

Clarifications to Bidder's queries
CMRL / PHASE – II / SYS / ASA07 / 2021
03-03-2022

SN	Part	Section	Clause	Original Bid condition	Bidder's query	Reply
1	Part 2	SECTION VI - B PARTICULAR SPECIFICATIONS	4.3.1.4(x)	For the road-vehicle mounted Tetra Radio Sets, the required minimum coverage range shall be 50 meters on either side of elevated/at grade track and 250 meters radius of elevated/sub-surface stations	Please share Qty of "road-vehicle" in CMRL Phase-2 project ?.	Refer SN 5 Page 1 of "Clarifications to Bidder's queries CMRL / PHASE – II / SYS / ASA07 / 2021 27-01-2022."
2	Part 2	SECTION VI - B PARTICULAR SPECIFICATIONS	6.15.5.	Optical Distribution Frames (ODFs)	As per our understanding, ODFs will be provided by FOTS/CBN vendors. Requesting you to please remove clause-6.15.5 from Radio Chapter.	Tender condition will prevail. FOTS/CBN vendor will provide Splice Boxes only in Communication equipment room for the 8 core fiber allocated from the main FO cable.
3	Part 2	SECTION VI - B PARTICULAR SPECIFICATIONS	6.15.2.	Line-side Fibre Optic Splice Boxes	As per our understanding, Fibre Optic Splice Boxes will be provided by FOTS/CBN vendors. Requesting you to please remove clause-6.15.2 from Radio Chapter.	Tender condition will prevail. FOTS/CBN vendor will provide Splice Boxes only in Communication equipment room for the 8 core fiber allocated in the main FO cable.
4	Part 2	SECTION VI - B PARTICULAR SPECIFICATIONS	6.16.3(a)	The minimum protection required shall be as follows: IP 52 for equipment within the Equipment Rooms and Control Rooms.	Requesting you to please confirm that IP rating of Equipements which will be installed in racks inside "Equipment Rooms and Control Rooms" should be considered as IP52. Please reduce the same to lower rating like IP30 because these are not exposed to external environment.	Refer Addendum 2 SN 6.
5	Part 2	SECTION VI - B PARTICULAR SPECIFICATIONS	16.3.4, e	RADIO with Telephone System (TEL) – ii) For extending Fire Brigade users of CMRL portable radios to Fire Control through CMRL PABX. iii) For extending Police users of CMRL portable radios to Police Control through CMRL PABX.	We understand that Police and Fire Brigade users will be using only CMRL portable TETRA radios for calling their respective control rooms through CMRL PABX in "Chennai Metro Rail Project – Phase II" radio network . Please confirm understanding is correct.	Confirmed.
6	Part 2	SECTION VI - B PARTICULAR SPECIFICATIONS	6.3.2.3.	Development of the Acoustic study for the PAS in stations and Depots.	We understand that this clause-6.3.2.3 is not relevant to Radio Chapter. Please remove the same.	Refer Addendum 2 SN 5.
7	Part 1	Section – I (ITB)	Bid Data Sheet, Clause No. 21	The Bidder shall furnish as part of its Technical Bid, a Bid Security in the amount and currency specified in the BDS..... The amount and currency of the Bid Security shall be INR 90,00,000 (Indian Rupees, Ninety Lakhs Only) or USD 121,320 (US Dollars, One Hundred Twenty One Thousand and Three Hundred Twenty Only).	"Referring to clause 4 of memorandum issued by Ministry of Finance (Govt. of India) vide No. F.9/4/2020-PPD dated 12.11.2020 regarding Bid Security, no provisions of Bid Security should be kept in the Bid Documents in future and only provision for Bid Security Declaration should be kept in the Bid Documents. On account of slowdown in economy due to the pandemic, Ministry of Finance had made these changes in the 'Bid Security' clause of Procurement Policy. As all recent tenders from the Govt./PSUs are following the above mandate, we request you to please allow bidders to submit Bid-Securing Declaration in lieu of Bid Security."	Tender Conditions Prevail.

