Replies to Pre Bid Queries-4B

Sr. No.	Part	Section	Clause No.	Relevant Page No. of bid document	Complete Description of Clause	Queries	Replies
1				278 of 432	Section 6B: PS-Signalling and Train control R1 Rolling Stock Performance Requirements Note: d) Train Configuration The Trainset formation shall generally be as follows: 3 Car Train formation (MRTS): *DEC-NDEC-DEC* 3 Car Unit for RRTS: DBC-NDEC-NDEC or DEC-NDEC-NDEC 6 Car Train formation (RRTS): *DBC-NDEC-NDEC=NDEC-NDEC-DEC*	We have two 3 car units in a 6 car RRTS train.(Coupling / uncoupling) Is it expected that each of these two 3 car units will be used independently in ATP \ ATO modes for Revenue service? Kindly clarify this point since there will be a need of 2 on-board signalling systems for 6 car RRTS trains in case of such 2x3 car operation is expected.	Please refer Addendum & Corrigendum-07B
2				285 of 432	16) S&T Vs Maintenance Vehicle Contractor	As per RFP document, we have three type of maintenance vehicle such as Engineer's Vehicle, RGM/RGV, CMV. The section "S&T Vs Maintenance Vehicle Contractor" defines scope between signalling contractor, Rail Grinding Vehicle Contractor and Catenary Maintenance Vehicle. Kindly clarify if we must install ETCS on-board equipment in Engineer's Vehicle as well.	Please refer Addendum & Corrigendum-07B
3					Clarification on Section 6F General Alignment Drawings DM12DDC-DTD-GEN-ALG-DWG-009151 DM12DDC-DTD-GEN-ALG-DWG-009152 DM12DDC-DTD-GEN-ALG-DWG-009153 DM12DDC-DTD-GEN-ALG-DWG-009154 DM12DDC-DTD-GEN-ALG-DWG-009155 DM12DDC-DTD-GEN-ALG-DWG-009156 DM12DDC-DTD-GEN-ALG-DWG-009157 DM12DDC-DTD-GEN-ALG-DWG-009158 DM12DDC-DTD-GEN-ALG-DWG-009159 DM12DDC-DTD-GEN-ALG-DWG-009160 DM12DDC-DTD-GEN-ALG-DWG-009161 DM12DDC-DTD-GEN-ALG-DWG-009162 DM12DDC-DTD-GEN-ALG-DWG-009163 DM12DDC-DTD-GEN-ALG-DWG-009164 DM12DDC-DTD-GEN-ALG-DWG-009165 DM12DDC-DTD-GEN-ALG-DWG-009166 DM12DDC-DTD-GEN-ALG-DWG-009181	In Addendum, Verison R1 was available. But previously we received Version R2. Need confirmation whether latest version is condemned and previous version is fit for construction	Please refer Addendum & Corrigendum-07B
4					Clarification on Section 6F General Alignment Drawings DM09-AYE-AR-DRP-DUH-DPT-DSP-11000	Version R0 is available in addendum, but we have received previously version R1. please confirm the version	Please refer Addendum & Corrigendum-07B
5				415 of 432	1.3 Onboard equipment No. of maintenance vehicle 06 (CMV, Engineer's Vehicle and RGM)	The reference clause provides cummulative number of maintenance vehicle to be equipped. Kindly provide number of vehicle in each type of maintenance vehicle to be provided with ETCS on-board system.	Please refer Addendum & Corrigendum-07B

