Filed of View H : 180.° ~ 35° / V : 70° ~ 25.0° / D : 120.0° ~ 45°	Please allow for H:88°-26°, V:65°-20°, 90.0° ~ 55°	Please refer Addendum 2 for revised bid condition
214	P2	VI B	4.2.6.3 High Speed, High Definition IP PTZ Dome Camera (Day / Night)	Lens Focal Length Angular Filed View 5.0~100 mm or better. H : 60°(Wide) ~ 3°(Tele) / V : 35°(Wide) ~ 1.75°(Tele)	Please allow for H:55.3°~3.2°,V:32.2°~1.8°	Please refer Addendum 2 for revised bid condition
215	P2	VI B	4.2.6.1-2	Minimum 5 Mega pixels for 16:9 format, it shall be possible to configure camera in lower resolution	Camera installation height and angle are the two major factors for the field of view and aspect ratio, wherein sometimes horizontal angle and sometimes more vertical angle is required for the detailed view/ information. Hence, we request kindly allow 16:9 / 4:3 format for 5MP Cameras	Please refer Addendum 2 for revised bid condition
216	P2	VI B	4.3	Face Recognition	Kindly confirm us, whether only face detection is to be done or face recognition where the individual face images will be identified from a database.	Please refer Addendum 2 for revised bid condition
217	P2	VI B	4.3	People Attributes	Need more clarification what type of attributes like upper body dress color, lower body dress color or anything else. Kindly clarify.	Please refer Addendum 2 for revised bid condition 4.3
218	P2	VI B	4.3	CCTV Video analytics	There is no clarity on the scope of video analytics if the same shall be provided by bidder or shall be provided by other contractor. Since all the application software shall be provided by other contractor so we understand the video analytics software and required hardware such as server shall also be provided by the other contractor only. Please confirm if our understanding is correct.	Video Analytics shall be provided by ASA 05 Contractor Which shall be interfaced with ISMS system. Please refer Addendum 2 for revised clause 4.3, 13.21.1.2 and additionally added clause 13.21.1.3.
219	P2	VI B	4.3	Queuing Detection	We shall be providing Crowd detection in a certain area, if number of people exceed in that particular area alert will be given. Kindly confirm.	Please refer Addendum 2 for revised bid condition 4.3
220	P2	VI B	4.3 CCTV Video analytics	4.3 CCTV Video analytics 4.3.1 Requirements for CCTV Video Analytics for CCTV System Analytics can be enabled or disabled on each unit individually without degrading video performance on the system 4.3.1.1 Intelligent Video Analytics shall be implemented on the proposed cameras. Different types of Video analytics feature shall include, but not limited to:	We understand that the video analytics shall be server based and edge based analytics are not acceptable, kindly confirm.	Please refer Addendum 2 for revised bid condition 4.3
221	P2	VI B	4.3.1	4.3 CCTV Video analytics 4.3.1 Requirements for CCTV Video Analytics for CCTV System Analytics can be enabled or disabled on each unit individually without degrading video performance on the system	We understand that the video analytics shall be server based. Please confirm.	Please refer Addendum 2 for revised bid condition 4.3
222	P2	VI B	4.3.1.1	Vehicle attributes - Vehicle attributes shall include vehicle colour,type and size etc.	Kindly elaborate the requirement of Type of Vehicle. We assume it refers to LMV / H MV only. Also elaborate the requirement of size of Vehicle	Please refer Addendum 2 for revised bid condition 4.3

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

223	P2	VI B	4.3.1.1	4.3.1.1 Intelligent Video Analytics shall be implemented on the proposed cameras. Different types of Video analytics feature shall include, but not limited to: 4.3.1.4 The Video Analytics functionality shall have mechanisms to continue alarm generation in case of failure of the Server. The Video Analytics shall not be bound to the MAC address of the device and hence any video analytics feature shall be possible to be deployed on any of the applicable cameras. The Video Analytics system shall also have functionality to help trace the person who left baggage unattended. This will allow Employer to use CCTV / Video License independent of MAC Address of the camera/server/archiver/device.	We understand that the video analytics shall be server based and edge based analytics are not acceptable	Please refer Addendum 2 for revised bid condition 4.3
224	P2	VI B	4.3.1.3	Contractor shall provide POC for all Video analytics and integration with VMS as per ISMS specifications in Appendix B.	As VMS to be supplied by another contractor through other RFP, to conduct successful POC, responsibilities lies with contractors of both the RFPs. Please clarify.	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
225	P2	VI B	4.4.1.2	Viewing client software application for stations and depot MMI's shall not be in scope of this RFP and shall be provided by other designated OCC/BCC contractor as ISMS solution. However Contractor shall provide MMI hardware with all accessories and desirable OS software. Required OS shall be finalised during design stage.	Kindly provide the specifications of MMI hardware.	Please refer chapter 10 HMI's, Servers and Workstations. Also refer revised bid condition 10.7.3 in Addendum 1.
226	P2	VI B	5.0.		Please provide detail requirement for FIDS	Query is not clear and without any reference clause or chapter of Tender.
227	P2	VI B	5.0.		Please provide detail requirement for Pedestal barrier	Please refer revised bid condition 5.1.1.8, 5.5.3.6.4 and 5.5.8.4 in Addendum 2
228	P2	VI B	5.0.		what are doors required Key switch?	Key Switch shall be provided per controller in order to open all doors controlled by that specific controller in a location not under the control of that particular controller.
229	P2	VI B	5.0.		Please provide details of Electrical Pulsed fencing for RSS Details	Please refer revised bid condition 5.5.4.2 in Addendum 2
230	P2	VI B	5.0.	MTBF of the major systems: 7) ACID Ingress Button, Break Glass, Key Switch, Sensors, Locks > 60,000 Hours	Ingress Button, Break Glass, Key Switch are passive components. Hence, request you to kindly remove these items from the clause	Tender condition prevails. Please refer revised Table 1.4 MTBF of the major systems in 1.7.4.12 in Addendum 2.
231	P2	VI B	5.0.		Whose scope supply of Access Card?	Please refer revised bid condition in Addendum 2 for clause 5.4.6.
232	P2	VI B	5.1.1.2	The ACIDS shall be provided at Stations, Depots, RSS & Administrative Building. The ACIDS in stations, as a minimum, shall be provided in important rooms like SCR, Ticket Offices, EFO's, Service gates (near AFC gate array), Technical rooms (Power Supply, Signaling and Low Voltage technical rooms), ASS, Crew control rooms and other important rooms. In Depots, ACIDS shall, as a minimum, be provided in Technical rooms (Power Supply, Signaling, Telecom, AFC and Low Voltage technical rooms), DCC including main entry & exit gates to control access into important equipment rooms and critical areas. Location of the ACIDS system shall be finalized during detailed design stage.	We request you to provide us the locations, where all the doors with only card reader option to be considered.	Please refer Chapter 5 for details.
233	P2	VI B	5.1.1.3	The functions of the system shall be access management, alarm management and intrusion detection. They shall include, but not limited to the detection sensors/ equipments, control switch, card readers, interface controllers, display HMI, alarm printers, etc.	Normally Panic switch used for access control exit. Does control switch mean push button.?	Control Switch is Push button in case of each door and a Universal emergency switch in SCR for all the doors.
234	P2	VI B	5.1.1.4	The HMI of ACIDS shall be integrated with HMI of the CCTV system.	What is the basis of this integration? Kindly clarify.	ACID control system shall interface with CCTV system for events like access control violation, intrusion detection etc. and immediately alerts the controllers with the pop up of relevant images of the events in the HMIs. For further details, please refer Chapter 4, 5, 12, 13 and Appendix B of Technical specification for detailed functional and interface requirements. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

235	P2	VI B	5.1.1.4	The Human Machine Interfaces (HMI) shall be located in the SCR of each station, the guard room at Depot and the OCC & BCC to ensure the safety of major equipment. The HMI of ACIDS shall be integrated with HMI of the CCTV system.	1. Does HMI mean Workstation Client? 2. HMI at each of these sites is required for ACIDS or Access system?	1. HMI means MMI (Man machine interface) or Workstation Client. 2.HMI shall be located in the SCR of each station, the guard room at Depot and the OCC & BCC and shall be integrated with HMI of the CCTV System. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
236	P2	VI B	5.1.1.5; 5.1.1.6	"Centralised Access Management System including OCC/BCC Software application and Station HMI client software application shall not be in scope of this RFP and shall be provided by other designated OCC/BCC contractor as Integrated Security Management System (ISMS)" Contractor shall interface with OCC/BCC CCTV Contractor for seamless integration of Station and Depot ACIDS system with Integrated Security Management system(ISMS).Details of ISMS is given as Appendix B of this document. Contractor shall refer Appendix B for seamless ntegration with ISMS for Video management and recording.	"From the clause given in the RFP we understand bidders scope for the Access Control System and Intrusion detection is limited to supply and installation of "Card readers+Door Controllers+Door Accessories like locks , Door contact + Cabling required at the station While all front end application software and related hardware such as servers , OS, DB workstation at station & depot and any other related equipments shall be provided by other contactors. please confirm if our understanding is correct Alswe understand the the ISMS shall be provided by other contractor. Please confirm if our understanding is correct.	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3. ISMS Application software shall be provided by OCC/BCC Contractor at stations.
237	P2	VI B	5.1.1.8	A highly secure and reliable Access Control and Intrusion Detection System, with fast response times, shall be installed throughout the Metro premises. Vehicular and pedestrian barrier - Each depot entries & exits shall be provided with vehicular and pedestrian barriers (as required). Size, number of barrier / specifications shall be decided at the time of detail design;	Kindly provide size & number of barrier with specifications as it is required for designing & costing of the system.	Please refer revised bid condition in Addendum 2
238	P2	VI B	5.1.2.1	The Security Access Control System shall monitor and record information of entrance / exit and interface the information interconnecting with video images captured by CCTV system.	Please elaborate on the requirement of interfacing with CCTV system	ACID control system shall interface with CCTV system for events like access control violation, intrusion detection etc. and immediately alerts the controllers with the pop up of relevant images of the events in the HMIs. For further details, please refer Chapter 4, 5, 12, 13 and Appendix B of Technical specification for detailed functional and interface requirements. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
239	P2	VI B	5.1.2.1	The Security Access Control System shall monitor and record information of entrance/exit and interface the information interconnecting with video images captured by CCTV system.	Please clarify on the statement.	ACID control system shall interface with CCTV system for events like access control violation, intrusion detection etc. and immediately alerts the controllers with the pop up of relevant images of the events in the HMIs. For further details, please refer Chapter 4, 5, 12, 13 and Appendix B of Technical specification for detailed functional and interface requirements. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
240	P2	VI B	5.1.2.2	Management of Authentication The Security Access Control System shall provide the authentication function with IC card and biometrics such as finger vein authentication.	Please provide us the specification of card reader and Biometric reader as this information is missing	Please refer Chapter 5, Chapter 12, Chapter 13 and reference Appendix B of Technical specification for detailed functional and interface requirements
241	P2	VI B	5.1.2.2	Management of Authentication The Security Access Control System shall provide the authentication function with IC card and biometrics such as finger vein authentication.	There are many variety of Card readers & Biometric readers available in the market. Please provide the specifications of card reader and Biometric reader as this information is missing in the RFP document.	Please refer Chapter 5, Chapter 12, Chapter 13 and reference Appendix B of Technical specification for detailed functional and interface requirements
242	P2	VI B	5.1.2.2 & 5.1.2.8	Management of Authentication	This point calls for.....such as finger vein authentication & the point against clause No. 5.1.2.8 calls forbiometric authentication such as fingerprint authentication. Kindly confirm which is to be considered.	Please refer revised bid condition 5.1.2.2 in Addendum 1.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