8	Part 3	Part 3, Section VIII, Particular Conditions of Contract (Part B: Specific Provisions)	Clause No. 19	<p>The Performance Security shall be in the form of a Bank guarantee, in the amounts of 10% of the Accepted Contract Amount, Excluding Price Centre L & M, and in the same currency(ies) of the Accepted Contract Amount.</p> <p>28 days before the issuance of taking over certificate, the contractor shall furnish another Performance Security in the form of a Bank guarantee from a Public Sector Bank (PSB) or Scheduled Commercial Banks of India for an amount of 10% of the total accepted value for CAMC for respective Stage. This Bank Guarantee for CAMC shall be kept valid up to 28 days beyond the scheduled expiry of the CAMC period.</p> <p>The Bank Guarantee submitted for CAMC shall be released on successful completion of the CAMC period and upon issuance of No Claim Certificate by the Contractor and as accepted by the Employer.</p> <p>Before the end of DNP of stage 7 (last stage), the contractor has to submit a separate Performance security amounting to 10% of Main Contract Price, including Price Centre L & M, valid for the full design life of the system to cover the maintenance obligations. In such a situation, the Bank Guarantees submitted for various stages of AMCs will be returned to the Contractor.</p>	<p>"1) As per our understanding, referring to clause 3 of memorandum issued by Ministry of Finance (Govt. of India) vide No. F.9/4/2020-PPD dated 12.11.2020 regarding Performance Security, the percentage of it has been reduced from 10% to 3% of the total accepted value of the project.</p> <p>Request you to amend the requirement accordingly, if our understanding is correct.</p> <p>2) Amount of PBG asked in these clause contradicts each other.</p> <p>As per our understanding, before the end of DNP of stage 7 (last stage), instead of submitting a separate Performance security amounting to 10% of Main Contract Price (including Price Centre L & M) the contractor should submit Performance security amounting to 10% of total accepted value of CAMC only.</p> <p>Please confirm if our understanding is correct.</p> <p>"</p>	1 & 2. Tender Conditions will prevail.
9	Part 4	Part 3, Section VIII, Particular Conditions of Contract	Part A, Contract Data Clause No. 18	<p>Total Advance Payment: Interest bearing mobilization advance to a maximum of 10% of the Accepted Contract Amount (Excluding Provisional Sum), Excluding Price Centre L & M, Excluding Taxes & duties, is payable in INR.</p> <p>The rate of Interest shall be 13.5% per annum.</p> <p>Mobilization advance shall be paid in two equal instalments.</p>	<p>Both clause contradict each other.</p> <p>As per our Understanding-</p> <p>a). The contractor will have to submit ABG for amount equivalent to Advance amount.</p> <p>b). The advance amount will be interest free.</p> <p>Please confirm if our understanding is correct.</p>	Refer Addendum 1 SN 57 Page 10 & SN 62 Page 11.
10	Part 3	Section VIII, Particular Conditions of Contract (Specific Provisions)	Clause No. 51	The Employer shall make an interest free advance payment for mobilization when the Contractor submits a guarantee in accordance with this sub-clause. This guarantee shall be in the form of BG for an equivalent amount of the requested advance amount as per format given in the Annex to PCC from any Public sector bank (PSB) or Scheduled Commercial Bank in India. The total advance payment and the applicable currencies and proportions shall be as stated in Contract Data.		