Replies to Pre Bid Queries-4B

Sr. No.	Part	Section	Clause No.	Relevant Page No. of bid document	Complete Description of Clause	Queries	Replies
6				Addendum 5B, S.No 33 No 7.4.1		Addedndum 5B introduced some updates concerning on-board equipment redundancy. After revieing the updates it seems that some of them regarding ATO sub-system are contradictory. Please refer to remarks highlighted in §7.4.1: -in point 2) redundancy of ATO is not required anymore, -While in final paragraph of §7.4.1 it is stated that HW (component/card) shall still be redounded to prevent ATO functionality loss. Based on above two clauses our understanding is that ATO redundandcy is not required, could you kindly confirm that our understanding is correct? 33 | No. 7.4.1 | 2) Two out of two hardware with identical or diverse hardware and common or diverse software or Single Electronic Structure based on reactive fail safety with diverse software. Redundancy shall be provided so that failure of one onboard ATP / ATO equipment does not prevent the train from being operated in ATP/ ATO | 2) Two out of two hardware with identical or diverse hardware and common or diverse software or Single Electronic Structure based on reactive fail safety with diverse software. Redundancy shall be provided so that failure of one onboard ATP ~~/ ATO~~ equipment does not prevent the train from being operated in ATP~~/S- ATO~~ mode. The changeover in the event of failure of one unit shall 7.4.1 No single component/card failure (viz input/output cards DMI, odometer, Balise antenna, radio antenna, radio modem etc) should cause the complete failure of the onboard or trackside ATP or ATO equipment. | 7.4.1 No single component/card failure (viz input/output cards DMI, odometer, ~~Balise antenna~~, radio antenna, radio modem etc) should cause the complete failure of the onboard or trackside ATP or ATO **functionality** ~~equipment~~.	Please refer Addendum & Corrigendum-07B
7			**Part - 2 Employer's Requirement** **Section -6A: General Specifications** **Clause No.10.7.2** The Contractor shall, within 60 days of the Commencement Date of the Works, submit a Transfer of Technology Plan, with suitable Indian company or companies having proven track record and working in relative areas, for all imported systems/subsystems ensuring the provision of support for the period of minimum 15 years. The Contractor shall support his plan with Memoranda of Understanding (MOU) from the Indian company or companies. & **Employer's Requirement: Part 2** **Section 6B: PS-Signalling and Train control R1** Clause No.13.4.2 TOT shall be essential and shall cover until the end of the DLP. TOT shall include installation, testing, commissioning and maintenance support as a minimum. & Clause No.13.4.5 In case of any conflict between PS & GS with regards to TOT clause, PS shall prevail.	Page: GS, 10-4 of 5 & Page 144 of 432		With reference to the mentioned TOT clauses, the clause in GS states that provision for support of minimum 15 years to be provided by the contractor for imported systems/subsystems. However as per the TOT clause in PS, TOT shall cover until the end of the DLP i.e 36 months. As per our understanding and as per clause no.13.4.5 (referred), PS shall prevail over GS and TOT will be provided for only upto DLP period i.e 36 months by the contractor. Kindly confirm our understanding.	Please refer Addendum & Corrigendum-05B
8		Section 6A_General specification for S&T	10.2.7		Where applicable, the Employer will pay all of his staff's salaries, travelling, subsistence and other related allowances.	Please confirm that the Employer will pay all expenses during the whole execution of works including training in contractor's offices.	Please refer clause no. 13.4.2.1 of Section 6B_Particular Specification _Signalling and Train Control-R1
9		Section 6B_Particular Specification _Signalling and Train Control 14042020 1811	5.3.7.4		Impedance bonds shall be provided wherever required. The Signalling & Train Control Contractor shall provide the impedance bonds. The Signal & Train Control Contractor shall work with the traction power contractor to assure that the impedance bonds provided meet the requirements for traction power return without compromising train detection or cab signal reception.	Please confirm that impedance bonds have to be supplied by signalling contractor.	Please Follow bid conditions
10		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 Follow bid conditions

Replies to Pre Bid Queries-4B

Sr. No.	Part	Section	Clause No.	Relevant Page No. of bid document	Complete Description of Clause	Queries	Replies
11		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.	Shall be finalized during design stage
12		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.	Bidder's understanding is correct
13		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.	Bidder's understanding is correct
14		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 40º 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 follow bid conditions
15		Drawings				Please could you send us drawings with the location (kilometre points) of point machines?	Please refer Addendum & Corrigendum-07B
16		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-02B
17		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 Follow bid conditions