243	P2	VI B	5.1.2.3	Management of Integration Function with Other systems The Security Access Control System shall have the function to interface other systems such as the CCTV system and fire alarm system.	Please provide us the functionality of the interface. Also need to know the number of CCTV cameras need to interface.	ACID control system shall interface with CCTV system at software level for events like access control violation, intrusion detection etc. and immediately alerts the controllers with the pop up of relevant images of the events in the HMIs. ACID control system shall interface with Fire alarm system using dry contact or other suitable means for unlocking of all or selected door during Fire alarm. Please refer Chapter 4, 5, Chapter 12, Chapter 13 and reference Appendix B of Technical specification for detailed functional and interface requirements
244	P2	VI B	5.1.2.3	Management of Integration Function with Other systems The Security Access Control System shall have the function to interface other systems such as the CCTV system and fire alarm system.	Please provide us the number of CCTV cameras needed for this interface and the locations of interfacing	ACID control system shall interface with CCTV system at software level for events like access control violation, intrusion detection etc. and immediately alerts the controllers with the pop up of relevant images of the events in the HMIs. ACID control system shall interface with Fire alarm system using dry contact or other suitable means for unlocking of all or selected door during Fire alarm. Please refer Chapter 4, 5, Chapter 12, Chapter 13 and reference Appendix B of Technical specification for detailed functional and interface requirements
245	P2	VI B	5.1.2.8	High Security Zone In the high security zone, railway company staff shall be restricted with security permission in advance in staff/visitor's IC card and/or a biometric authentication such as fingerprint authentication. The biometric authentication shall be equipped in a. SCR (Station Control Room), b. Station's SER, c. Station's CER d. ASS/TSS room of each station, e. ASS/TSS rooms at each Depot f. Entrance & Peripheral Gates in Depot g. RSS buildings h. DCC (Depot Control Centre) room i. CER at Depot j. SER at Depot k. Tunnel portal l. Telecom Closet rooms at stations	Please provide exact location Biometric reader and card reader requirement.	Please refer revised Bid condition for clause 5.1.2.6,5.1.2.7 and 5.1.2.6.8 in addendum 2
246	P2	VI B	5.1.2.8	High Security Zone In the high security zone, railway company staff shall be restricted with security permission in advance in staff/visitor's IC card and/or a biometric authentication such as fingerprint authentication. The biometric authentication shall be equipped in a. SCR (Station Control Room), b. Station's SER, c. Station's CER d. ASS/TSS room of each station, e. ASS/TSS rooms at each Depot f. Entrance & Peripheral Gates in Depot g. RSS buildings h. DCC (Depot Control Centre) room i. CER at Depot j. SER at Depot k. Tunnel portal l. Telecom Closet rooms at stations	These two statement are contradicting. Please provide exact location Biometric reader and card reader requirement. This contradicting with 5.2.1.5	Please refer revised Bid condition in Addendum 2.
247	P2	VI B	5.2.1.5	The contractor shall provide Biometric reader, key and card at TER,SER,TSS,ASS and UPS room and Station Control rooms and remaining access rooms shall be provided with card and key.	Our understanding of the key mentioned in this clause is, an option of entering PIN number in the card reader. Kindly confirm.	Please refer Addendum 2 for revised bid condition for Clause no 5.2.1.5
248	P2	VI B	5.2.1.5	The contractor shall provide Biometric reader, key and card at TER,SER,TSS,ASS and UPS room and Station Control rooms and remaining access rooms shall be provided with card and key.	These two statement are contradicting. Please provide exact location Biometric reader and card reader requirement. This contradicting with 5.1.2.8	Please refer Addendum 2 for revised bid condition for Clause no 5.2.1.5

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

249	P2	VI B	5.2.2.2	The intrusion detection system (part of ACS system) shall include commercially available Sensor Controller with discrete initiating devices to provide supervised monitoring of access doors and, gates, etc.	The sensors/devices proposed will have the feature / provision to be supervised. The functionality is also dependent on the ACID software which is not part of this RFP. Kindly confirm.	Please refer Addendum 2 for revised ACIDS specification.
250	P2	VI B	5.3.1 (f)	switches, egress equipment and power supply equipment. All access point facilities shall be vandal resistant and tamper proof. Access point controller and Battery shall be properly housed in an enclosure having IP rating of IP 54 for indoor installation and having IP rating of IP 65 for installation at outdoor/exposed to rain and sunlight. Contractor to ensure aesthetics view of the station / OCC & BCC / depot area where ACID system will be deployed. Exposed cabling, conducting, cable containment is not allowed. Contractor to interface with civil works contractor to ensure timely deployment of secondary containment so that cable laying can be done. Door equipment like I/O box, battery Boxes, CPUs shall not be exposed. This equipment to be installed above false ceiling or below false floor to ensure easy maintenance. Card reader, door sensor and EM lock assembly will have IP rating of IP 54 for indoor installation and having IP rating of IP 65 for installation at outdoor /exposed to rain & sunlight	As per standard practice, Door equipment like I/O box,battery Boxes, CPUs should not installed above false ceiling or below false floors. Kindly consider these equipment installation at proper secure, dry and safe locations on floor areas.	Please refer revised bid condition in Addendum 2. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
251	P2	VI B	5.3.1	(b) Enclosures for smart card readers, override key- System functionality shall be achieved with central server in redundant mode. Contractor shall submit design & RAMs calculation for final approval.	Does reader and override key require enclosure. Please provide more clarification.	Please refer revised bid condition in Addendum 2. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
252	P2	VI B	5.3.1(b)	Enclosures for smart card readers, override key- System functionality shall be achieved with central server in redundant mode. Contractor shall submit design & RAMs calculation for final approval.	The enclosure shall be provided for the Controllers only, whereas the Readers, override keys shall not need any enclosures to be provided. Kindly confirm.	Please refer revised bid condition in Addendum 2. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
253	P2	VI B	5.3.1.f	(f) switches, egress equipment and power supply equipment. All access point facilities shall be vandal resistant and tamper proof. Access point controller and Battery shall be properly housed in an enclosure having IP rating of IP 54 for indoor installation and having IP rating of IP 65 for installation at outdoor/exposed to rain and sunlight. Contractor to ensure aesthetics view of the station / OCC & BCC / depot area where ACID system will be deployed. Exposed cabling, conducting, cable containment is not allowed. Contractor to interface with civil works contractor to ensure timely deployment of secondary containment so that cable laying can be done. Door equipment like I/O box, battery Boxes, CPUs shall not be exposed. This equipment to be installed above false ceiling or below false floor to ensure easy maintenance. Card reader, door sensor and EM lock assembly will have IP rating of IP 54 for indoor installation and having IP rating of IP 65 for installation at outdoor /exposed to rain & sunlight	These equipments are vandal resistant and tamper resistant. Hence please change this to tamper resistant.	Please refer revised bid condition in Addendum 2.
254	P2	VI B	5.3.1.f	(f) switches, egress equipment and power supply equipment. All access point facilities shall be vandal resistant and tamper proof. Access point controller and Battery shall be properly housed in an enclosure having IP rating of IP 54 for indoor installation and having IP rating of IP 65 for installation at outdoor/exposed to rain and sunlight. Contractor to ensure aesthetics view of the station / OCC & BCC / depot area where ACID system will be deployed. Exposed cabling, conducting, cable containment is not allowed. Contractor to interface with civil works contractor to ensure timely deployment of secondary containment so that cable laying can be done. Door equipment like I/O box, battery Boxes, CPUs shall not be exposed. This equipment to be installed above false ceiling or below false floor to ensure easy maintenance. Card reader, door sensor and EM lock assembly will have IP rating of IP 54 for indoor installation and having IP rating of IP 65 for installation at outdoor /exposed to rain & sunlight	The Access control equipments are vandal resistant & tamper resistant not tamper proof. Hence the same is recommended for tamper resistant.	Please refer revised bid condition in Addendum 2.
255	P2	VI B	5.4	ACS system shall be an integrated smart card access, intrusion detection, and alarm monitoring control system designed to meet the operational requirements of ACS system shall be interfaced mainly with GE backbone Network, CCTV System and Automatic Fare Collection System (according to smart card technology), Clock System, Fire Alarm, Civil	Please clarify the Objective of Interface with AFC Fare collection system with ACS. We understand it is interface with AFC Card.	The objective of this interface is to ensure the compatibility of Employee pass/AFC card on Access control system.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

256	P2	VI B	5.4.2	5.4.2 It shall be able to perform its function standalone in case of communication failure with the central ISMS server in the OCC & BCC. The system shall be able to detect sensor failure and damage of wire.	The system detects the sensor failure not the cable damage. It is recommended to remove the cable damage detection.	Please refer revised bid condition in addendum 2
257	P2	VI B	5.4.9	The employee master database of CMRL shall be synchronized online with the ACIDS system data base for authentication.	Please confirm whether the synchronisation is in ISMS vendor scope. [which is not part of scope of this RFP]	All employee details shall be synchronized and stored centrally and locally. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
258	P2	VI B	5.5.1	Central Access Control Server - Not in scope of this RFP	Bidder understands that even the Central Access Control Server is not in scope of this RFP	Central Server is not in scope of this RFP. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
259	P2	VI B	5.5.1	Central Access server not in scope of RFP	Central access server out of scope can cause many intergration issues , can this be part of RFP please clarify	Central Server is not in scope of this RFP. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
260	P2	VI B	5.5.1.1	5.5.1.1 Site / Station HMI for local operator control and monitoring: (a) Support standalone operation of Station HMI while communication failure with central server (b) A stand-alone Workstation (in the depot and OCC & BCC only) to facilitate issue of new access control cards/modify and cancel access entitlements, etc.	Client shall work in conjunction with server in OCC as mentioned in 1.12 Central Server A central access control server (with hardware redundancy and disk mirroring) shall be installed in CER, within the OCC & BCC, which shall control and monitor all of the Access Control and Intrusion Detection facilities installed within all phase 2 (Corridor 3,4 &5) corridors, sites, stations, OCC & BCC, Depots and Operational administrative offices both for OCC, BCC & Depots. In case of communication failure, client shall log off automatically as this will be a security feature requirement. Please confirm. The standalone client to continue operating in station when communication to central server fails would require local server and database at station. Please confirm if this is the requirement.	Please refer revised bid condition 5.5.1.1 in Addendum 2.
261	P2	VI B	5.5.1.1	Site / Station HMI for local operator control and monitoring: (a) Support standalone operation of Station HMI while communication failure with central server (b) A stand-alone Workstation (in the depot and OCC & BCC only) to facilitate issue of new access control cards/modify and cancel access entitlements, etc.	(a) The ACID HMI shall be in OCC / BCC Contractor's scope. Kindly confirm. . (b) This function shall be part of OCC / BCC Contractor's scope. Kindly confirm.	Please refer revised bid condition 5.5.1.1 in Addendum 2. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
262	P2	VI B	5.5.1.1	Site / Station HMI for local operator control and monitoring: (a) Support standalone operation of Station HMI while communication failure with central server	Now a days Access control system design follow a centralized approach only as various type of redundancy features are available to keep the central server availability. This allows more memory to the controller so that controller can handle standalone operation incase of network failure. Request you to allow design flexibility in this clause	Please refer revised bid condition in Addendum 2.
263	P2	VI B	5.5.10	5.5.10.1 (a) Automatic self-test facility, automatic detection and automatic configuration	Please clarify regarding Automatic self-test facility, automatic detection and automatic configuration	Please refer revised bid condition in Addendum 2.
264	P2	VI B	5.5.10.1	5.5.10.1 (h) A local alarm sounder shall be activated at the operator's HMI and locally at the door, gate or to alert security personnel to the location of the forced entry. Reset of the forced entry shall be security protected.	The Audio Visual alarm is built in the reader and a local alarm sounder can be provided at the HMI. Please confirm if any other Audio Visual alarm to be provided.	Built-in alarm in reader and workstation speaker can be used as alarm. No additional alarm sounder needed.
265	P2	VI B	5.5.2.2	Degraded mode of operation shall be defined and finalized during the design stage, whereas for clarity Controller may be treated as Control Sever where local controller should work as independently in case of degraded mode of operation. Access point Controller should be POE, POE+ enabled capable of battery charging, powering up readers etc. may be accepted.	Bosch controller can be power by power supply unit will it be allowed ?	Please refer Addendum 2 for revised bid condition.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