11	NIT	CORRIGENDUM No – 2	DATE EXTENSION	Last Date and Time of submission/uploading of Bid - 09 Mar 2022 till 13:00 hrs.	<p>We request CMRL to give an extension of 45 days from the current date of submission .</p> <p>It may be noted that we require the same considering below -</p> <p>(1) Last amendment has been released on 4th Feb'22.</p> <p>(2) Still there are few clarifications required based on current & earlier queries.</p> <p>(3) Apart from Tetra ,the tender also has considerable solution requirements on IBS and other third party items .</p> <p>(4) Current uncertain pandemic situation</p>	Refer Corrigendum No 4

Clarifications on Reply to Bidder's queries
CMRL / PHASE – II / SYS / ASA07 / 2021
03-03-2022

SN	Part	Section	Clause	Original Bid condition	Bidder's query	CMRL Response (27 Jan 2022)	Clarification sought further	CMRL Response
1	Part – 2	Section – VI B Particular Specification	Clause No: 3.4.8.1 Page No: 326 of 936	Complete Train Radio system shall be installed by the Rolling Stock Contractor, using the materials supplied by the Radio Contractor and under the supervision of the Radio Contractor, in such a way that the radios in the leading and trailing cabs operate in hot stand-by mode to each other, but fully independent of each other. The contractor shall use cable connections being installed by Rolling Stock Contractor between Front and Rear Cabs, for the Train Radio Hot standby features. The physical dimensions, positions, mounting holes, antenna type, cable routes, cable lengths, cable / pin connections to Rolling Stock PA/Train Information Management system (TIMS), interface hardware details, protocols, exact data rate to be exchanged, etc are to be coordinated with the Rolling Stock Contractor as spelt out in the applicable interface sheets forming part of interface management plan. The Train Radio shall also have its own Interface Unit to monitor the health of the radio transceivers and shall enable switching to the standby transceivers upon detection of communication failure. This interface shall communicate the events to the TIMS system. In case failure of Tetra Coverage or both radios, the Train interface units shall function using the network connectivity to OCC supplied by signaling vendor (Non CBTC Radio).	The TETRA radio system is being designed to provide overlap coverage to all the Train radios. The type of interface mentioned in the clause uses proprietary protocols & hence it is not possible for train interface unit to interface and ensure all Train borne functionalities using its network connectivity. Hence request you to please remove the clause.	In case failure of Tetra Coverage or both radios, the Train interface units shall function using the network connectivity to OCC supplied by signaling vendor (Non CBTC Radio). This is a Preferred technical requirement. Implementation details will be finalized during design stage.	As per current CMRL train borne design we are just forwarding the periodic train information (PTI) from signalling to the OCC. This means the PTI data is already available with signalling system hence there is no purpose of sending back the same data via onboard non CBTC Radio. Request you to please confirm our understanding.	Response (SN 26 Page 5 of Clarifications to Bidder's queries CMRL / PHASE – II / SYS / ASA07 / 2021 27-01-2022) given on 27-01-2022 remains valid. The list of commands and alarms will be finalized during design phase in discussion with the Engineer of CMRL.
2	Part – 2	Section – VI B Particular Specification	Clause No: 3.4.8.4 e) iv) c) Page No: 330 of 936	iv) Train PA call shall support the following. c) Dispatching of Prerecorded messages stored in Train PA system	The list of recorded messages are agreed at the time of the Interface meeting and stored in the RCW system. As a standard practice in the deployed Metros, the RCW performs Train PA call either on ad Hoc basis or selects the pre-recorded from the CAD subsystem library. The PA call is based on Operation teams input at that instant. The radio system does not have the interface/capability with the Train PA system in order to access the messages. Further, it is advisable for the Train PA system to have full control of the same and any other system accessing the Train PA system may cause operational issues. Hence request you to remove the point c) of this clause.	Dispatching of Prerecorded messages stored in Train PA system- This feature is applicable for the list of recorded messages that are agreed at the time of the Interface meeting and stored in the On board PA library with corresponding message details in RCW system. This can be either streaming audio over Tetra or via triggering of message codes.	RCW system includes library of PA messages (in the form of text codes) similar to Onboard PA system and each message in the library is having unique code in both the system (RCW and Onboard PA).RCW trigger the respective messaging code to enable the announcement from the Onboard PA. Live streaming can be done from the centralized OCC PA system.	Tender condition will prevail. In addition RCW shall cater a minimum 30 numbers Prerecorded messages entries as spare in RCW HMI in ready to use condition.
3	Part – 2	Section – VI B Particular Specification	Clause No: 3.4.8.4 e) v) Page No: 330 of 936	v) Train PA call shall support zone selection as envisaged by Train PA system (eg: PA Inside train, PA from outer speaker)	Please confirm if the cars inside the trains are being referred as different zones. Further, the Train PA announcement is done in the whole train as the announcement is common to all the cars in the train and not only aimed at certain car in the train. Hence, request you remove the V) in this clause.	Bid conditions will prevail.	This is new interface which has not been implemented in any of the India Metro Projects.	Bid conditions will prevail. Provision for the this Interface is incorporated in Rolling stock Tender.
