

**DESIGN, SUPPLY, CONSTRUCTION, INSTALLATION, TESTING AND COMMISSIONING OF 2X25kV AC ELECTRIFICATION, SIGNALLING & TELECOMMUNICATION, E&M AND ASSOCIATED WORKS ON DESIGN BUILD LUMP SUM BASIS OF DADRI – KHURJA SECTION (APPROXIMATELY 47 ROUTE KM OF DOUBLE LINE) OF EASTERN DEDICATED FREIGHT CORRIDOR**

**SYSTEMS WORKS CONTRACT PACKAGE 105**

**RESPONSES TO PRE-BID QUERIES OF THE BIDDERS**

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
1.	<p>Part 1, Section III, Volume 3, Clause 2.2 (5)</p> <p>Documents Required for Bid Submission and Evaluation of First Stage Technical Proposal</p> <p>Technical Submittal The Bidder shall submit details of compliance with the Employers' Requirements as listed in Part 2 of bidding document. This shall be done in a tabular format on a section by section basis and detail how the compliance is achieved.</p>	<p>As we are submitting the clause by clause compliance, wherein we shall indicate that whether we comply or not, this document is one and the same of compliance statement. Please confirm</p>	<p>Yes, it is confirmed.</p>
2.	<p>Part 2, Section VI, Volume 3, Clause 3.2.4 (1) (b)</p> <p><b>Control System</b> There shall be a Control terminal in Hot Standby mode provided at every Station with the Station Master. The Control terminal provided with the Station Master at the Station shall be used to control the Station yard and Block</p>	<p>As Absolute block system is the scope of work, we can only display a particular station territory along with the distant signals on either side of the Home Signal of that particular station. i.e. UP &amp; Down Side. Please confirm if our understanding is correct.</p> <p>Wherever LC gates in block section are interlocked, the display shall be provided in a</p>	<p>Bidder's Query not understood. The scope of work primarily includes automatic block system except on lines connecting IR and WDFC. It is further clarified that the display on the Control terminal shall include complete block section up to adjacent station on both sides of the Station.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Section, under control of the said Station Master. <b>The display on the Control terminal shall however, include not only the current state of railway under control of the Station Master but shall also include further display for the Block Sections on both sides of the Station.</b> The complete display shall be available on the Control Terminal without scrolling. Multiple terminals shall be used, as required for proper display.</p>	<p>station which is controlling the concerned gate. Please confirm.</p>	
3.	<p>Part 2, Section VI, Volume 3, Clause 3.2.4 (2) (c)</p> <p>The Software of Control terminal shall be validated to SIL-2.</p>	<p>As per clause 2.2.3 – 3(a) of particular specifications Volume 3, the Electronic Interlocking (EI) shall be as per RDSO specification RDSO/SPN/192/2005 or RDSO/SPN/203/2011. The spec 2011 is applicable for yards with more than 200 routes. The spec 2005 does not specify that the control terminal software is validated to SIL 2, whereas 2011 specify the same. As most of the stations can be covered 4.under spec 2005, we would like to know if the requirement is not mandatory for this project.</p>	<p>Provisions of Bidding Document as specified shall be mandatorily followed irrespective of what specification the Electronic Interlocking is supplied to.</p>
4.	<p>Part 2, Section VI, Volume 3, Clause 3.2.5 (1) (b)</p> <p><b>Track Vacancy Detection System</b> The track vacancy detection technique shall use Digital Axle Counter Technology as a primary means of train detection. Where required, a secondary means of track vacancy detection can be used to supplement the primary means with the approval of the Engineer.</p>	<p>Is DC track circuit is secondary means of track vacancy detection which can be used to supplement the Primary means of detection, which is MSDAC.</p>	<p>Primary track vacancy detection shall be performed using DAC. Supplementary track vacancy or train detection techniques (like DC track circuit or any other means) can be used where required subject to the approval of the Engineer.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
5.	<p>Part 2, Section VI, Volume 3, Clause 3.2.5 (2) (g)</p> <p>The track-vacancy detection system in New Khurja – New Boraki block section and Up and Down lines connecting New Boraki Junction Station to Point zone controlling movement to/from Dadri ICD yard-Dadri area shall have Main system and Supervisory system. The Main and Supervisory systems shall be provided on different rails. The Supervisory system shall have a track section for every two Main system track sections.</p>	<p>We understand that only Main lines shall have Main and supervisory system. The Loop lines of stations shall not need supervisory track sections. Please confirm.</p>	<p>Provisions of Bidding document are sufficiently clear. The Loop lines of stations shall not have Supervisory track section.</p> <p>Also, refer to Addendum No. 7, S. No. 25 &amp; 26.</p>