Replies to Pre Bid Queries-4B

Sr. No.	Part	Section	Clause No.	Relevant Page No. of bid document	Complete Description of Clause	Queries	Replies
18		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.	Bidder's understanding is correct
19		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.	Bidder's understanding is correct
20		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 APPENDIX C - List of TMS Workstations of Section 6B_Particular Specification _Signalling and Train Control-R1
21		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 follow bid conditions
22		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 follow bid conditions
23		Section 6B_Particular Specification _Signalling and Train Control 14042020 1811	5.1.1		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. (1) ATO Mode (2) ATP/Full Supervision (3) On Sight (4) Staff Responsible (5) Isolation/Cut out (6) Reversing etc.	Could you specify the system version which has to be used in SRS 3.6.0 baseline 3 release 2?	Please follow bid conditions
24		Section 6B_Particular Specification _Signalling and Train Control 14042020 1811	Appendix R – 1.1		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.	In this document it is said that mixed stations (RRTS + MRTS) are Shatabdi Nager, Begumpul and Modipuram. In document 9. Attachment 1 Section 6G Particular Specification Platform Screen Doors it is said that mixed stations are Begumpul, Meerut South and Modipuram. And in drawings mixed stations are Meerut South and Shatabdi Nager. Please confirm which stations are mixed stations for both RRTS and MRTS trains.	For list of mixed stations please refer APPENDIX R of Section 6B_Particular Specification _Signalling and Train Control-R1
25		02B. P24_Addendum and Corrigendum-02B	5		Procurement of following items shall be done only from local suppliers: 1) Depot Point Machine with other accessories: High thrust, trailable Point machine 2) 3 aspect, Shunt, Buffer light and route indicator signals with accessories 3) Power Distribution Cubicle with accessories for Interlocking stations, Secondary stations (station with object controller) Secondary stations (Non-Interlocking Station) 4) Control terminal with VDU display and associated accessories: Interlocking VDU 5) Junction boxes for Signals and Point Machines 6) Earthing material per station/depot 7) Maintenance workstation at OCC, station 8) All type of UPS 9) VRLA maintenance free batteries 10) Spare cell charger 11) Indoor & Outdoor DATA and power Signalling Cables	We understand that hardware of interlocking VDU has to be supply by a local supplier, but the software can be developed by contractor. Please confirm.	Bidder's understanding is correct
26			15.6.3- IoT: Remote monitoring of Railways asset to improve their availability	158		1. Please suggets, how many IoT Subscriber License to be considered. 2. Please let us know the IoT traffic Profile and IoT Use case to be considered	Shall be finalised during design stage