4	Part – 2	Section – VI B Particular Specification	Clause No: 3.4.8.4 e) vi) Page No: 330 of 936	e) Train PA Call vi) RCW system shall enable the operator to perform scheduling of Prerecorded messages from RCW.	As a standard practice in the deployed Metros, the RCW performs Train PA call either on ad Hoc basis or selects the pre-recorded from the CAD subsystem library. The PA call is based on Operation teams input at that instant. There is no scheduling. Hence request you to confirm our understanding and remove the scheduling from the clause.	Bid conditions will prevail. Scheduling is limited to item b & c as per clause 3.4.8.4.e.iv	Scheduling of pre-recorded PA messages from RCW library is not applicable as this functional requirement is related to the interface between signalling and onboard PA system. Further, RCW system includes library of PA messages (in the form of text codes) similar to Onboard PA system and each message in the library is having unique code in both the system (RCW and Onboard PA).RCW trigger the respective messaging code to enable the announcement from the Onboard PA. Hence request you to please remove the scheduling and also confirm our understanding on the Onboard PA using message codes in the RCW to trigger onboard PA announcement.	Refer addendum 2 for the scheduling functionality. With respect to the Dispatching of Prerecorded messages, RCW shall permit dispatching of Prerecorded messages from RCW Library as well as from Onboard Library. RCW shall permit the administrator to upload prerecorded messages to RCW Library and edit the RCW Library details in the RCW System as when required.

5	Part – 2	Section – VI B Particular Specification	Clause No: 3.4.8.4 g) Page No: 330 of 936	g) Ambient Monitoring i) The Controller shall be able to remotely switch on the microphone on the all the Passenger Emergency Intercom/call point of the Train radio listen to the received audio.	The ambient monitoring is a radio specific feature where the controller will turn on the microphone of the radio in order to listen. There is no interface defined to remotely switch on the microphone of the Passenger Emergency Intercom/call point. Hence, request you to limit the ambient monitoring to only the Radio. Please confirm.	Passenger emergency call point is a call point from where a passenger can call OCC. Similarly , a listening functionality shall be established by enabling a silent call back to passenger Intercom. This facility shall be implemented irrespective of ambient monitoring facility in the radio.	This is new interface which has not been implemented in any of the India Metro Projects and will require train intercom system to allow for remote activation, the functionality of which has to be provided by the on-board intercom system. Request you to please confirm our understanding.	Bid Conditions will prevail. Provision for the this Interface is incorporated in Rolling stock Tender.
6	Part – 2	Section – VI B Particular Specification	Clause No: 3.4.8.4 p) iv) Page No: 333 of 936	iv) Failure of the radio equipment shall not interrupt the normal operation of the Train-borne Signalling equipment. The train operation commands are normally sent from the UTMS to the GOA4 trains through the Wi-Fi radio network of the CBTC System. In case of failure of Wi-Fi, as a standby, it should be possible for Central signaling system to send some vital commands to Onboard and receive on board alarms through the train radio system by suitable interfacing arrangement at the OCC and onboard. The list of such vital commands and alarms will be finalized in discussion with the Engineer of CMRL. In case of failure of Tetra Coverage, as a standby, it should be possible for on board Tetra Radio to ensure all Train borne functionalities via the Non CBTC link to OCC.	The TETRA radio system is being designed to provide overlap coverage to all the Train radios. The type of interface mentioned in the clause uses proprietary protocols such it is not possible for train interface unit to interface and ensure all Trainborne functionalities using its network connectivity. Hence request you to please remove the clause.	In case failure of Tetra Coverage or both radios, the Train interface units shall function using the network connectivity to OCC supplied by signaling vendor (Non CBTC Radio).This is a Prerefered technical requirement. Implementation details will be finalised during design stage.	As per current CMRL trainborne design we are just forwarding the periodic train information (PTI) from signalling to the OCC. This mean the PTI data is already available with signalling system hence there is no purpose of sending back the same data via onboard non CBTC Radio. Request you to confirm our understanding.	Response (SN 31 Page 6 of Clarifications to Bidder's queries CMRL / PHASE – II / SYS / ASA07 / 2021 27-01-2022) given on 27-01-2022 remains valid.The list of commands and alarms will be finalised during design phase in discussion with the Engineer of CMRL.