6.	<p>Part 2, Section VI, Volume 3, Clause 3.2.5 (2) (l)</p> <p><b>Resetting Arrangement</b>  <b>(i) Manual Resetting</b>  A suitable resetting scheme shall be designed by the contractor for manual resetting of axle counter track sections at stations and block sections. This shall be achieved through a mix of system design and the operating procedures. The scheme should avoid, to the extent possible, physical verification of track at site without affecting safety.</p>	<p>We are not required to design the circuits using Line Verification boxes for all track sections employed. Please confirm. Accordingly, the materials supply shall not include Line Verification boxes.</p>	<p>Suitable manual resetting scheme shall have to be designed by the Contractor and approved by the Engineer after award of contract</p> <p>Wherever the Contractor is able to demonstrate to the Engineer and gain his acceptance on manual resetting scheme without physical verification at site, the Line verification box for resetting of such track sections need not be provided.</p>
7.	<p>Part 2, Section VI, Volume 3, Clause 3.2.6 (2) (b)</p> <p><b>Points and Point machines</b>  <b>(1) Technical requirements</b>  Provision shall be made for individual manual operation of each point. Electrical Power shall get disconnected</p>	<p>Whether points shall be operated centrally from Relay room (or) locally operated?</p>	<p>All the point operations will be done centrally from the Control Terminal provided with the Station Master. Manual operation at local level will be only during emergencies, using crank handle that will automatically disconnect the electrical power being supplied to the point machine.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	from the point drive under manual (crank handle) operation.		
8.	Part 2, Section VI, Volume 3, Clause 6.3.2 (5)  <b>Cable core allocation</b> A separate cable shall be used for operation of each point/ crossover.	Can we combine the cable for point detection along with its 'operation cables". i.e Operation and detection for each end in a single cable.	Please refer to Addendum No. 7, S. No. 33.
9.	Part 2, Section VI, Volume 3, Clause 6.3.2 (7)  Cables for main and supervisory track vacancy detection systems shall be separate	Whether each of the following functions need separate Quad cable: (a) UP detection points (DP) – separate 4 quad (b) DN detection points (DP) – separate 4 quad (c) UP Supervisory DP – separate 4 quad (d) DN Supervision DP – separate 4 quad	Provisions of Bidding document are sufficiently clear. Also, refer to provisions of Para 3.2.5 (2)(k)(ii) of PS (Signalling) of the Bidding document.
10.	Part 2, Section VI, Volume 3, Clause 6.3.7 (5)  <b>Cable laying underground</b>  Signalling cables shall not run with cables carrying high voltages or heavy currents and shall conform to the requirements specified in BS 7671.	We understand the specification BS 7671 is related to General electrical system which will handle high and very high voltages. Basically this specification tells about safety to handle high voltages. <b>Accordingly we understand that signalling cables shall not run parallel to High voltage cables as per this BS 7671 spec. This is the only requirement to be complied. Please confirm</b>	Bidder's understanding is correct.
11.	Part 2, Section VI, Volume 3, Clause 6.3.20 (1)  All cable entry points in the Equipment room, battery room, SM's room, location boxes, junction boxes etc. shall be sealed using modular based cable and pipe sealing system based on 'multi-diameter' technology as per RDSO specification circulated vide letter no.	Please confirm its use is limited to SER only or in all places like as highlighted in yellow as it is too costly	Provisions of Bidding document are sufficiently clear and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	STT/OFC/Misc/263/Vol. XIV dated 03.01.2008. The modules shall be made of low smoke index, halogen free cross linkable rubber compound based on EDPM (Ethylene-Propylene Diene Terpolymer).		
12.	<p>Part 2, Section VI, Volume 3, Clause 6.4.3 (3)</p> <p>The Signalling equipment having Solid State components and the enclosures housing them shall be provided with maintenance free earth using copper bonded steel electrode, earth enhancement compound and bonding connection through exothermic welding as per specification RDSO/SPN/197/2008.</p>	Please confirm as it will be required for each DP in case Electronic JN Box is placed in outdoor.	Provisions of Bidding document are sufficiently clear.