Replies to Pre Bid Queries-4B

Sr. No.	Part	Section	Clause No.	Relevant Page No. of bid document	Complete Description of Clause	Queries	Replies
27						1. Please suggest, how many total users need to be configured for HSS/MCPTT/EPC. 2. Total SIM requirements mentioned in the SOR is 800 for this Corridor. Please confirm that there would be 800 users as per SOR.	Please refer clause 15.7.1.7 of Section-06B Particular Specifications Signalling & Train Control-R1
28						We understand that OCC in Jangpura will be ready in 2024. Please clarify how the Geo-redundant equipment for the project will be deployed at the launch in 2023.	Shall be finalised during design stage
29			15.7.13 (15)	189		LTE NMS shall have online data backup capability for upto 14 days. however for longer duration proposed NMS shall be able to export the offline data to the external storage for 3 months provided by NCRTC. please confirm.	Please refer clause 15.7.13 (15) of Section-06B Particular Specifications Signalling & Train Control-R1
30			General			please specify requirement of Charging Gateway for P/S GW with Raw Cdrs Storage duration	Please refer clause 15.7.1.16 of Section-06B Particular Specifications Signalling & Train Control-R1
31			General			please specify requirement of Mediation Server with Network elements for which Cdrs to be stored and Cdrs Storage duration	Please refer clause 15.7.1.16 of Section-06B Particular Specifications Signalling & Train Control-R1
32			IoT: Remote monitoring of Railways asset to improve their availability.	152		Kindly share detail on the assets being considered as part of this IOT along with any specific protocol requirements.	Shall be finalised during design stage
33			Addendum and Corrigendum No. 02B - Dated 16.06.2020 - Employers Requirement Part-2, Section 6B: PSSignalling and Train control, Chapter 15, Clause 15.9 (11) Certifications, sub clause (ii) FCC, CE, NOM or equivalent certifications.	Page 191 of 420		The NOM certification is for Mexico only. Please suggest the equivalent certification for India	Please refer clause 15.9 (11) of Section-06B Particular Specifications Signalling & Train Control-R1
34			Bid Document No: Package 24 Part-2 Section -6B: Particular Specifications: Signalling and Train Control. Clause 8.4.6 FAT shall demonstrate the correct operation of the Train Control and Signalling System, including LTE system, working together with all other systems with which it interfaces, as specified in the Specification.	111		We understand that in FAT, HW & Quality test of the offered Product has to be provided, as setups to demonstrate end-to-end funcitioning of the Product with other Network Elemnsts is not available at Factory locations. Also all products are not manufactured at one location. We suggest that end-to-end Functional test to be part of Integrated Testing & Commisioning stage (step 7 section 8.2.1)	Please refer clause 8.4.6 of Section-06B Particular Specifications Signalling & Train Control-R1
35			Addendum and Corrigendum No. 02B - Dated 16.06.2020 Employers Requirement Part-2, Section 6B: PS-Signalling and Train control, Chapter 15, Clause No. 15.7.6 (4) Operating temp range: 0°to +70°Celsius	172		As per ETSI EN 300 019-1-3 Operating temp range of Indoor Telecom products is -5°to +45°Celsius and as per ETSI EN 300 019-1-4 Operating temp range of Outdoor Telecom products is -40°to +55°Celsius. Request to follow ETSI recommendation for Telecom Products.	Please refer Addendum & Corrigendum-05B
36			Addendum and Corrigendum No. 02B - Dated 16.06.2020 Employers Requirement Part-2, Section 6C: PS-Telecommunication, Appendix Q Clause 4.12 Add the following new clause (4.12.2) in clause 4.12 in PS] All outdoor equipment shall be IP66 or higher			Request to maintain Outdoor Telecom product compliance to IP65 as initally in the RFP.	Please follow Bid Conditions
37			Addendum and Corrigendum No. 02B - Dated 16.06.2020 Employers Requirement Part-2, Section 6B: PSSignalling and Train control, Chapter 15, Clause No. 15.7.1.3 The EPC shall have provisioning system that should be able to configure service parameters and acts as a central repository of data, along with HSS provisioning for quick integrations with another core network vendor, for other RRTS corridors	75		The provisioning System is not part of the EPC as the central provisioning and central data repository function handled by HSS. HSS can be centralised and can integrate with another core network vendor over 3GPP Standard interfaces for usage in other RRTS Corrdors. Alternatively, HSS can be placed at two sites in full redundancy with common DB. Please confirm can we consider the HSS proposed as the provisioning system for EPC Network	Please refer clause 15.7.1.3 of Section-06B Particular Specifications Signalling & Train Control-R1
			Annexure-3 Schedule of Rates of Items for LTE	Annexure 3		Please clarify the following	
			1.2 - Interface Management			Interface Management under PM - Please clarify which interface activity is to be conisdered under this item?	Please refer to Appendix A and A1 of Section-06B Particular Specifications Signalling & Train Control-R1
			3.1 - OEM Standard 4G Equipment Supplies-(Evolved Packet Core, MCPTT, Dispatcher, Radio Network, NMS with associated installation Material)			Please clarify on this line item as sub items of LTE are separately requested in subsequent line items and sub headings.	Please refer updated Financial Bid of Addendum & Corrigendum-06A