7	Part – 2	Section – VI B Particular Specification	Clause No: 3.4.12.2 a) Page No: 338 of 936	3.4.12.2. RCW Call Features a) Train PA Call: A sub-window shall be activated when the Train Public Address broadcast, (either live or recorded) is initiated - The display shall allow the Chief Controller/Traffic Controller to set up and make PA announcements to an individual train, to a selected group of trains or to all trains in the system. The display shall support Scheduling of Prerecorded Message play lists from RCW with zone selection (Saloon area, Exterior speaker). RCW shall permit dispatching of Prerecorded messages from RCW Library as well as from Onboard Library. RCW shall permit the administrator to upload prerecorded messages to RCW Library and edit the onboard library details in the RCW System as when required.	Please confirm if the cars inside the trains are being referred as different zones. Further, the Train PA announcement is done in the whole train as the announcement is common to all the cars in the train and not only aimed at certain car in the train. The list of recorded messages are agreed at the time of the Interface meeting and stored in the RCW system. As a standard practice in the deployed Metros, the RCW performs Train PA call either on ad Hoc basis or selects the pre-recorded from the CAD subsystem library. The PA call is based on Operation teams input at that instant. The radio system does not have the interface/capability with the Train PA system in order to access the messages. Further, it is advisable for the Train PA system to have full control of the same and any other system accessing the Train PA system may cause operational issues. Hence request you limit the PA call to the whole train instead of the zone selection. Also, as explained above, the RCW will only access its predefined pre-recorded database from the RCW subsystem and not from the onboard library. Additionally, this can also have impact on the Train PA operation, hence request you to please remove the reference to onboard library from the clause.	3.4.12.2. RCW Call Features a) Train PA Call: A sub-window shall be activated when the Train Public Address broadcast, (either live or recorded) is initiated - The display shall allow the Chief Controller/Traffic Controller to set up and make PA announcements to an individual train, to a selected group of trains or to all trains in the system. The display shall support Scheduling of Prerecorded Message play lists from RCW with zone selection (Saloon area, Exterior speaker). RCW shall permit dispatching of Prerecorded messages from RCW Library as well as from Onboard Library. RCW shall permit the administrator to upload prerecorded messages to RCW Library and edit the RCW Library details in the RCW System as when required.	Scheduling of pre-recorded PA messages from RCW library is not applicable as this functional requirement is related to the interface between signalling and onboard PA system. Further, RCW system includes library of PA messages (in the form of text codes) similar to Onboard PA system and each message in the library is having unique code in both the system (RCW and Onboard PA).RCW trigger the respective messaging code to enable the announcement from the Onboard PA. Hence request you to please remove the scheduling and also confirm our understanding on the Onboard PA using message codes in the RCW to trigger onboard PA announcement.	Refer SN 8 of addendum 2 for the scheduling functionality. With respect to the Dispatching of Prerecorded messages, RCW shall permit dispatching of Prerecorded messages from RCW Library as well as from Onboard Library. RCW shall permit the administrator to upload prerecorded messages to RCW Library and edit the RCW Library details in the RCW System as when required.

8	Part – 2	Section – VI B Particular Specification	Clause No: 3.5.1.1 h) Page No: 343 of 936	h) The train radio shall be accessible from OCC via the Non CBTC network supplied by Signalling. In case of failure of Tetra Coverage, as a standby, it should be possible for on board Tetra Radio to ensure all Train borne functionalities via the Non CBTC link to OCC.	The TETRA radio system is being designed to provide overlap coverage to all the Train radios. The type of interface mentioned in the clause uses proprietary protocols such it is not possible for train interface unit to interface and ensure all Train borne functionalities using its network connectivity. Hence request you to please remove the clause.	h) The train radio shall be accessible from OCC via the Non CBTC network supplied by Signalling. In case of failure of Tetra Coverage, as a Preferred Requirement (Possibility to be examined in the design phase and shall be implemented, if feasible), it should be possible for on board Tetra Radio to ensure all Train borne functionalities via the Non CBTC link to OCC.	As per current CMRL train borne design we are just forwarding the periodic train information (PTI) from signalling to the OCC. This mean the PTI data is already available with signalling system hence there is no purpose of sending back the same data via onboard non CBTC Radio. Request you to please confirm our understanding.	Response (SN 41 Page 7 of Clarifications to Bidder's queries CMRL / PHASE – II / SYS / ASA07 / 2021 27-01-2022) given on 27-01-2022 remains valid. The list of commands and alarms will be finalized during design phase in discussion with the Engineer of CMRL.