266	P2	VI B	5.5.2.2 (g)	Degraded mode of operation shall be defined and finalized during the design stage, whereas for clarity Controller may be treated as Control Sever where local controller should work as independently in case of degraded mode of operation. Access point Controller should be POE, POE+ enabled capable of battery charging, powering up readers etc. may be accepted.	Request for acceptance of standard non - PoE controller as PoE is: -Prone to network disturbance -Addition of PoE extenders for more than 100m which is not suitable for large expanse projects like Metro -Single point of failure possibility in case of PoE device failure	Tender condition shall prevail.
267	P2	VI B	5.5.2.2.f	(f) Temperature range shall be 0 to 50°C for indoor installation, and same shall be 0 to 70°C outdoor installation.	Controller are always suggested to be in Indoor location where temperature is not high. Request you to kindly approve "Operating temperature 0°C to +55°C Storage temperature range 0°C to +70°C"	Please refer revised bid condition 5.5.2.2 (f) in Addendum 1.
268	P2	VI B	5.5.2.2.g	Degraded mode of operation shall be defined and finalized during the design stage, whereas for clarity Controller may be treated as Control Sever where local controller should work as independently in case of degraded mode of operation. Access point Controller should be POE, POE+ enabled capable of battery charging, powering up readers etc. may be accepted.	Can we provide separate Power Supply for Controllers, instead of POE, POE+. Kindly confirm.	Please refer Addendum 2 for revised bid condition.
269	P2	VI B	5.5.3.1 (b)	5.5.3 Access Point Hardware 5.5.3.1 General All access point facilities shall be vandal resistant and tamper proof.	These equipments are vandal resistant and tamper resistant. Hence please change this to tamper resistant.	Please refer Addendum 2 for revised bid condition.
270	P2	VI B	5.5.3.1	All access point facilities shall be vandal resistant and tamper proof	We understand that the Controller, reader and lock which can be provided with tamper switch/feedback sensor and anyone trying to open the same, there shall be an alarm in the system. For the field equipment like cards, anti tamper provision cannot be provided.Please clarify.	Please refer revised bid condition addendum2
271	P2	VI B	5.5.3.1 (d)	The access card reader shall have suitable internal memory for data storage for fast access and operation of system in fallback mode.	Only biometric card readers have the in-built memory feature. IC card reader does not have the memory inbuilt. Kindly modify the clause	Please refer Addendum 2 for revised bid condition.
272	P2	VI B	5.5.3.1	5.5.3 Access Point Hardware 5.5.3.1 General The access card reader shall have suitable internal memory for data storage for fast access and operation of system in fall-back mode.	The access card readers are just antennas for reading the card credentials, does not have any memory. The data is stored in the controller which has the memory. In case of fal back mode the controller stores the data and all the event , alarms.	Tender condition shall prevail.
273	P2	VI B	5.5.3.1 (b)	All access point facilities shall be vandal resistant and tamper proof	Please clarify list of items required with vandal and tamper proof apart from controllers	Please refer revised Bid condition in addendum 2
274	P2	VI B	5.5.3.1 (d)	The access card reader shall have suitable internal memory for data storage for fast access and operation of system in fallback mode	Please clarify if this is only for biometric reader, as normal smart card readers would not have inbuilt memory	Please refer Addendum 2 for revised bid condition.
275	P2	VI B	5.5.3.1.d	The access card reader shall have suitable internal memory for data storage for fast access and operation of system in fallback mode.	We are providing Mifare cards, hence the data will be stored in the cards. And as for the Biometrics, the- Biometric card reader shall have the inbuilt memory. Please confirm.	Please refer Addendum 2 for revised bid condition.
276	P2	VI B	5.5.3.2.e	Access points, which provide an exit in an emergency, shall be equipped with power- locked devices.	We understand that power locked device means EM lock.Please clarify.	Power locked device shall be an electrical lock as specified in clause 5.5.3.2 (a).
277	P2	VI B	5.5.3.6.4	5.5.3.6.4 Consideration shall be given as to the distances over which a proximity ID is required to operate to cover pedestrian access at gates, vehicular access at barriers and door access, such as based on ISO 14443 for communications at distances up to 10 cm or ISO 15693 for distances up to 50 cm.	As cards shall be compatible with AFC, communication distances of 10 cm, cannot be achieved. Distance can be upto 5 cms. Request approval for same.	Tender condition shall prevail.
278	P2	VI B	5.5.3.6.4	Consideration shall be given as to the distances over which a proximity ID is required to operate to cover pedestrian access at gates, vehicular access at barriers and door access, such as based on ISO 14443 for communications at distances up to 10 cm or ISO 15693 for distances up to 50 cm.	Please let us know the exact location for this reader requirement, so that suitable card can be considered	All card readers supplied under this scope of the contract shall minimum comply with ISO 14443 for communications at distances up to 10 cm. Please refer Addendum 2 for revised bid condition.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

279	P2	VI B	5.5.4.1	Intrusion Detection facilities shall be installed. For Depot perimeter intrusion detection system, the solution shall be provided as per the list below and shall be finalised during design stage. Contractor shall obtain the approval from Engineer accordingly.	Request to please share the exact requirement with locations for Intrusion system.	Please refer Addendum 2 for revised bid condition. For RSS, Intrusion detection system shall be provided as per clause 5.5.4.2.
280	P2	VI B	5.5.4.1	Intrusion Detection facilities shall be installed. For Depot perimeter intrusion detection system, the solution shall be provided as per the list below and shall be finalised during design stage. Contractor shall obtain the approval from Engineer accordingly. (a) In station areas to prevent public access to Back of House & Track areas. (b) Around the vehicular and pedestrian entry & exits at depot. (c) Details of sites/location to be provided with IDS facility shall be finalized during detailed design stage. (d) The detection techniques / modalities shall include one or more of the following, all of which shall operate in conjunction with each other and the CCTV System, to continuously track intrusions within and across zones and all areas within the confines of the site. (e) Motion detection cameras, with associated special software and software licenses (f) Vibration detection (g) Infra-red beam detectors (h) Microwave beam detectors (i) Beam interruption sensors for Depot gates (j) Fence mounted sensors (k) Door relay (l) The contractor shall provide the door sensors at the fire exit doors to monitor the door open/close status	Please share the location where all this is required, also the minimum quantity.	"Please refer Addendum 2 for revised bid condition. For RSS, Intrusion detection system shall be provided as per clause 5.5.4.2."
281	P2	VI B	5.5.4.1	The contractor shall provide the door sensors at the fire exit doors to monitor the door open/close status	Kindly provide the number of Fire Exit doors to be monitored using Door Sensors.	Please refer drawings for door details.
282	P2	VI B	5.5.4.1 (a)	Intrusion Detection facilities shall be installed. For Depot perimeter intrusion detection system, the solution shall be provided as per the list below and shall be finalised during design stage. Contractor shall obtain the approval from Engineer accordingly. (a) In station areas to prevent public access to Back of House & Track areas.	Intrusion coverage is specified for track areas as well, can you please clarify the extent of this till which track areas need to be covered and what kind of intrusion detection needed at track area	Please refer Addendum 2 for revised bid condition.
283	P2	VI B	5.5.4.2	The contractor shall provide electrical pulsed fences at RSS Building.	electrical pulse can be fatal even non-fatal by design please re-conform requirement or can contractor suggest alternative please clarify	Please refer revised bid condition in Addendum 2.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

284	P2	VI B	5.5.4.2	The contractor shall provide electrical pulsed fences at RSS Building.	Please clarify the other places where the Electric pulse fence is required ? Shall we consider the same for depot perimeter as well. We recommend mandatory site visit by the bidder / oem before proposing the electric fence system Also we recommend that at least these minimum specifications are kept as standard as it is a design & build tender : Fence Min. Standard: Configuration of fence:1.5m 16 lines grouted to the wall top with addl 0.3m grouting length Fence Post Material : Min. 2mm Profile rolled from Cold Rolled MS and hot dip galvanized to a min thickness of 60Microns Spacing between wires :Holes equally spaced on profile not less than 91mm to hold Insulators / Hooks Profile: should be Pointed Top to prevent climbing Configuration: Live and Earth configuration Max. Length of each zone:225 meters Fence Wire: HT Wire 2mm wire with electrical resistance 30 Ohms per KM Intermediate insulators : Insulator made of HDPE with UV Protection color black and designed to break when 25Kg Load is applied vertically (Anti Climb) Field Enclosure: IP65/IP56 with access controlled door with EML for security Intelligent Field/Master controller: Memory capacity :minimum 75000 events storage buffer Encryption : AES 128 bit encryption between Fence controller and Intelligent controller , AES-256 bit encryption between Intelligent controller and monitoring software Energy per Zone: Min 2.3Joules independent of other Zones Safety features of Energizer Fence controller : Pulse Rate: 1 pulse every 1Sec~1.5Sec. (Mandatory; No pulse to repeat within 1 Sec) Pulse Sync Option: Mandatory Maximum energy delivered to a load of 500Ω must be less than 5 Joule Safety Standards : IEC 60335-2-76 & IS302-2-76 Notifications & Alarms : GUI Software : Software shall be GUI based with support for latest Windows OS 10/11 and system databased based on Microsoft SQL Server 2016 version. Alarms Management : All alarms and events shall be displayed in the GUI application with options of acknowledge and audit trail with time stamps. Fence intrusion Alarms - CCTV Integration : Software shall have capability for pop-up of the corresponding CCTV video during alarm event through high level integration. Integration to Command centre applications : Software shall have capability for integration of the system including alarms , control through industry standard protocols such as REST API/ OPC / BACNet.	Please refer revised bid condition in Addendum 2.
285	P2	VI B	5.5.4.2	The contractor shall provide electrical pulsed fences at RSS Building	For RSS fences, please let us know the length and the perimeter area of each RSS.	Please refer revised bid condition in Addendum 2. For Poonamallee RSS length is 74 mtr , Perimeter is 234m and area 31.82 Sq.m For Alwartirunagar RSS length is 90 mtr , Perimeter is 248m and area 30.60 Sq.m Please refer Annexure A in addendum 1 for RSS layout
286	P2	VI B	5.5.5	Engineering Terminal	We understand that these functions are just for our reference and the related Engineering Terminal such as PC / Workstation for station level & its application software shall not be in scope of this RFP and shall be provided by OCC/BCC Contractor. Please confirm	Engineering Terminal such as PC/Workstation for station level & its application software is within the scope of ASA-05 however respective sub system application software shall be provided by ASA 06 contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
287	P2	VI B	5.5.7.1	All components of the Access Control & Intrusion Detection System (ACIDS) equipment within the stations and Depot shall operate on 230 V AC and shall be powered from the ACDB provided in the TER.	All Access Control & Intrusion Detection System (ACIDS) equipment 12V DC power and used AC TO DC converter SMPS. Kindly consider the same	Bidder is allowed to use AC to DC Converter.
288	P2	VI B	5.5.8.4 & 4.1.3.2.1	(g) CCTV monitoring shall be possible for under vehicle inspection of visitors vehicle at Depot entry/exit gates & Provision of CCTV Cameras at Depot – Mainline train Entry/Exit for UVSS (Under vehicle surveillance) facility both for up and down tracks	Clause 5.5.8.4 (g) asks for UVSS for Vehicles at entry/exit of Depot while other clause 4.1.3.2.1 asks for UVSS for Rolling Stock. Kindly clarify whether these are two separate requirements and bidder has to provision for both separately.	Please refer Addendum 2 for revised bid condition.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