13.	<p>Part 2, Section VI, Volume 3, Clause 10.2.1</p> <p><b>Supply of spares</b></p> <p>The Spare Parts to be supplied by the Contractor shall consist of:</p> <p>(1) Commissioning Spares (as hereinafter defined);</p> <p>(2) Defects Liability Spares (as hereinafter defined); and</p>	What is % of items to be supplied for Commissioning spares and Defects Liability Spares?	Bidder may refer to provisions of Para 10.2.2, 10.2.3 and 10.2.4 of PS (Signalling) of the Bidding document, which clearly address the Bidder's query.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
14.	<p>Part 2, Section VI, Volume 3, Clause 1.1.4</p> <p>There are at present 13 level crossing gates in this section which are planned to be replaced with RUBs by DFCCIL/IR.</p>	<p>Please confirm these Level crossings to be considered in project execution.</p>	<p>Please refer to Para 1.4 (SCOPE OF WORKS) of PS (Signalling) of the Bidding document. The interlocking of Level Crossings need not be considered for Project execution.</p>
15.	<p>Part 2, Section VI, Volume 3, Clause 3.2.3(4) (f)</p> <p>Interlocking design The system shall have provision for accommodating additional 25% of the I/O used as minimum spare provision, including corresponding processor capacity for future use.</p>	<p>Does this mean that Tender has to include cost of 25% of Input &amp; Output Boards used in a particular station as "spares provision"? Apart from 25% of the I/O cards to be accommodate in future any additional spare need to be considered during design. Please confirm.</p>	<p>Please refer to Addendum No. 7, S. No. 23.</p> <p>Under the clause, the Bidder need not provide additional 25% I/O cards but shall only keep provision for accommodating the same. However, the Contract spares shall be provided as per Item 4 of Table at Para 10.2.7(2) of PS (Signalling).</p>
16.	<p>Part 2, Section VI, Volume 3, Clause 3.2.3 (5)</p> <p>Mid-section modified semi-automatic signal in each direction in New Khurja – New Boraki block section shall be provided as per Indian railways General Rules referred at Para 3.2.1(2) above. The mid-section semi-automatic stop signal SPT (Signal Post Telephone) design, as approved by the Engineer, shall only be provided by the Contractor. The following system of working shall be implemented:</p>	<p>For lengthy block section (e.g. Approximately 42 Km bet. New Khurja to New Boraki) more no. of mid-section Modified automatic signals in block section in each direction required for Foggy arrangement. Please confirm.</p>	<p>Provisions of Bidding document are sufficiently clear.</p>
17.	<p>Part 2, Section VI, Volume 3, Clause 3.2.8 (4)</p>	<p>We'll prefer to provide a separate UPS having load capability pertaining to CP-105 S&amp;T systems. Please advise otherwise.</p>	<p>Provisions of Bidding document are sufficiently clear. The power supply design shall be submitted by the</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>The Contractor of CP 104 will also provide a UPS as per specification at Appendix 1 for Signaling and Telecommunication Equipment provided in OCC under CP 104. The responsibility for providing Power supply for additional equipment being provided under the Contract in OCC, lies with the Contractor. The Contractor can meet its contractual obligation by either providing new power supply or by suitable addition/augmentation of the Power supply provided under CP 104. The Contractor shall coordinate with the Contractor of CP - 104 for the same.</p>		<p>Contractor and approved by the Engineer at design stage after award of contract</p>
18.	<p>Part 2, Section VI, Volume 3, Clause 3.2.10 (2)</p> <p>The Train Management System of CP-105 shall be provided by extending the Train Management System (TMS) of adjacent section, Bhaupur-Khurja Section of EDFC -1, being provided under Contract Package CP-104. The design of TMS system of CP- 105 shall be fully compatible with the TMS system being provided for Bhaupur-Khurja section of Contract Package CP-104 in all respects</p>	<p>TMS interfacing with CP-104: necessary Software and Hardware requirements should be provided by CP-104 Contractor.</p>	<p>Please refer to specification of TMS being provided by CP 104 Contractor in Appendix 7, especially provisions under Para 3(32) – Interface with other TMS.</p>
19.	<p>Part 2, Section VI, Volume 3, Appendix 7, Clause 3 (15)</p> <p>TMS Terminals for Chief Controller, Dy.</p>	<p>We are assuming 1 No. of Traffic Controller and 1 No. of Assistant Traffic Controller. As section is of 47 KM and having only 4 Stations. Please confirm our understanding is correct.</p>	<p>The clause referred specifies TMS terminals to be provided under CP 104 contract to Controllers of Bhaupur-Khurja section in the OCC.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Chief Controller, Traffic Controller(s) and Assistant Controller at OCC		It is however, clarified that there will not be any separate Controllers in the OCC for supervision and control of traffic of Dadri-Khurja section. The TMS terminals of the Controllers of Bhaupur-Khurja section provided under CP 104 shall be suitably modified to include the section under CP 105. Please also refer to Addendum No. 7, S. No. 30.