9	Part – 2	Section – VI B Particular Specification	Clause No: 4.3.1.1 page 354 of 936	4.3.1.1. In UTO train operation passenger emergency communication from and to OCC from the train is most important. To keep the communication reliability high overlapping coverage at any point on the track from either side of the base stations should be planned. The minimum signal level under the worst case from the relevant base station, received by the Train borne antenna shall be at least -86 dBm or 20 dB above the receiver sensitivity level for 98% of the worst case 50m of train run along the tracks. The audio quality level under such conditions also should be good.	This requirement of -86dbm is on a higher side which will force the normal operations coverage requirement much higher and will require more number of Base station or BDA (also will increase the interference in the network) to meet the requirement. Metros deployed in India has 3uv/-97.5 dbm signal strength requirement and has not faced issues with respect to the quality of calls. The -86dBm signal strength would be an overkill which will have an impact on the number of BTS and BDAs, Hence request you to please revise the signal strength requirement to minimum -97.5dbm.	In UTO train operation passenger emergency /Train Radio communication from train to OCC, RAU/RCP in SCR and vice-versa is most important. To keep the communication reliability high overlapping coverage at any point on the track from either side of the base stations should be planned. The minimum signal level shall have at least 10 dB margin (uplink as well as downlink of Hand Portable) above the receiver threshold duly factoring all the losses and gains. This value shall be ensured for the samples taken at every second in the section between any two adjacent stations of the Track with a maximum permitted deviation in two samples .	The signal strength with the margin 10 DB stronger than most of the Metro project like DMRC where the signal strength requirement after system margin (3dB) is -94.5dbm and is running successfully. Hence request you to please review the signal strength requirement to -97.5dbm with 3 dbm system margin. Request you to please confirm if we can proceed with this approach which has been successfully implemented and tested.	Response (SN: 23 Page 6 of Addendum 1) given on 27-01-2022 remains valid.

10	Part – 2	Section – VI B Particular Specification	Clause No: 4.3.1.2 Page No: 354 of 936	4.3.1.2. The minimum signal level from the relevant base station, received by a reference dipole at 1.5 m above ground level in all coverage areas including inside the Moving (80 km/h) train compartment shall be at least -86 dBm for 98% of the worst case 50m of run in stations and in train. Signal level of minimum -86 dBm for 98% Location shall be available inside all the equipment rooms, plant rooms & operation control rooms in stations, Depot and substations. The up-link and down link audio quality level under such conditions also should be good. For deciding the coverage criteria automated measurement set up with suitable software should be used. At least 50 samples of signal strength measurement should be taken for 50 meters of travel. The coverage measurement results should be put up to the engineer for his approval.	This requirement of -86dbm is on a higher side which will force the normal operations coverage requirement much higher and will require more number of Base station or BDA (also will increase the interference in the network) to meet the requirement. Metros deployed in India has 3uv/-97.5 dbm signal strength requirement and has not faced issues with respect to the quality of calls. The -86dBm signal strength would be an overkill which will have an impact on the number of BTS and BDAs, Hence request you to please revise the signal strength requirement to minimum -97.5dbm.	4.3.1.2. The minimum signal level from the relevant base station, received by a Hand portable in all coverage areas including inside the Moving train (40 Km/Hr)compartment shall have at least 10 dB margin (uplink as well as downlink) above the receiver threshold duly factoring all the losses and gains. This value shall be ensured for the samples taken at every second in the section between any two adjacent stations of the Track with a maximum permitted deviation in two samples .Signal level shall have at least 10 dB margin (uplink as well as downlink) above the receiver threshold duly factoring all the losses and gains for 98% of all Locations inside all the public areas, equipment rooms, plant rooms & operation control rooms in stations, Depot and substations. The up-link and down link audio quality level under such conditions also should be good. For deciding the coverage criteria automated measurement set up with suitable software should be used. The coverage measurement results should be put up to the engineer for his approval.	The signal strength with the margin 10 DB stronger than most of the Metro project like DMRC where the signal strength requirement after system margin (3dB) is -94.5dbm and is running successfully. Hence request you to please review the signal strength requirement to -97.5dbm with 3 dbm system margin. Request you to please confirm if we can proceed with this approach which has been successfully implemented and tested.	Response (SN: 25 Page 6 of Addendum 1) given on 27-01-2022 remains valid.