289	P2	VI B	5.5.9.1	Configuration of new card shall be done from Card Work station, which shall be part of ACS network.	Card issue station to be considered at all stations ? Please clarify the locations for this requirement.	"Three number of Workstation for Card issuance shall be required. Location shall be finalized during design stage."
290	P2	VI B	5.6.1.2	5.6.1.2 Suitable encryption and associated electronic safeguards shall be provided to prevent any cloned Proximity ID Cards gaining access to the system and entry to controlled locations.	In order to prevent the cloned cards it is recommended to use the card key system , wherein the reader can read and write in the sectors of the cards and for access grant verification it will read the Card Key from the Sector instead of reading the CSN no. at the outside of the card.	Contractor shall propose methodology for Employer's review during design stage.
291	P2	VI B	5.6.1.3	Any card reading equipment removed from site, by unauthorized means, shall be automatically barred from future access to the system.	This feature is available for only Biometric readers not for other readers. Kindly update the clause accordingly.	Please refer Addendum 2 for revised bid condition.
292	P2	VI B	5.6.1.3	Any card reading equipment removed from site, by unauthorized means, shall be automatically barred from future access to the system.	Generally this feature used to be available for Biometric readers and not for other readers. Kindly clarify if it is required for Biometric Readers only	Please refer Addendum 2 for revised bid condition.
293	P2	VI B	5.6.1.3	Any card reading equipment removed from site, by unauthorized means, shall be automatically barred from future access to the system.	This feature is available for Biometric readers not for other readers.	Please refer Addendum 2 for revised bid condition.
294	P2	VI B	5.6.1.3	5.6.1.3 Any card reading equipment removed from site, by unauthorized means, shall be automatically barred from future access to the system.	This equipment shall not be programmed in the server, but barring this equipment shall be a manual process.	Please refer Addendum 2 for revised bid condition.
295	P2	VI B	5.7	"It shall be possible to expand ACS by additional 30% into the Access Control System / network without affecting the performance of the Access Control System / network. Any limits on this requirement, shall be specified by the Contractor for review by the Employer."	We understand 30% expandability is not applicable on the hardware access controller. And is expandability is applicable only to ACS software only. Please confirm if our understanding is correct.	Please refer Addendum 2 for revised bid condition.
296	P2	VI B	6.2 (a)	At OCC & BCC, Master Clock system to be provided under Telecom Contract shall consist of following major components: a) GPS Master Clock Unit. (In redundancy)	We understand that the redundant Masterclock system in 1+1 configuration optically linked to each other shall be kept at OCC as a main unit and another hot standby unit in same configuration shall be kept at BCC so that Master Clock services are uninterruptible available and survive during any one failure of hardware, cabling and software. Please confirm our understanding. Further, we observed that, the NMS / MMI is missing in specification which is required to be provided at OCC/BCC for supervision and maintenance of Master Clock System including stations / depot / HQ / OCC / BCC clocks. Requesting your kind attention for addition of MMI at OCC/BCC for supervision and maintenance of all stations / depot / OCC / BCC clocks.	Master clock and its NMS is not under scope of this tender and shall be provided by other designated OCC/BCC contractor i.e. ASA-06.
297	P2	VI B	6.7.2.3 (a)	One wall mounted synchronized digital clock in each Station Control Rooms, OCC & BCC, SSR, DCC, TOM, RSS, small offices	Kindly provide some information about small offices.	Small offices shall be PPIO, Depot Security control room, reception areas etc. Please refer revised bid condition 6.7.2.3(b) and 6.2 in Addendum 1. Please also refer Annexure A - STATION AND DEPOT BUILDING DRAWINGS in Addendum 2.
298	P2	VI B	6.7.2.3 (b)	Minimum two No's of Large Display clocks - digital clock at concourse to the passenger areas to be visible in all lighting conditions.	please provide the size of large display digital clock.	Please refer revised bid condition 6.7.2.3 (b) in Addendum 1.
299	P2	VI B	6.7.2.3.b	Minimum two No's of Large Display clocks - digital clock at concourse to the passenger areas to be visible in all lighting conditions.	We understand that the large digital display clocks required for concourse area shall be "outdoor double sided ceiling mount type" for the passengers to be visible in all lightening conditions. Please confirm our understanding. OEM recommends to use similar specification "outdoor double sided ceiling mount type" display clock, one at each platform.	Please refer revised bid condition 6.7.2.3 (b) in Addendum 1.
300	P2	VI B	6.7.2.3.c	Display digital clock at various locations shall display 4 characters viz.time in HH:MM format and date in DD:MM format.	We understand that the Display digital clock at various locations shall display 4 characters viz.time in HH:MM format and date in DD.MM format alternatively.	Please refer revised bid condition in Addendum 2.
301	P2	VI B	7.1.1.11	Corridor 4 Stations FOTS network shall be integrated to Core Switch at OCC & BCC by using open standard protocols. Core Switches at OCC & BCC shall be provided by other Telecom Contractor (ASA 06)	As per our understanding, there is existence of temporary OCC. Please confirm the consideration of core switch and FOTS NMS at this loaction either by ASA 06 contractor or by ASA 05 contractor.	Temporary OCC shall not be required. Please refer revised bid condition 1.6.3.4 in Addendum 1.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

302	P2	VI B	7.1.1.11	Core switches at OCC & BCC shall provided by other telecom contractor (ASA 06)	Please clarify scope within OCC and BCC for fiber connectvty to core switch	Fiber connectivity up to BCC (at Nanadhanam Metro Bhavan, Phase 1 route will be followed for OFC connectivity to BCC Nanadhanam Metro) CER shall be under scope of this tender. OCC is planned in Madhavaram and Bidder will be permitted to use the 144 Core fiber infra supplied by other Telecom contractors of respective section. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
303	P2	VI B	7.1.1.8	A Network Management System shall be provided at the OCC and BCC to monitor status of all the FOTS equipment and control the operation and maintenance process. It shall provide alarm surveillance, performance monitoring, configuration management, failure management as a minimum as per operational requirements.	We understand that these functions are just for our reference and the related NMS such as PC / Workstation for station level & its application software shall not be in scope of this RFP and shall be provided by OCC/BCC Contractor. Please confirm	Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
304	P2	VI B	7.1.3	(r) Hardware firewalls with redundancy solution shall be provided for internet service for OA/IT.	Please confirm the specification of Firewall that will be deployed in the network.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
305	P2	VI B	7.1.3 Scope of Supply	Hardware firewalls with redundancy solution shall be provided for internet service for OA/IT	Hardware firewalls with redundancy solution shall be provided for internet service for OA/IT "Do we required firewall on both network also need clarification on Internet bandwidth. Request to clarify Firewall sizing and selection depends on the Internet bandwidth and no-of users	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
306	P2	VI B	7.1.3(r)	Hardware firewalls with redundancy solution shall be provided for internet service for OA/IT.	The firewall shall be provided only at a single location either OCC/BCC, which will be in the OCC/BCC Contractor's scope. Kindly confirm.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
307	P2	VI B	7.1.4.2	After 6 months of revenue operation, the Contractor shall compile and submit performance report to the Engineer/Employer for approval. The Contractor shall be responsible where necessary for re-configuring the network and providing additional hardware to ensure maintenance of the specified minimum equipped reserve capacity and additional spare capacity at no extra cost to CMRL.	Our execution will be based on the CMRL approved design, hence we will not be able to provide any additional requirement after 6 months.	Please refer Addendum 2 for revised bid condition.
308	P2	VI B	7.1.4.4	The trenching involved for the connectivity of RSSs shall be carried out by E&M Contractor.	Request to include the supply & laying of DWC pipe / Conduits involved for the connectivity of RSSs shall also be carried out by the same E&M Contractor.	Please refer Chapter 13.7 Interface with PS-OHE Contractor. Please refer revised bid condition for clause 7.1.4.4 in addendum 2
309	P2	VI B	7.2.1.1	(a) 24 core fiber optic for station other tail connectivity.	This requirement shall be in the scope of the Signalling Contractor, who is providing the dark fiber cables.	Please refer Addendum 2 for revised bid condition.
310	P2	VI B	7.2.1.5	The transmission system used as the backbone for operational communications will be a GE based IP network consisting of carrier grade IP elements. The system shall be based on duplicated Fiber optic ring structure with necessary IP protocols and suitable ring protection mechanism (< 50ms) to provide tolerance in the network to multiple faults in the OFC back bone.	Most of the application and services converge in 150ms to 300ms & works well in this convergence time protocol. Hence, kindly amend the same as,"The transmission system used as the backbone for operational communications will be a GE based IP network consisting of carrier grade IP elements. The system shall be based on duplicated Fiber optic ring structure with necessary IP protocols and suitable ring protection mechanism (250ms to 1s) to provide tolerance in the network to multiple faults in the OFC back bone."	Please refer Addendum 2 for revised bid condition.
311	P2	VI B	7.2.4.3	Telecom Contractor shall extend OFC connection up to Telecom rooms and equipments from single mode OFC termination point by signalling contractor at each station, and depot, OCC & BCC	Kindly confirm if any specific core cable to be used or shall we select as per requirement 12F/24F/48F	Please refer revised bid condition 7.2.4.3 in Addendum 1.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