Replies to Pre Bid Queries-4B

Sr. No.	Part	Section	Clause No.	Relevant Page No. of bid document	Complete Description of Clause	Queries	Replies
38			3.2 - 4G Equipment Infra & Devices- 3GPP Supplies			Please clarify on this line item as sub items of Infra&Devices are separately requested in subsequent line items and sub-headings	Please refer updated Financial Bid of Addendum & Corrigendum-06A
			4.1 - OEM Standard 4G Equipment Installation for above mentioned supplies			Please clarify on this line item as sub items are separately requested in subsequent line items and sub-headings	Please refer updated Financial Bid of Addendum & Corrigendum-06A
			5.1 - OEM Standard 4G Equipment			Please clarify on this line item as sub items of Infra&Devices are separately requested in subsequent line items and sub-headings	Please refer updated Financial Bid of Addendum & Corrigendum-06A
			5.2 - OEM Standard 4G Equipment - DLP Service for above mentioned supplies			Please clarify on this line item as sub items of Infra&Devices are separately requested in subsequent line items and sub-headings	Please refer updated Financial Bid of Addendum & Corrigendum-06A
			5.3 - 4G Equipment Infra & Devices- 3GPP Service incl.DLP			Please clarify on this line item as sub items of Infra&Devices are separately requested in subsequent line items and sub-headings	Please refer updated Financial Bid of Addendum & Corrigendum-06A
39			Employers Requirement Part-2, Section 6B: PSSignalling and Train control, Chapter 4, Clause No. 4.4.2.3 - [Add the following new Sub Clause No. (5) in Clause No. 4.4.2.3 in PS] (5) The following MTTR shall be achieved in case of LTE equipments: a. 30 minutes for train-borne equipment. b. 30 minutes for trackside equipment; and c. 30 minutes for equipment located in equipment rooms or control rooms	Page 4 of Addendum and Corrigendum 05B		We understand that L1 support (First level of maintenance) for Core, Trackside & Train borne equipoemnt is to be done by NCRTC Operations staff or O&M agency hired by NCRTC. LTE contractor responsibility is to provide L2 support in case L1 support team is not able to resolve the issue. These SLAs mentioned in this clause are applicable to L1 support team.	Please refer to clause 4.4.2.3 of Section-06B Particular Specifications Signalling & Train Control-R1
40			Employer's Requirement Part-2, Section 6B: PSSignalling and Train control, Chapter-11, Clause No. 11.1.3 The DLP of a section or part of work shall start from the date of opening of the section for revenue services and shall continue until 3 years from the date of opening of the section for revenue services of that relevant section or part of the work. For the equipment and software supplied of OCC/BCC, the DLP shall start from the date of opening of taking over of OCC/BCC and shall continue until 3 years from the date of taking over of the OCC/BCC opening of Stage -4 for revenue service. Note: For the time period during which Temporary OCC is operational, Contractor has to manage the equipments.	Page 7 of Addendum and Corrigendum 05B		We understand that First line of mainteance for all equipemnt supplied for LTE is to be done by NCRTC operations staff. Please elaborate what is expected from LTE contarctor against below mentioned scope "Note: For the time period during which Temporary OCC is operational, Contractor has to manage the equipments."	Please refer Chapter 11 of Section-06B Particular Specifications Signalling & Train Control-R1
41			Employers Requirement Part-2, Section 6B: PS Signalling and Train control, Chapter 15, Clause No. 15.6.1 sub clause (3) (a) (Downlink)– 4 Mbps minimum, (Uplink)– 2 Mbps minimum (Assuming 5Mhz Spectrum is provided) per UE, with network loading of 50% in case of all eNodeB sites functioning. (b) (Downlink)– 2 Mbps minimum, (Uplink)– 1 Mbps minimum (Assuming 5Mhz Spectrum is provided) per UE, with network loading of 50% in case of single eNodeB sites failure.	Page 92 of Addendum and Corrigendum 05B		We understand that RF design of the LTE network needs to be done considering down link & uplink throughput requirement as mentioned in clause. Generally RF design for Throughput requirement is being done considering Cab radio Anteenae at Top of Train. Please confirm RF design criteria to be considered- Option-1 : Downlink 4 Mbps and uplink 2 Mbps throughput requirement considering cab radio antennae at top of train Option 2 : Downlink 4 Mbps and uplink 2 Mbps throughput requiremen considering UE inside the train.	Please refer 15.6.1 (2) (3) of Section-06B Particular Specifications Signalling & Train Control-R1