11	Part – 2	Section – VI B Particular Specification	Clause No: 16.1.5.26 Page No: 435 of 936	16.1.5.26. TETRA. contractor shall furnish RS Contractor with the interface required between the TETRA radio system and the on-train public address system/other suitable system of RS to allow on-board passenger emergency Intercom (PEI) call point mic of RS to be used for silent listening of saloon voice through TETRA by OCC. The identifier of the PEI device (which call point in which car of the train) shall be communicated by the on-board TETRA system to the RS system for selecting the mic of that call point to be used for this feature. There shall not be any indication on the PEI call point or any other location on the train, visible for passengers, denoting the silent listening mode activation.	The ambient monitoring is a radio specific feature where the controller will turn on the microphone of the radio in order to listen. There is no interface defined to remotely switch on the microphone of the Passenger Emergency Intercom/call point. Hence, request you to limit the ambient monitoring to only the Radio. Please confirm.	Passenger emergency call point is a call point from where a passenger can call OCC. Similarly , a listening functionality shall be established by enabling a silent call back to passenger Intercom. This facility shall be implemented irrespective of ambient monitoring facility in the radio.	This is new interface which has not been implemented in any of the India Metro Projects and will require train intercom system to allow for remote activation, the functionality of which has to be provided by the on-board intercom system. Request you to please confirm our understanding.	Tender Conditions will prevail. Provision for the this interface is incorporated in Rolling stock Tender.
12	Part – 2	Section – VI B Particular Specification	Clause No: 16.1.6.1 Page No: 436	RS, STC, Telecom TETRA and PSD contractors shall jointly setup an integrated test bed at CMRL premise to arrange for the integration testing of various subsystems, as a minimum but not limited to ATS, ATO, on-board CCTV management system by signalling contractor, On-board passenger information system, on-board driver display units, TCMS, On-board NVR,RTR-DMS by RS contractors, station passenger information systems etc of the Telecom contractors. The test bed shall have provision for testing the actual softwares over the actual hardware. Necessary train running mimicking simulator shall be provided by the SIG contractor to simulate a train running. RS contractors shall provide necessary simulators to simulate various failure and operational scenarios in the TCMS pertaining to the Interface data.	There are no details provided in terms of Bill of quantity (BoQ) for the TEST BED. We understand that 1 qty of Train borne radio with its accessory need to be considered, which is already mentioned as interfacing software/hardware in clause 3.5.1.1 i) of Part 2 Particular specification. Please confirm.	One set of device for simulating and testing all Tetra Interface scenarios including Signalling ,Rolling stock at Wayside, OCC and onborad.All inputs required for testing the Interface shall be simulated by the System.	We can provision one type of each tetra devices like RCP/RAU, NMT, dispatch console, BTS which will be connected to the Main CMRL Tetra Switching Infrastructure for this purpose.. Request you to please confirm our understanding.	Tetra Simulation facility shall comprise as minimum 1. One set of Onboard equipment. 2. A simulation set up to mimic Central/OCC Tetra-Central/OCC Signalling interface for the Test bench. 3. This setup shall facilitate testing as a minimum a)Passenger emergency call b)Ambient listening c) Live PA d) Prerecorded PA e)Command and Alarm transmission with Signalling and Rolling stock.