312	P2	VI B	7.2.4.5	Intra connectivity of station, depots & OCC & BCC location for CCTV, PIDS etc. shall be done by 12 Core Armored SM / MM fiber for FOTS.	This requirement shall be in the scope of the Signalling Contractor, who is providing the dark fiber cables.	Please refer revised bid condition 7.1.1.5 in Addendum 1.
313	P2	VI B	7.2.5.1	The Giga Ethernet backbone shall be based on suitable protection to achieve convergence time of < 50ms in event of any link failure and or any network disruptions along with conditions defined in above paras.	Most of the application and services converge in 150ms to 300ms & works well in this convergence time protocol. Hence, kindly amend the same as, "The Giga Ethernet backbone shall be based on suitable protection to achieve convergence time of 250ms to 1s in event of any link failure and or any network disruptions along with conditions defined in above paras."	Please refer Addendum 2 for revised bid condition.
314	P2	VI B	7.2.6.1 Main System Elements	7.2.6.1 WAN Nodes (a) The WAN shall connect all sites in ring topologies via WAN Nodes which shall be provided at all main sites including stations, OCC & BCC /HQ and depots.	Kindly confirm our understanding that HQ, MRTS HQ, CMRL HQ, Metro Bhawan, Metro Bhawan HQ, Nandanam Metro Bhawan all refer the same location.	HQ, MRTS HQ, CMRL HQ, Metro Bhawan, Metro Bhawan HQ, Nandanam Metro Bhawan all refer the same location.
315	P2	VI B	7.2.6.2 (a)	(a) This equipment shall provide interfaces to site LANs and other IP devices like IP telephony. In case any system having interface on other protocol then convertor for same will be provisioned by Telecom Contractor	The provisioning of the convertors for the sub-system outside the scope of this tender should be the responsibility of the other contractor deploying that sub-system. Any sub-system for integration with FOTS should be available in standard Ethernet copper interface. Please amend the clause accordingly.	Please refer Addendum 2 for revised bid condition.
316	P2	VI B	7.2.6.3	Network Management System	We understand that the related NMS such as PC / Workstation for station level & its application software shall not be in scope of this RFP and shall be provided by OCC/BCC Contractor. Also refer Tender Part 2 clause# 7.2.9.1.4. Please confirm	Contractor shall interface with OCC/BCC Contractor for finalization of NMS architecture during design stage. Please refer revised bid condition 7.2.9.1.7,13.21.1.2 and additionally added clause 13.21.1.3 in Addendum 2.
317	P2	VI B	7.2.6.4	Engineering Terminal	We understand that the related Engineering Terminal such as PC / Workstation for station level & its application software shall not be in scope of this RFP and shall be provided by OCC/BCC Contractor. Please confirm	Engineering Terminal is a local portable Engineering Computer Terminal for system set-up, testing, diagnostics and maintenance operations. Engineering Terminal supplied under the scope of ASA-05 shall be loaded with the application software supplied under the scope of ASA-05. For example, the configuration software for PAVA system, Network switches etc. which is in scope of this RFP and shall be provided by ASA-05 Contractor.
318	P2	VI B	7.2.9.1.11	The Layer 3 switch in OCC & BCC, stations, depots and Head Quarters shall be modular chassis based switch. Bidders shall provide FCAPS certified NMS Solution which can support & manage multiple vendor devices.	We understand the L3 switches at OCC & BCC comes under the category of Core switches and these to be procured by customer through other RFP. L3 switches at stations, Depot are asked in active/active configuration which can easily be achieved through fixed chassis (1RU or more) switches. Therefore the Chassis based L3 switches may not be required at Stations and Depot level. Request you to amend or modify the clause accordingly.	Please refer revised bid condition 7.2.9.1.11 in Addendum 1.
319	P2	VI B	7.2.9.1.4	NMS at OCC and BCC shall be Common for all 3 Corridors of CMRL phase II and shall be in other Corridor Telecom RFP Scope Which shall be provided by other designated Telecom Contractor	As the NMS shall be common and provided by other RFP please confirm data sharing from corridor switch to NMS shall be on SNMP v3. please confirm that NMS shall not be provided under Corridor 4 RFP.	Please refer revised bid condition 7.2.9.1.7 in Addendum 2. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
320	P2	VI B	7.2.9.1.7	If Contractor shall fail to interface successfully, Integration shall be done by providing his own NMS at OCC & BCC and interfacing at NMS level with Common NMS without any additional cost.	We shall provide only the software, in case we fail to integrate with the OCC/BCC contractor. We shall supply & install our software in the same hardware provided by the OCC/BCC Contractor.	Please refer revised bid condition in Addendum 2. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
321	P2	VI B	7.4.1.2	In-service performance monitoring for all network elements shall include, but not be limited to, on the following performance parameters: (b) Port Frame Error Rate (c) Port In Drop Rate (d) Port Out Drop Rate	The mentioned features of FOTS NMS are specifically applicable for the SDH -TDM based network & not related / not applicable to Giga Ethernet based system, hence request to remove these clauses from the TS.	Please refer revised bid condition 7.4.1.2 in Addendum 1.
322	P2	VI B	7.4.1.2a	In-service performance monitoring for all network elements shall include, but not be limited to, on the following performance parameters: (a) Bandwidth Utilization in Byte, Packet & Percentage	In order to allow equal participation from multiple OEMs, kindly amend the clause as mentioned below "Bandwidth Utilization in Byte or Packet or Percentage"	Please refer revised bid condition 7.4.1.2 in Addendum 1.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

323	P2	VI B	7.5.1.1	The Contractor shall provide a main and standby database for storing the system hardware and software configurations. Both the working and backup configuration database shall be automatically updated for any changes in the database.	To avoid error replication on both the NMS database due to auto sync feature , we recommend to have separate database connection to network devices for both the NMS. Request to amend the Clause as "Both the working and backup configuration database shall be kept on two separate database to avoid sync error replication on similar connected database."	Virtualized environment shall be provided by ASA-06 for hosting all NMS software of Phase 2 at two locations tentatively at OCC and BCC. ASA-05 contractor shall implement NMS system in a geo redundant manner utilizing this infrastructure and ensure the full NMS functionality shall be operated from both locations.
324	P2	VI B	7.8 Technical System Performance	7.8.1.3 The maximum traffic interruption time on any circuit due to link, node or any other failure shall be less than 50 ms for the FOTS network. This shall include the time duration for protection switching completion in accordance with the sequence of events below: (a) from the onset of a failure detection to the completion of protection switching. (b) from the clearing of a failure to the completion of protection switching restoration in case of revertive switching. (c) from the activation of the restoration command to the completion of protection switching restoration in case of non-revertive switching; and (d) reframing time required by FOTS equipment 7.8.1.4 The maximum traffic interruption time on any circuit due to link, node or any other failure shall be less than 50 ms by using suitable open standard Ring protection protocols. 7.8.1.5 The system response times of the FOTS Network Management System shall be as follows: (a) Commands presented to the FOTS Network Management System from FOTS management Workstation shall be processed and produce an appropriate output within 2 seconds maximum. (b) Real-time data presented to the FOTS Network Management Workstation from the network elements shall be processed and produce the appropriate output within 2 seconds maximum; and (c) Execution of parameter changes to GE IP Nodes initiated through the FOTS Network Management System shall be less than 2 seconds.	It seems difficult to maintain <=50 ms failover time looking at the possibility of involvement of different OEMs products (switches) considering OCC/BCC not in scope of ASA 05.	Please refer Addendum 2 for revised bid condition. In case of difficulty ASA 05 contractor may provide his own core switch/High-capacity switch for terminating the corridor 4 all FOTS rings and shall do core to core integration to Common Core switch which shall be provided by other OCC/BCC designated contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3
325	P2	VI B	7.9.2.1 h Giga Ethernet Equipment	(h) All the Network Switching Devices/NMS should support Open Flow Protocol for SDN technology	SDN is centralized solution and should be part of OCC/BCC. Can we consider this not required for ASA 05 to ensure.	Please refer revised bid condition 7.9.2.1 (h) in Addendum 2
326	P2	VI B	7.9.2.11	The proposed FOTS system must support a centralized SDN management provisioning technology for centralized device provisioning, zero touch recovery of the failed field units to minimize the MTTR and increase the service up time, centralized OS management and roll out to minimize the business down time. The SDN provisioning must not be restrictive only to the FOTS WAN switches but also must be capable to extend to the local LAN switches within Stations, Depots, RSS and other locations	Request to remove the clause.	Please refer revised bid condition 7.9.2.11 in Addendum 1
327	P2	VI B	7.9.2.11	The proposed FOTS system must support a centralized SDN management provisioning technology for centralized device provisioning, zero touch recovery of the failed field units to minimize the MTTR and increase the service up time, centralized OS management and roll out to minimize the business down time. The SDN provisioning must not be restrictive only to the FOTS WAN switches but also must be capable to extend to the local LAN switches within Stations, Depots, RSS and other locations	This is restrictive clause unless complete network desing and OEM details ,Hence request to remove "The SDN provisioning must not be restrictive only to the FOTS WAN switches but also must be capable to extend to the local LAN switches within Stations, Depots, RSS and other locations " Moreover SDN controller are OEM Specific and limited fucntionlity when you integrate multiple OEM Kindly Ammend - The proposed FOTS system must support a centralized SDN management provisioning technology for centralized device provisioning, zero touch recovery of the failed field units to minimize the MTTR and increase the service up time, centralized OS management and roll out to minimize the business down time. The SDN provisioning must not be restrictive only to the FOTS WAN switches but also must be capable to extend to the local LAN switches within Stations, Depots, RSS and other locations	Please refer revised bid condition 7.9.2.11 in Addendum 1

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

328	P2	VI B	7.9.2.1h	All the Network Switching Devices/NMS should support Open Flow Protocol for SDN technology	In order to allow equal participation from multiple OEMs, kindly amend the clause as mentioned below "All the Network Switching Devices/NMS should support Open Flow Protocol or equivalent Sflow/Netflow for SDN or equivalent technology."	Please refer revised bid condition in Addendum 2
329	P2	VI B	7.9.5 (e.) & 7.9.12	Layer 2 Features : 802.3x - Flow Control, Layer 2 Ping, Layer 2 Traceroute and Connectivity Fault Management	Layer 2 Ping, Layer 2 Traceroute is specific to some particular OEM, kindly change it to "Layer 2/3 Ping, Layer 2/3 Traceroute"	Please refer Addendum 2 for additional bid condition.
330	P2	VI B	7.9.6.p	MPLS VPN	OEMs support VRF-Lite. Generally in Metro environment it's a ring based architecture on dark fiber with path redundancy. MPLS will be used in mesh network by ISP. Kindly change it to "MPLS VPN / VRF-Lite"	Please refer Addendum 2 for revised bid condition.
331	P2	VI B	7.9.7 (f.) & 7.9.14 (f.)	Scheduling IP precedence, 802.1p and ISL priority, three transmit queues on a per port basis, WRR, Strict Priority Queue TOS<->COS mapping	1) ISL Priority is Cisco proprietary kindly remove it or change it to "Scheduling IP precedence, 802.1p / ISL priority, three transmit queues on a per port basis, WRR, Strict Priority Queue TOS<->COS mapping" 2) Secure policy manager is an additional appliance/solution.	Please refer Addendum 2 for revised bid condition.
332	P2	VI B	8. TELEPHONE COMMUNICATION SYSTEM	8.1.1.4 The provision of Media gateway inside depot shall be in scope of other Telecom Contractor(ASA06)	Request to provide the make and model of existing OEM and Media Gateway details for interoperability and smooth integration	Media Gateway shall be provided by other designated OCC/BCC Contractor. Make and Model shall be finalized during design stage.
333	P2	VI B	8.0.		Considering metro there has to be self survivability functionality so that in case network failure for reaching OCC/BCC, Inside the station all IP phones should work with basic functionality.	Please follow tender conditions.
334	P2	VI B	8.0.		If OCC server & BCC server is not reachable in a station, adjacent 4 stations should work as group(Ring) to provide all features & facilities	Please follow tender conditions.
335	P2	VI B	8.1.1.1	The Telephone System shall provide the CMRL Phase II, Corridor 4 staff with voice, fax and data communications between CMRL personnel internally and also externally to the PSTN on IP PBX Exchange. Objective is to use the network infrastructure which is redundant. The infrastructure shall be used on a separate CAT 7 CAT 6A STP LSZH cable or latest	For Cat6A STP Cable, is this SF/UTP (Overall Aluminum Foil and Tinned Copper Braid Shield) please confirm	Please refer Addendum 2 for revised bid condition.
336	P2	VI B	8.1.1.2	In addition to IP Phones, DLT and Analog telephones in Depot, help points at platforms and Tunnels shall also be provided for passengers for assistance when they are within the Tunnels and Station platforms.	1. Kindly clarify the types of phones to be considered for which locations in this RFP [IP Phones, Digital Phones & Analog Phones] 2. Do all 28 locations to have independent systems connected over IP network between each other and does the supply of these systems at 28 locations is part of this tender. Kindly confirm 3. Please let us know the Analog phones quantity in the Depot.	1. Please refer clause 8.4.5 for details regarding type of phone and their respective locations. 2. PABX Shall be placed only in OCC & BCC (by OCC/BCC Contractor). At stations PABX shall not be required. Please refer Chapter 8 and Chapter 13 for detailed telephone scope. 3. Tender is based on Design and built requirement. Please follow the tender conditions.
337	P2	VI B	8.1.1.4	The provision of Media gateway inside depot shall be in scope of other Telecom Contractor(ASA06) The Telephone System shall consist of the following subsystems: 8.1.1.5 Direct Line Telephone Communication; 8.1.1.6 Voice Over IP Phones and network	Under the heading of "Telephone System" there are two sub systems "Direct Line Telephone Communication" and "Voice Over IP Phones. Are these to be considered two separate EPABX'S and are these in addition to 28 stations.	PABX shall not be under scope of this tender. EPBX shall be common, however a logically independent network (separate VLAN) with high priority shall be provided for Direct Line Communication System.
338	P2	VI B	8.1.1.8.3	The Telephone System shall be interfaced with a Centralized Digital Recording System for recording of free space voice conversations of all Controllers in SCR and DCC Room, The micro phones shall be so placed in SCR and DCC to enable clear recording of all controller positions without any mixing / disturbance.	Since CDRS is not part of this RFP, request you to elaborate on the interface required from Telephone System for the free space voice recording as mentioned in this clause.	Please refer Addendum 2 for revised bid condition.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