Replies to Pre Bid Queries-4B

Sr. No.	Part	Section	Clause No.	Relevant Page No. of bid document	Complete Description of Clause	Queries	Replies
42			Addendum and Corrigendum02B Sr. No. 232 (12) The Handheld, Fixed Radio and Train Radios (Voice + data, Cab LTE Modem & Data Only Radios etc) shall have PTCRB/GCF or equivalent Interoperability certification	Page 91 of Addendum and Corrigendum 05B		PTCRB/GCF certification seems not applicable for each of these equipment/OEMs. We request that self certification of inter-operability should also be acceptable as these equipements are tested and validated buy us.	Please refer to clause 15.5.3 (12) of Section-06B Particular Specifications Signalling & Train Control-R1
43			Employers Requirement Part-2, Section 6B: PS Signalling and Train control, Chapter 15, Clause 15.9 (5) Wireless connectivity, sub clause (i) 3GPP Release 13 and upgradable to FRMCS or a higher version with the approval of Employer.	Page 100 of Addendum and Corrigendum 05B		Most of the Ruggedized Handsets avaialble in market are compliant to Rel 12. Clause should be normalized to Rel 12 & above.	Please refer to clause 15.9 (5) (i) of Section-06B Particular Specifications Signalling & Train Control-R1
44			Employer's Requirement Part2, Section 6G: PS- Platform Screen Doors, Chapter -13, Clause No: 13.4 Tenderer shall submit the detailed plan of Transfer of Technology along with MOU with suitable Indian companies or company having proven track record and are working in related areas for all major systems/ subsystems. The contractor will not impose any technical or commercial condition on the Indian company receiving transfer	Page 52 of Addendum and Corrigendum 05B		Understand this is not applicable for Telecom, LTE, Wireless and other subsystems and for solutions of OEMs whose Indian subsidy/entity already present in India?	Please refer to clause 13.4 of Section-06B Particular Specifications Signalling & Train Control-R1
45			Employers Requirement Part-2, Section 6C: PS Telecommunication, Appendix Q Clause 4 and Point nos. 200, 201 of Addendum - 5B The primary link for ETCS data is LTE. Arrangements may be provided for transfer of ETCS data over Wireless Network in case of non-availability of primary link. Wireless Network may not be considered active standby to primary link	Addendum and Corrigendum 05B		We understand theres is no Interface, integration to be provided between LTE and Wireless systems and are independent and separate Access layers w.r.t. ETCS2/for Railway Signalling?	Please refer to clause 4 of Appendix Q of Section-06C Particular Specifications Telecom
46			**Addendum and Corrigendum 05B** 15.5.3 The proposed solution shall comply with the following: (5) The Systems shall be so designed as to have a minimum of 15 years of service life operating continuously. for the equipment (excluding Servers & workstations) For Servers & workstations it shall be 10 years.	Page 92 of 103		We understood that, the service life stand as End of support of all the delivered equipment as defined by the OEM in this tender. Please confirm.	Bidder's understanding is correct