13	CORRIGENDU M No – 2	DATE EXTENSION		Last Date and Time of submission/uploading of Bid - 09 Mar 2022 till 13:00 hrs.			We request CMRL to give an extension of 45 days from the current date of submission . It may be noted that we require the same considering below (1) Last amendment has been released on 4th Feb'22. (2) Still there are few clarifications required based on current & earlier queries. (3) Apart from Tetra ,the tender also has considerable solution requirements on IBS and other third party items . (4) Current uncertain pandemic situation	Refer Corrigendum 04

14	Part-1, Section III, Evaluation and Qualification Criteria (EQC)	2.4.2 a) Specific Experience, Page No. - 64	<p>Requirement: Experience in "Manufacture, Supply, Installation, Testing and Commissioning of Telecommunication Radio Systems for Metro Rail /Mono Rail /Mainline Railways involving at least 5 base stations in single project. The commissioned project should have been in satisfactory revenue service at least for one year during the last 7 (seven) years (with required documentary evidence). Additionally, 30 base stations and 5 switching systems of similar make, in various projects put together, should have been in satisfactory Passenger operation for at least one year during the last 7 (Seven) years (with required documentary evidence). (i) As a Single Entity or JV member; (without engaging specialist sub-contractor(i));</p> <p>OR (ii) In the capacity of specialist sub-contractor(i); between 1st September 2014 and the bid submission deadline. (All documentary evidence shall be from the client in case of Single entity/JV; or from the Project integrator in case of Specialist Subcontractor)</p> <p>Lead Member: Must be the OEM of Switching system and Base station (Hardware and software). Must meet requirement in respect of supply of Switching system and Base station (Hardware and software) for minimum 5 base stations in single project and minimum 30 base stations and 5 switching systems of similar make working satisfactory for one year in last 7 years, in various projects put together.</p>	<p>QUERY SPECIFIC TO CONSORTIUM BIDDING SCENARIO:</p> <p><u>1. For the Consortium mode of bidding, we would like to request that any member of the Consortium to be designated as Lead Bidder based on the scope of work split between the Consortium members.</u></p> <p><u>2. We would like to request that for the purpose of 'Experience' as stated in clause 2.4.2 a), Indian subsidiary of the OEM to be allowed to use the credentials of any of the group companies of OEM.</u></p> <p><u>3. The OEM shall still be part of the Consortium (though not necessarily as lead bidder). For all practical purpose, CMRL shall be engaging with the OEM for all TETRA equipment related aspects based on below reasons:</u> a) TETRA OEM shall be joint and severally liable for the project execution along with other Consortium members for complete scope of work. b) For all Communication/Notice, TETRA OEM shall be party to the same and included in the Consortium agreement c) Given the contractual commitment for TETRA equipment support for the long term contract duration, TETRA OEM as Consortium member shall be liable for all TETRA equipment support</p> <p><u>4. In case of Foreign Party is lead bidder in Consortium. It would not be favorable to CMRL, considering 'Purchase Preference to Local Suppliers/Preference to 'Make In India' Policy' & would have GST implications.</u></p> <p><u>5. Request that Tetra OEM can be part of the Consortium, which parties can make & other JV/Consortium partners can be the lead bidder. The reason is that even if OEM is not Lead Bidder, then also TETRA OEM shall be jointly and severally liable for the project execution along with other Consortium members for complete scope of work.</u></p>	Refer Addendum	<p>Please note that for smooth functioning of Tetra network, it's imperative that the OEM of Tetra Radios needs to be included in the Consortium Agreement which is excluded in the current form of the bid. As the whole requirement of OEM was envisaged for whole Tetra Solution best support and working for Metro deployment, request you to please make the consortium have mandate inclusion of Tetra Radio OEM as well.</p> <p>Also, as we understand from Clause No: 4.3.1.2. The up-link and down link audio quality level under such conditions also should be good, which makes it mandatory that the Radio OEM should also be made part of the Consortium for seamless working of the Tetra solution network.</p>	As already clarified in SN:116 Page 2 of Clarifications on Reply to Bidder's queries CMRL / PHASE – II / SYS / ASA07 / 2021 04-02-2022, Tender clause 2.1.2.5 page 314 (Section – VI B Particular Specification) will prevail.
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