339	P2	VI B	8.1.1.9.1	The Telephone Common Network Management System (NMS) main at OCC and redundant at BCC with Maintenance Supervisory Console, Keyboard with common Log Printer Server and associated printers, shall be provided by other designated OCC/BCC Telecom Contractor. Corridor 4 Telephone system and network shall be interfaced with Common NMS by using open standards and all features and functionality shall be ensured.	The NMS for the Telephone system cannot be common for the other system and other OEMs, request you to remove the word "Common".	The Telephone Common Network Management System (NMS) shall be provided by other designated OCC/BCC Telecom Contractor. In general NMS will be used to manage the EPBX and Media gateways. The status of the Telephones connected to the EPBX, and Media Gateways shall be monitored by this NMS. ASA-05 shall ensure the integration of the EPBX (supplied by ASA-06) and Telephones (Supplied under ASA-05) as per the tender requirements. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3
340	P2	VI B	8.1.1.9.1	The Telephone Common Network Management System (NMS) main at OCC and redundant at BCC with Maintenance Supervisory Console, Keyboard with common Log Printer Server and associated printers, shall be provided by other designated OCC/BCC Telecom Contractor. Corridor 4 Telephone system and network shall be interfaced with Common NMS by using open standards and all features and functionality shall be ensured	NMS will be or is provided by different vendor and "Telephone System" provided under this tender should be monitored or interfaced by the existing NMS. Please confirm, if the understanding is correct. If yes, the third party NMS might have some proprietary information which might not be understood on a open platform. Please clarify, if this clause goes like this or more clarity could be provided on this.	Integration is envisaged using open standards and the features supported by the Open standards. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3
341	P2	VI B	8.1.1.9.1	The Telephone Common Network Management System (NMS) main at OCC and redundant at BCC with Maintenance Supervisory Console, Keyboard with common Log Printer Server and associated printers, shall be provided by other designated OCC/BCC Telecom Contractor. Corridor 4 Telephone system and network shall be interfaced with Common NMS by using open standards and all features and functionality shall be ensured.	The NMS for the Telephone system cannot be common for the other system and other OEMs, request you to kindly amend the same and remove the word common NMS.	Integration is envisaged using open standards and the features supported by the Open standards. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3
342	P2	VI B	8.1.1.9.2	IP PBX, Direct Line Telephone System and IP Network shall be monitored, supervised and controlled by Network Management Systems.	NMS will be or is provided by different vendor and "Telephone System" provided under this tender should be monitored or interfaced by the existing NMS. Please confirm, if the understanding is correct. If yes, the third party NMS might have some proprietary information which might not be understood on a open platform. Please clarify, if this clause goes like this or more clarity could be provided on this.	Integration is envisaged using open standards and the features supported by the Open standards. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3
343	P2	VI B	8.2.2.1.13	Minimum 50% cables shall be available as spares	Please elaborate about this requirement of minimum 50% cables as spares, whether the same refers ports for IP phones or Copper for Analog phones.	Clause is applicable for Analog type phones including emergency telephones in tunnels. Spare IP ports shall be provided as defined in FOTS requirement.
344	P2	VI B	8.3.2 Direct Line Communication System	8.3.2.2.1 Direct Line Consoles shall be provided by other designated Contractor at OCC & BCC for each of the controllers.	Kindly confirm the requirement of DLT consoles for Stations (SCR, SSCR) and HQ, for consideration as part of scope of the ASA 05 Contractor.	DL Consoles shall not be under scope of this tender. It shall be provided by ASA 06 Contractor. Direct Line IP telephone for stations and depots shall be provided by ASA-05. Please also refer Annexure A - STATION AND DEPOT BUILDING DRAWINGS in Addendum 2.
345	P2	VI B	8.3.2.1.4	8.3.2.1.4 The Direct Line Telephones shall be single button selection connected to OCC & BCC so that an audible alarm is sounded and the location of the calling telephones is displayed on appropriate console at OCC & BCC. At the locations other than the OCC & BCC, Direct Line Telephones shall be terminated on Digital/IP telephone sets. Consoles shall be provided with single button selection for each direct line connection.	OCC & BCC consoles are not part of tender so compliance to 8.3.2.1.4 to be done by IPPBX contractor only. Since the telephone system is IPPBX, DLC should be IP Phone only not Digital phone so kindly clarify.	DL Consoles at OCC/BCC operators shall be provided by ASA 06 Contractor while IP type Direct Line telephones at all stations, depot etc. of Corridor 4 shall be provided by ASA 05 Contractor. Please refer Addendum 2 for revised bid condition.
346	P2	VI B	8.3.2.3	Direct Line Telephones shall be standard IP Telephones connected to OCC & BCC Direct Line Console through single push button selection. In each station 1 Nos. of such telephones, 20 lines for SCR/DCC, and 10 lines for each of the other locations in the Stations/Depot/RSS shall be provided. It shall be possible for the SCR to make normal and emergency direct line calls to the designated controllers in OCC & BCC. Different audio/visual indications shall be provided for incoming direct line calls on the Direct Line Telephones for normal and emergency calls.	Direct Line phones will be supplied by ASA05 and connected to ASA05 contractor supplied Telephone systems. Kindly confirm	Query not clear. Direct line Telephones shall be provided by ASA 05 Contractor at all stations, depot, RSS, etc. of Corridor 4 and shall be connected to PBX which will be provided by ASA 06 contractor at OCC & BCC. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

347	P2	VI B	8.3.2.6.2	The IP PBX Call Management Server shall be provided by other designated Telecom Contractor, in hot redundant configuration, will be placed at OCC with the redundant part at the BCC and should be configurable in two different subnets. It shall be configured in hot standby configuration such that no single failure should affect the availability of the system. Or Bidder may propose Virtualized solution by having all services applications, Database, Management servers including other system applications in Virtualized manner to optimize the solution hardware etc. as per bidder design. In such case Subsystem/system redundant software shall be residing in separate server other than primary application server which should work in Hot standby mode.	As per this clause the "IP PBX Call Management server is to be provided by other designated contractor" which means call management software is not to be provided by bidder/OEM of this RFQ then compliance to many clauses such as 8.3.2.6.2, 8.1.1.5, 8.1.1.6.1, 8.1.1.6.5, 8.1.1.8, 8.1.1.9, 8.2.2.1, 8.2.5, 8.2.6, 8.2.7, 8.4.2.2 is not possible as these specifications can only be complied by the vendor providing IPPBX call management server/software in HOT redundant configuration.	Please refer revised bid condition 8.3.2.6.2 in Addendum 1. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
348	P2	VI B	8.3.2.7	Main Nodes IP PBX at OCC shall form the main node with backup at BCC . This main node shall be connected with central switches (1+1 hot standby) at OCC/BCC and through Ethernet links to the station managed switches (L2 Managed POE) in Star and Ring Topology. The IP phones at OCC & BCC and stations will connect to POE switches. The above arrangement has to be commissioned providing dedicated link to maintain connectivity.	Our system is capable of handling PSTN Connectivity, however the scope of connecting the PSTN vendor to our system is in the scope of CMRL. Kindly confirm.	Please refer Addendum 2 for revised bid condition.
349	P2	VI B	8.4.2.2.2	The Telephone Network Management Systems shall provide facilities for users to run diagnostics on the control, voice and data circuitry without causing interruption to the operation of the system.	The Telephone system NMS shall be manage the Telephone system devices like - Call server, Media Gateway, IP phones etc. it will not manage the Data switches etc. kindly confirm.	Telephone NMS will not manage the Data switches. Data switches shall be managed by FOTS NMS. Please refer Addendum 2 for revised bid condition.
350	P2	VI B	8.4.2.2.6	The Telephone Network Management Systems shall support for integration with other OEM systems.	The telephone system shall support the same OEM NMS, generally it doesn't integrate with other OEM NMS, we request you to kindly amend the same.	Please refer revised bid condition 10.3.7.2 in Addendum 2.
351	P2	VI B	8.4.2.2.6	The Telephone Network Management Systems shall support for integration with other OEM systems.	The telephone system shall support the same OEM NMS, it cannot integrate with other, we request you to kindly amend the same.	Please refer revised bid condition 10.3.7.2 in Addendum 2.
352	P2	VI B	9.2.2 Networking hardware for the OA and IT system. 9.3 Scope of Supply	The scope of Communication Contractor shall be provision of OA/IT System (including design, supply, installation, testing, commissioning and integration). All personal computers, printers and servers for data storage and related application software are not included in scope of the communication Contractor. 9.3.1 The Contractor shall provide two 24 port switches at each station, one in TER and one in SCR and 5 No's of 24 port switches at Depot	As per our understanding End user nodes for OA/IT are not in scope of this RFP hence, for OA/IT network, we need to provide two L3 (distribution) switches at each station & five L3 switches at Depot level. Therefore, the supply of Access switches is outside the scope of this RFP. Kindly confirm.	Please refer revised bid condition in Addendum 2.
353	P2	VI B	9.3.2	Hardware firewalls with redundancy solution shall be provided for internet service for OA/IT.	The firewall shall be provided only at a single location either OCC/BCC, which will be in the OCC/BCC Contractor's scope. Kindly confirm.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment. Please refer revised bid condition in Addendum 2.
354	P2	VI B	9.3.2	Hardware firewalls with redundancy solution shall be provided for internet service for OA/IT.	Firewalls are installed at OCC & BCC however, OCC & BCC are not a part of this Contract. Please clarify	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment. Please refer revised bid condition in Addendum 2.
355	P2	VI B	9.4.1	Telecom Contractor shall provide All the OA & IT servers, OA/IT PCs, and printers, required for administration works of the Rail System shall be connected on the dedicated OA / IT GE network.	Clause 9.2.2 and Clause 9.4.1 are Contradictory	Please refer revised bid condition in Addendum 2.
356	P2	VI B	9.4.2	The OA / IT network shall be extended to all locations / rooms in stations, Depots, RSS and provided with voice network. OA&IT Network shall have separate Distribution/ and access layer. The contractor to ensure system fall back redundancy and to ensure that there should not be any single point of failure. The Contractor shall provide minimum Two 24-port switch at each station, and 5 nos. 24 port switch at each depot (all L-3 Switches with 10/100/1000mbps ports) for OA/IT network. Specifications of the switch shall be as provided in the FOTS specification. A separate NMS for OA/IT with all hardware and software shall also be supplied.	Please provide us the entire OA / IT requirement in detail like station wise quantity for considering the cost accordingly.	Please refer revised bid condition in Addendum 2.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

