

P24 Response to Pre-Bid Queries-5B							
Sr. No.	Part	Section	Clause No.	Relevant Page No. of bid document	Complete Description of Clause	Queries	Replies
1	2					<p>NCRTC has previously removed other FRMCS related requirements in Addendum & Corrigendum 05 & 06. We also request you to delete all the remaining FRMCS-related compliance requirements in Section 6B: PS-Signalling and Train control R1 including clauses 15.4 (1), 15.4 (5), 15.4 (6), 15.4 (8) and 15.7.11.</p> <p>FRMCS standards are still evolving and yet to be frozen by ETSI. Any kind of commitment to upcoming standards/features can only be provided upon (i) finalization of these standards, and (ii) identification of relevant features by the user (Railways), and (iii) mutual commercial agreement.</p>	Please refer Addendum & Corrigendum-09B
2	2	6B	3.6.4.	24	The Employer will not provide the Contractor with any general works train for the execution of this Contract.	Please specify that this clause does not include the equipped train and drivers needed to perform testing and commissioning of the S&T track site equipment.	Bidder's understanding is correct
3	2	6B	2.3	13	Contingency Plan The clause 2.3.7 indicated the following "Detailed arrangements shall be finalized at the design stage."	Please confirm that the contingency plan cost should not be included in the tendered offer. Because we understand that the cost will be evaluated according with the defined units and needs that will be detailed during the design stage as indicated in 2.3.7 if finally, it is necessary to implement the contingency plan.	Contingency Plan is in the scope of the Bidder. Also please refer clause no. 7.6 of Preamble in Financial Bid.
4	2	6B		285	Shall furnish the requirement of space for installation of "ETCS Onboard S&T System" in maintenance vehicle. It shall include but not limited to Onboard EVC, Euro Radio and antenna, Speedometer, Balise antenna, Driver Machine Interface (DMI), Driver Identification Reader, Onboard Digital Counter and requirement for voice communication (Radio Console) as a minimum.	Maintenance vehicles are required to be equipped with "Onboard digital counter". Could you please explain the needed functionality of the "Onboard digital counter"?	Functionality shall be same as that mentioned in clause 5.1.6.3, 5.2.2 of Section 6B Particular Specifications: Signalling and Train Control.

5		Section 6B_Particular Specification _Signalling and Train Control 14042020 1811	5.43		Asset Protection System (APS) shall include Hot Axle Box Detector (HABD). The provision, supply and installation of the HABD is in the scope of the RS Contractor. The ground equipment and their connection to the closest SER/TER shall be provided by RS Contractor and the data transmission form closest SER/TER to the OCC/BCC is in the scope of the S&T Contractor.	Please confirm the number and location of them.	Please refer Addendum & Corrigendum-07B
6		Section 6B_Particular Specification _Signalling and Train Control 14042020 1811	5.43		Asset Protection System (APS) shall include Hot Axle Box Detector (HABD). The provision, supply and installation of the HABD is in the scope of the RS Contractor. The ground equipment and their connection to the closest SER/TER shall be provided by RS Contractor and the data transmission form closest SER/TER to the OCC/BCC is in the scope of the S&T Contractor.	Please confirm that HABD's information is upload to TMS by means of IXL. Therefore, an interface between HABD and IXL exists.	Please refer Addendum & Corrigendum-07B
7		Section 6B_Particular Specification _Signalling and Train Control 14042020 1811	5.3.10.4		The Train control & Signalling System shall provide an alarm to the SCADA system controlling the tunnel ventilation system.	Please confirm that scada is out of the scope of signalling contractor and the train control & signalling system shall only provide alarms to the scada system.	Please refer Addendum & Corrigendum-07B
8		Section 6B_Particular Specification _Signalling and Train Control 14042020 1811	Appendix A		29. Live streaming of CCTV camera from train. Buffering in OCC /BCC.	Please confirm that CCTV workstation is only for live streaming of CCTV camera from train and therefore the images have not to be stored by signalling contractor.	Please refer Addendum & Corrigendum-07B