357	P2	VI B	9.4.2	The OA / IT network shall be extended to all locations / rooms in stations, Depots, RSS and provided with voice network. OA&IT Network shall have separate Distribution/ and access layer. The contractor to ensure system fall back redundancy and to ensure that there should not be any single point of failure. The Contractor shall provide minimum Two 24-port switch at each station, and 5 nos. 24 port switch at each depot (all L-3 Switches with 10/100/1000mbps ports) for OA/IT network. Specifications of the switch shall be as provided in the FOTS specification. A separate NMS for OA/IT with all hardware and software shall also be supplied.	Generally for OAIT Metro Networks Layer 3 Switch is at OCC and BCC and Stations are Provided with Layer 2 Switch. Clarification Required if Layer 3 Distribution Switch is required at Station , RSS and Depot from which Layer 2 OAIT Access switch will be connected. NMS	Please refer revised bid condition in Addendum 2.
358	P2	VI B	9.4.4	CAT 6E, STP data cables with flame retardant and LSZH properties combo termination point for telephone & data (RJ 45) connectivity shall be provided at every location including end- point socket. The CAT 6E STP cable shall be terminated in the combo termination point.	We shall design & offer Cat6 cables as per clause 8.3.1.4.5, since there is a contradiction under Clause no. 8.1.1.1 & Clause no. 9.4.4 as it is mentioned as Cat6A & CAT6E respectively. Kindly confirm.	Please refer revised bid condition clause 8.1.1.1 and 9.4.4 in Addendum 2.
359	P2	VI B	APPENDIX – B 1.11.2	2. It is possible to synchronize both databases ACIDS andCMRL. In order to ensure a correct synchronization between two databases, a bi-directional synchronization process is needed. The ACIDS database will receive all relevant information about theCMRL, employees, and in opposite direction, CMRL receives the time attendance of its employees. The time attendance data that are synchronized withCMRL, database are only the date/time of entrance and exit of the employee. All process about ACIDS and CMRL databases synchronization shall be discussed in detail, as part of the interface design with CMRL and AFC Contractor. Telecom contractor shall be lead contractor for this interface.	Please change to: 2. It is possible to synchronize both databases ACIDS andCMRL. In order to ensure a correct synchronization between two databases, a bi-directional synchronization process is needed. The ACIDS database will receive all relevant information about theCMRL, employees, and in opposite direction, CMRL receives the time attendance of its employees. The time attendance data that are synchronized withCMRL, database are only the date/time of entrance and exit of the employee. All process about ACIDS and CMRL databases synchronization shall be discussed in detail, as part of the interface design with CMRL and AFC Contractor. Telecom contractor shall be lead contractor for this interface. The system shall have capability to customise the data exchange for between two databases and also shall support custom reports as needed	Please refer Addendum 2 for revised bid condition.
360	P2	VI B	APPENDIX – B 1.12	1.12 Central Server A central access control server (with hardware redundancy and disk mirroring) shall be installed in CER, within the OCC & BCC, which shall control and monitor all of the Access Control and Intrusion Detection facilities installed within all phase 2 (Corridor 3,4 &5)corridors, sites, stations, OCC & BCC, Depots and Operational administrative offices both for OCC, BCC & Depots	We understand that disk mirroring is RAID 5, please confirm?	Central server is not in the scope of this tender. ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
361	P2	VI B	APPENDIX – B 1.16.f ACIDS	(f) Integrated Access control system software (Central server, Corridor server and various stations ,OCC,BCC and Depot HMI clients shall be designed for minimum 130 stations which shall cover corridor 3,4 & 5 of CMRL phase 2.	ACIDS Corridor server for C4 shall be scope of which contractor.	Integrated Access control system software is provided for reference, shall be provided by ASA06 contractor. Please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
362	P2	VI B	APPENDIX – B 1.4.2.g	g. Once configured, recording servers shall run independently of the management server, and shall continue to operate even if the management server is offline.	Once configured, recording server shall run independently and any change or modification shall be done through management system only from local location. And management server shall coontinue to monitor and manage all activities of recording server in order to maintain track of all actions and system integrity This will ensure no loss of recordings, functionality like Alarm & Events, and operator action verification	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
363	P2	VI B	APPENDIX – B 1.4.2.j	j. System should ensure that once recorded, the video cannot be altered, ensuring the audit trail is intact for evidential purposes. This has to be achieved using Authentication with SHA-1 hashing function, secured with encryption to ensure authentication. Water marking alone for ensuring tamper proof recording is not sufficient. The VMS must support digital signature to prove authentication and integrity. Temper proof recording mechanism which meets security of minimum 128 bits encryption shall be implemented.	In addition there are various password protection features. There are also mechanisums to completely hide the video files in unformatted drives so as no one can even attempt to tamper them. So, allow alternate mechanisms for tamperproof recordings.	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

364	P2	VI B	APPENDIX – B 1.4.2.j	j. System should ensure that once recorded, the video cannot be altered, ensuring the audit trail is intact for evidential purposes. This has to be achieved using Authentication with SHA-1 hashing function, secured with encryption to ensure authentication. Water marking alone for ensuring tamper proof recording is not sufficient. The VMS must support digital signature to prove authentication and integrity. Temper proof recording mechanism which meets security of minimum 128 bits encryption shall be implemented.	Please confirm if this would mean Digital certificates and same shall be acceptable	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
365	P2	VI B	APPENDIX – B 1.4.2.n	n. The online archiving capability shall be transparent and shall allow viewing client users to playback archived recordings without the need to restore the archived video to a local hard drive for access.	Our understanding is that the archived video shall be stored on the same network as that of VMS management and recording server. Please confirm	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
366	P2	VI B	APPENDIX – B 1.4.j	j. The system shall support search of recorded video for motion in user- specified areas of a camera image. This intelligent post-recording motion search will work for relevant cameras connected.	We understand this as Region Of Interest "ROI" based motion detection analytics for selected cameras. Please confirm.	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
367	P2	VI B	APPENDIX – B 1.4.k	k. It shall be possible to backup and restore system configuration in order to quickly restore the configuration of the video management system. Two types of backup of system configuration shall be possible: (a) Scheduled backup, (b) Manual backup. System logs shall not be backed up or restored when performing manual backup or restore.	As per our understanding of scheduled backup, the system shall provide the option to be able to schedule a backup of selected cameras for a selected duration at selected time to specified location. Please confirm.	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
368	P2	VI B	APPENDIX – B 1.5.f	f. The viewing client shall enable operators to connect to the management server for initial authorization. Upon authorization, the viewing client shall be able to connect to the recording server(s), for access to live and recorded videos. Once authorized, the viewing client shall run independently of the management server, and shall continue to operate even if the management server is offline. However, in the downgraded mode (when the connectivity between central server and the station is not available), some other designated viewer client shall be able to login to the system and the video recording & the local viewing shall not be affected.	Please confirm the downgrade mode as this would mean only live viewing?	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
369	P2	VI B	APPENDIX – B 1.5.f	f. The viewing client shall enable operators to connect to the management server for initial authorization. Upon authorization, the viewing client shall be able to connect to the recording server(s), for access to live and recorded videos. Once authorized, the viewing client shall run independently of the management server, and shall continue to operate even if the management server is offline. However, in the downgraded mode (when the connectivity between central server and the station is not available), some other designated viewer client shall be able to login to the system and the video recording & the local viewing shall not be affected.	In the RFP Active directory functionality is also asked for to have enhanced security mechanism along with centralized management server for authentication. Allowing the local login will defeat the entire security mechanism. So, it is not recommended for such a infrastructure projects. Please confirm user shall get access only after centralized authentication.	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
370	P2	VI B	APPENDIX – B 1.5.h	h. The viewing client shall allow the user to be able to: 5. Should switch to secondary recording by simply pressing tab in viewing page	5. Secondary recording will be accessed based on the availability of primary recording system. System will decide which storage it should connect and no user level control required. Should have visible notification that which stored data of camera is playing back like Failover or Primary. This will ensure no operator action is needed to access all the recordings	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

371	P2	VI B	APPENDIX – B 1.5.h	17. skip gaps (periods with no recordings) during playback of recordings.	17. skip gaps (periods with no recordings) during playback of recordings . : The system shall support simultaneous playback of multiple cameras and also support simultaneous view of live and playback for same camera This will help in forensic and investigation	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
372	P2	VI B	APPENDIX – B 1.6.j	j. Map function shall allow the real-time status monitoring for VRM server/storage devices	We understand MAPs are only for monitoring purpose. Other feature like checking VRM server/storage devices shall be available from software. Kindly confirm.	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
373	P2	VI B	APPENDIX – B 1.7	1.7 Alarm Management Feature d. The camera associated with alarm shall be displayed as a separate video window.	The camera associated with alarm shall be displayed as a separate video window . If it is non CCTV alarm or event the associated video clip shall be available at alarm UI as embedded clip for investigation purpose This will ensure ease of operation and critical recordings will be available for immediate viewing	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
374	P2	VI B	APPENDIX – B 1.7	1.7 Alarm Management Feature e. An alarm preview window shall display recorded video from a selected alarm or event if these have videos associated with them. If there are more than one cameras associated with an alarm or if more than one alarm is selected, the preview shall show video from all associated cameras (up to 9 cameras).	An alarm preview window shall display recorded video from a selected alarm or event if these have videos associated with them. If there are more than one cameras associated with an alarm or if more than one alarm is selected, the preview shall show video from all associated cameras (up to 9 cameras). Or operator should be able to call up all associated cameras This will ensure flexibility of operation	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
375	P2	VI B	APPENDIX – B 1.1 ISMS Specifications	The ISMS platform shall support integration with MS – AD / ADFS or any Open ID 2.0 compliant single sign-on solutions.	Please confirm whether the applications which have to be integrated with IAM support SAML 2.0 or Open ID connect protocols or not	ISMS chapter has been included for reference purpose only and shall not be part of scope of this tender and shall be provided by ASA 06 Contractor. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
376	P2	VI B	APPENDIX – G	APPENDIX – G TELECOM LAB	We understand all systems i.e DTS, MCS, CCTV, Telephone, PIDS, PAS, ACIDS front end management software shall be provided by other contractor so the set up of LAB shall also be in the other contractor scope only. And contractor of ASA05 do not have to offer the same as part of the offering . Please confirm if our understanding is correct.	Lab set up is under scope of this tender. Telecom Lab shall be developed for training, testing and R&D purposes. ASA-05 shall seamlessly integrate all the Items mentioned in S.No. 6 of Appendix G with ASA-06 in Telecom Lab. Also, please refer revised bid condition S.No. 6 of Appendix G in Addendum 2.
377	P2	VI B	Appendix 19	General Query	Please confirm the number of EPS or equivalent GB per day usage to size SIEM solution. Are you only looking for Logs or both packets and logs?	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
378	P2	VI B	Appendix F and Appendix G	SPECIFICATIONS OF CONFERENCE SYSTEM IN DEPOT MEETING ROOM AND TELECOM LAB	We understand that the Depot meeting Room and Telecom Lab setup are not the part of this RFP under Corridor 2. Please confirm	Depot meeting room and Telecom Lab shall be part and under scope of this RFP. Please find revised Appendix-F in Annexure-L SPECIFICATIONS OF CONFERENCE SYSTEM IN DEPOT MEETING ROOM in Addendum 2. Telecom Lab shall be developed for training, testing and R&D purposes. ASA-05 shall seamlessly integrate all the Items mentioned in S.No. 6 of Appendix G with ASA-06 in Telecom Lab. Also, please refer revised bid condition S.No. 6 of Appendix G in Addendum 2.
379	P2	VI B	APPENDIX H (1 b)	b) The telecom Contractor shall be responsible for finalizing of cable tray/ladder size, routes etc. Also they shall interface with E&M Contractor for whole requirement on their stations.	We understand that E&M contractor shall provide cable tray/ladder wherever required. However telecom contractor shall interface with them for their requirement. Please confirm if above understanding is correct.	Refer Appendix H. Primary cable tray as shown in typical drawing shall be supplied by E&M Contractor. The secondary cable connectivity is in scope of ASA_05. Cable trays inside SCR shall be provided by ASA 05 Contractor. Please also refer Annexure A - STATION AND DEPOT BUILDING DRAWINGS in Addendum 2.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

380	P2	VI B	Appendix-19	ISS & CYBER SECURITY TECHNICAL REQUIREMENTS D. Security event logs shall be generated and kept for each device and system and shall be sent to Security Information and Event Management (SIEM) for further analysis, correlation, and evaluation in order to identify and respond to suspicious activity. The event logs shall be kept for a minimal period of 1 (one) year. The proposed SIEM system shall support exporting the SIEM event logs to an external/detachable storage device.	Request to share the detailed technical specifications and minimal quantities of SAN Switches or Ethernet Switches for external Storage purpose	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
381	P2	VI B	APPENDIX-19 10.10 Application Security	H. SIEM platform shall be implemented for centrally collecting, analysing and correlating generated audit information. The correlation engine shall be capable of generating real time alerts (SMS, email) and reports for detected suspicions events and security violation.	We understand SMS Gateway / E-mail server shall be provisioned by CMRL. Kindly confirm.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
382	P2	VI B	Appendix-19 10.12 Technological Means for Security	D. The appropriate restricted zones for areas shall be established where sensitive IT systems, assets, information and support utilities will be located. These areas include: a. Data Centers. b. All the control centers - OCC, NOC, SOC, CSOC. c. Offices and their related computer equipment.	Is this required to maintain NOC, SOC and CSOC separately for this contract or we can merge SOC , CSOC and provide combined functionality.	All Cyber security software including Firewalls, Anti-malware, anti-spam, anti-spyware, etc. along with required licenses shall be supplied by ASA-06. ASA-05 contractor shall configure the Endpoints in line with the centralized cyber security environment.
383	P2	VI B	APPENDIX-E	S. No Description Unit Make/Model Total 6 Cable Fault Locator No.Fluke,APLAB or equivalent 2 7 Cable Route Detector No As approved 1	Cable Fault locator and Cable Route detector specifications not provided in the RFP, kindly share for OEM compliance	Cable fault Locator shall be Fluke/Aplab or equivalent. Cable route detector - Contractor shall propose Make & Model and shall obtain approval from Engineer/Employer.
384	P2	VI B	8.1.1.9.1	The Telephone Common Network Management System (NMS) main at OCC and redundant at BCC with Maintenance Supervisory Console, Keyboard with common Log Printer Server and associated printers,shall be provided by other designated OCC/BCC Telecom Contractor.Corridor 4 Telephone system and network shall be interfaced with Common NMS by using open standards and all features and functionality shall be ensured	NMS will be or is provided by different vendor and "Telephone System" provided under this tender should be monitored or interfaced by the existing NMS.Please confirm, if the understanding is correct. If yes, the third party NMS might have some proprietary information which might not be understood on a open platform.Please clarify, if this clause goes like this or more clarity could be provided on this.	Integration is envisaged using open standards and the features supported by the Open standards. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3
385	P2	VI B	8.1.1.9.2	IP PBX, Direct Line Telephone System and IP Network shall be monitored, supervised and controlled by Network Management Systems.		Integration is envisaged using open standards and the features supported by the Open standards. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3
386	P2	VI B	COM -S&TC- 07	CCTV -ESP Interface	Can you please elaborate on this requirement for better understanding?	On activation of Emergency stop plunger CCTV system shall receive trigger from ESP to CCTV system and provide alarm with Pop up image to CCTV HMI in SCR & OCC.
387	P2	VI B	General	NA	As per the Tender drawings the platform length is on an average 135m, but as per the 3 CAR Train length we shall consider the design for the Telecom systems on Platforms only for that specific area.	For each non passenger area of platform (where no other functional rooms like SCR or Equipment rooms are not planned) other than operational 3 Car length of platform, Telecom Contractor shall consider one CCTV Fixed Bullet Camera and 2 speakers with suitable wattage for each side along with required cabling & fixtures according to the Platform area. PAS STI requirement shall not be applicable for this Platform area.
388	P2	VI B	General	List of total no. of signal crossing points at each stations.	Details required as list of total number of signal point crossing at each station is not mentioned.	Location shall be finalized during signaling detail design stage. However, as of now tentative location are mentioned below which are subject to change. Bidder shall note that number of locations may increase or decrease during design stage. 1.Poonamalle bypass metro & Poonamalle metro 2.Teliyagaram & Porur Bypass 3.Karambakkam& Valasaravakkam 4.Avichi School & Saligramam 5.Panagala Park& Kodambakkam 6.kutchery Road & Light House

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022**

01-09-2022

389	P2	VI B	General	General	As main Master Clock is required to synchronise the Telecom and other subsystems on NTP. Kindly provide the specifications of the same	Master clock shall not be under scope of this tender and shall be provided by other designated OCC/BCC Contractor. Slave clocks at stations, depot etc. shall be synchronized with Master clock on NTP.
390	P2	VI B	General	General	As per conventional practice we expect a minimum BOQ to base our design and further work upon. Hence request you to kindly share the minimum BOQ	This tender is based on Design and Built. Bidders need to propose quantities for complying all tender requirements.
391	P2	VI B	General	General	Kindly provide the Station architecture drawing in AutoCAD format including all the area.	Please refer Annexure A - STATION AND DEPOT BUILDING DRAWINGS for sample station CAD layouts in Addendum 2.
392	P2	VI B	General	General	Please provide the Chainage details for corridor 4 including depot	Please refer Annexure C in Addendum 2.
393	P2	VI B	General	General	Since OCC/BCC is in another package, whose scope with the integration of Corridor 4 systems to OCC? who is lead contractor?. If ay failure in system level, who is responsible to attend it?	Please refer Chapter 13. ASA 06 contractor shall be the lead contractor for OCC/BCC integration. At station, Depot, RSS etc. except OCC/BCC, ASA 05 Contractor shall attend failure for first line maintenance. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.
394	P2	VI B	General	General	Does Cross passage have IP Phones?	Inside tunnels Analog emergency telephones shall be provided under the scope of this tender for which ASA 06 Contractor shall provide Media gateway with long line cards at Light House, Thirumayilai, Boat club, Kodambakkam Metro stations. Please refer revised bid condition 8.3.2.5 in Addendum 2.
395	P2	VI B	General	General	We understand there will be stations which will have interchange facility so that the commuters can go to another line. In such locations/stations the number of platforms and no. of floors /levels gets increased. We understand the bidder/contractor of each line will provide there respective systems in there area. E.g. (at a station "X" we have intersection of two lines. Then it will have 4 platforms . Two platform for Line "1" and 2 Platform for Line "2". And there are two contractor in that case one contractor will have responsibility of 2 platform and the other will have 2 platforms responsibility.Please confirm if our understanding is correct.	Double stack stations in Corridor 4 are under the scope of ASA-05. ASA-05 shall provide telecom facilities for all Platforms.
396	P2	VI B	General	General	We understand the front end software shall be provided by other contractor and is out of the scope of this bid. However systems of ACID are proprietary systems and works with its own front end software and HMI. Where the software and HMI have all the various features like granting access, creating rights, creating user, door configuration etc. However if the front end software is of 3rd party in that case the ACID hardware OEMs mostly do not integrate with the 3rd party software as the hardware OEM would not create its own competitor. As mostly all ACID OEMS has both Software as well as hardware and it works seamlessly together. So kindly allow to offer both hardware as well as Centralized Software as part of this package. And if the client wants to have another layer of software on top of this Centralized Software they can have this only for Alarms and Events where ACID and other OEMS can expose the alarm and events to this centralized additional layer. The same applies to all other systems too like PA , PIDS, Telephone systems. So kindly allow to offer both hardware as well as Centralized Software as part of this package for better integration and seamless operations	Please follow tender conditions. For more details, please refer Addendum 2 for revised clause 13.21.1.2 and additionally added clause 13.21.1.3.

**Prebid Queries and Responses - Lot 02
CMRL / PHASE – II / SYS / ASA05 / 2022
01-09-2022**

397	P2	VI B	General		We understand analog phone is required at the Depot while IP phones needs to be provided at the station. Please confirm if our understanding is correct.	At Stations only IP phones shall be provided while in depot Combination of IP phones and Analog phones shall be provided. Analog emergency telephone shall also be provided by ASA 05 Contractor inside tunnels for which ASA 06 contractor shall provide Media Gateway with long line cards (at Light House, Thirumayilai, Boat club, Kodambakkam Metro stations). Please refer Chapter 8 of Technical specifications and Addendum 2 for detailed telephones requirements.
398	P3	VIII	4.1 Pg.No 106	<p>4.1.2 Spares, Test, Measuring Instruments, Maintenance tools & Plant: The Contractor agrees to provide all necessary spares for a period of five (5) years, from the end of DLP Period of the last stage, at the request of CMRL, at the prices quoted in the tender documents (following detailed design finalization) subject to the Price Adjustment clause specified in Part 1 –Bidding Forms – ‘Instructions for completing the Pricing document’. After acceptance of detailed design, the Contractor shall submit to the Engineer the revised list of spares, constituting 10% of actually used quantity of every item used in the Project, with details of unit prices of each item of Line Replaceable unit (LRU) used in the Project, plus additional bulk spares specifically required by the Employer as per Part 2 – Employer’s Requirements, with details of unit prices of each item, technical description, drawing/part number details, supplier details, with the total cost of entire quantity of spares not exceeding the amount quoted in the Bid under the heading “Spares”. An identical procedure shall apply in respect of Test & Measuring instruments, maintenance tools & plant, viz-a-viz the lumpsum indicated in the Bid against this head.</p> <p>The Contractor shall carry sufficient inventories to ensure an ex- stock supply of consumable spares, testing & commissioning spares, DLP spares for the plant and equipment. Other spare parts and components shall be supplied as promptly as possible, but at the most within six (6) months of placing the order. In addition, in the event of termination of the production of any spare parts, advance notification of 2 years should be given to the Employer of the pending termination, to give sufficient time to permit the Employer to procure the needed requirements. Following such termination, the Contractor will furnish to the extent possible and at no cost to the Employer the blueprints, drawings and specifications of the spare parts, if requested.</p>	<p>1. Experiencing the present global semi-conductor availability crisis due to COVID-19 pandemic maintaining the price validity for 11 Years (06 Year - Project Schedule + 05 Year - Time Period Asked) cannot be maintained. Therefore, request to reduce the price validity period till end of project schdule (incl. DLP).</p> <p>2. Experiencing the present global semi-conductor availability crisis due to COVID-19 pandemic, timeline for advanced notification for termination of production of equipment should be reduced to 6 months in place of 2 years. Also, sharing of blue prints of equipment will be on sole description of OEM.</p> <p>Request to update the clause as per above observation.</p>	Tender condition shall prevail.
399	P3	VIII	Table 1: Summary of Key dates:	Under Key Date No. column with reference to the last KD-S7-011 - Completion of CMRS Inspection and ROD Clearance time for completion is mentioned as 1390 days from the commencement date.	We understand that KD-S7-011 is the last milestone excluding the DNP period. As per NIT point No-4 Duration of Contract (Completion period of the work) is 1450 days. Kindly confirm the reason for the gap of 60 days	Contract Completion period should be 1400 days asper Part A -Contract DATA.
400	P3	VIII	Table 1: Summary of Key dates:	<p>C4-ECV02, C4-ECV01 Stretch: KD-S1-001 - Obtaining Notice of No Objection (NONO) for Preliminary Design KD-S1-003 - Obtaining Notice of No Objection (NONO) for Final Design</p> <p>C4-UG02 Stretch: KD-S4-001 - Obtaining Notice of No Objection (NONO) for Preliminary Design KD-S4-003 - Obtaining Notice of No Objection (NONO) for Final Design</p> <p>C4-UG01 Stretch: KD-S7-001 - Obtaining Notice of No Objection (NONO) for Preliminary Design KD-S7-003 - Obtaining Notice of No Objection (NONO) for Final Design</p>	<p>KD 01 and KD 03 shall be achieved on receipt of NOSC (No Objection Subject to Compliance) as the resolution of queries may take longer time as key date timeline for submission and approval is only 20 Days as per Table 1 (Summary of Key Dates).</p> <p>Further, non-approval of design will affect material delivery schedule and acheiving related key dates.</p>	As per Table 1 total 120 days for preliminary design and 290 days have been provisioned for obtaining NONO For final Design which is sufficient for submission and obtaining NONO. Contractor shall plan submissions in distributed manner to avoid any delay for resolution of design queries/Comments.
401	P3	VIII	Table 1: Summary of Key dates:	Associated Price Centres for the purposes of Liquidated Damages - For Stage 4 and Stage 7	In Stage 4 & 7, Associated price centers for the purpose of Liquidated Damages must include propotionate cost calculation as mentioned in Key Dates of Stage 1.	As per clause 4.5.3-part 1 section IV price centres of stage 4 and stage 7 shall be worked out in similar lines as provided for stage 1