9		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	6.7.4.1 3.6		6.7.4.1 Temperature: (3) CER and SER equipment shall be capable of working in a non-air-conditioned environment up to 40° C without any degradation in RAMS and MTBSAF requirements of the contract. 3.6 The system shall be capable for working in non-air-conditioned environment and ambient temperature range between -10°C to 70°C and Relative Humidity up to 95% at 40°C.	These requirements are contradictories. Please remove the clause 3.6.	Please refer Addendum & Corrigendum-07B
10		Drawings				Please could you send us drawings with the location (kilometre points) of point machines?	Please refer Addendum & Corrigendum-07B
11		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	5.14		... These functions shall be performed at two levels (OCC/BCC and Peripheral /Local Control).	We understand that the term “peripheral / local control” is the same control centre and peripheral control is not another control centre to be installed in other location, please confirm.	Please refer Addendum & Corrigendum-07B
12		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	6.3.2.1		... (3) Virus The Contractor shall ensure software, which is susceptible to viruses, is developed in environment certified free from computer viruses. To achieve this, the Contractor shall use propriety virus detection software and suppression tools.	We understand that the antivirus is only for workstations and servers in TMS, please confirm.	Please refer Addendum & Corrigendum-07B
13		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	5.3.8.4		Each CBI shall be provided with VDU workstations which will be provided at the SCRs of stations with points and crossing. These VDUs shall be used as a backup in case of failure of TMS.	Please confirm that VDU has only to be installed in the stations where an interlocking is installed.	Please refer Addendum & Corrigendum-07B
14		15. Track Plan R-7 with 25 stations				This drawing shows future turnouts, for example in Murad Nagar station. Please confirm that these turnouts have not to be signalled in the scope of this bid.	Please refer Addendum & Corrigendum-07B

15		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	5.30.8.1		SMR of each IXL station provided with TMS workstation and laptop mimic screen with diagnostic software. Each secondary station SER shall have facility to plug the maintenance laptop.	In page 343 of the same document, the table shows a TMS workstation in all stations. Please confirm where a TMS workstation has to be installed.	Please refer Addendum & Corrigendum-07B
16		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	Appendix D		Traffic Management system shall be provided. The Operational Control Centre will be located at NCRTC HQ at Jangpura and BCC at Duhai depot.	Please confirm that in Jangpura a single OCC has to be installed and therefore an additional DCC has not to be installed there.	Please refer Addendum & Corrigendum-07B
17		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	11.7		Predictive maintenance tool: Predictive maintenance tool shall be provided at all Interlocking stations and at remote locations, to detect anomalous behaviour of field gears before the complete failure of field devices.	Please confirm that the predictive maintenance tool is only for point machines.	Please refer Addendum & Corrigendum-07B
18		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	General		Languages in the HMI of all the systems / subsystems	Please can you confirm the language that shall be display to the user in all the HMI of all the systems and subsystems (TMS, Maintenance systems, ETCS, etc)	Languages in the HMI of all the systems / subsystems shall be English.

19		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	5.1.1		<p>Operating Modes shall be according to the ETCS Level 2 and ETCS Level 1. In normal situations ETCS Level 2 shall be used for train operation and in case of failure of same, ETCS Level 1 shall be used. Transition from one Level to another shall be smooth and it shall comply SRS 3.6.0 Baseline 3 Release 2 or latest issued. The Train Control and Signalling System shall provide the following modes of train operation as a minimum. The remaining modes shall be finalized as per SRS 3.6.0 Baseline 3 Release 2 or latest issued during the design stage.</p> <p>(1) ATO Mode (2) ATP/Full Supervision (3) On Sight (4) Staff Responsible (5) Isolation/Cut out (6) Reversing etc.</p>	<p>Could you specify the system version which has to be used in SRS 3.6.0 baseline 3 release 2?</p>	<p>Please refer Addendum & Corrigendum-07B</p>
20		Section 6B_Particular Specification_Signalling and Train Control 14042020 1811	Appendix R – 1.1		<p>The Delhi-Ghaziabad-Meerut corridor consists of 25 stations, 2 depots and one stabling yard for a total length of approx. 82 km (Refer track plan). The following table shows for each station the progressive, the type of service and the type of station (elevated or underground). Shatabdi Nager – RRTS + MRTS. Begumpul – RRTS + MRTS. Modipuram – RRTS + MRTS.</p>	<p>In this document it is said that mixed stations (RRTS + MRTS) are Shatabdi Nager, Begumpul and Modipuram.</p> <p>In document 9. Attachment 1 Section 6G Particular Specification Platform Screen Doors it is said that mixed stations are Begumpul, Meerut South and Modipuram.</p> <p>And in drawings mixed stations are Meerut South and Shatabdi Nager.</p> <p>Please confirm which stations are mixed stations for both RRTS and MRTS trains.</p>	<p>Please refer Addendum & Corrigendum-07B</p>