20.	Part 2, Section VI, Volume 4, Clause 5.3.4.5, Page 26  Each SDH node of the Second Network shall be at least STM-4 level or higher in the SDH hierarchy. The exact level of SDH node in SDH hierarchy shall be determined by the Contractor to meet the Bandwidth Requirements for Subsystems under this Contract as well as for relevant Project Contractors with 50% Spare Capacity. SDH Node of Second Network shall be equipped with minimum 4XSTM-4o Interfaces.	Please clarify the locations where SDH equipment's (STM-4) are to be placed other than station because at station STM-16 will be there as these come in the first network.	Being design & build contract, the number of SDH nodes (STM-4) and their locations shall be determined by Bidder/Contractor.
21.	Part 2, Section VI, Volume 4, Clause 5.3.4.6, Page 26  SDH Nodes at Station shall be common for First & Second Network and equipped with Digital Cross Connect at VC4, VC3 and VC12 levels.	By Common Nodes, we understand that Same STM-16 node will have STM-4 ports connected to second network. Please clarify	Bidder's understanding is correct.
22.	Part 2, Section VI, Volume 4, Clause 5.3.4.10, Page 26	The EoS shall support Layer-2 encapsulation and forwarding through Multiprotocol Label Switching (MPLS). We request to delete as it is not required	Provisions of bidding document shall prevail.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	SDH Equipments shall be equipped with Ethernet over SDH (EoS) as per ITU-T Rec. G.7041 at 10/100 BaseT. This Ethernet over SDH (EoS) shall facilitate delivery of Ethernet Private Line (EPL) Services, Ethernet Virtual Private Line (EVPL) Services and Ethernet Local Area Network (E-LAN) Services. The EoS shall support Layer-2 encapsulation and forwarding through Multiprotocol Label Switching (MPLS).	in such boxes.	
23.	Part 2, Section VI, Volume 4, Clause 5.3.8.1, Page 28  A Service Telephone/Engineers Order Wire with handset shall be provided at each SDH node location for point to point and multipoint voice communication calls between maintenance staff at different node locations. It shall permit selective and group call functions.	Please clarify, will group call be also required as only Pt. to pt. call is possible.	Provisions of bidding document shall prevail.
24.	Part 2, Section VI, Volume 4, Clause 5.5.3.3, Page 33	Please confirm whether the Flexible Access Multiplexer is to be provided, wherever the SDH node is provided.	Please refer to clause 5.3.5.5 of PS/ Telecommunication works.
25.	Part 2, Section VI, Volume 4	a) Please indicate the distance between the stations i.e for the first network (STM-16) and for the second network (STM-4). Distances are required to calculate the link engineering.  b) Request you to please provide the indicative network diagram with provision of First network and second Network.	The details are available in reference documents under Part-4, and may be referred to.  The Network Diagram shall be developed by Bidder/Contractor as per Clause 5.3 of PS/Telecommunication Works, Part 2, Section VI, Vol. 4.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
26.	<p>Part 2, Section VI, Volume 4, Clause 6.3.1, Page 37</p> <p>WAN shall be created using Layer-3 Switches equipped with minimum 4 Nos. of 10GigE Fibre Ports for backbone interconnections. WAN shall connect OCC, New Boraki Station, TSS and IMSD using Optic Fibre Cable. Further WAN shall connect TSS with New Boraki Station in Redundant Linear Topology using Optical Fibre Cable.</p>	How far is IMSD from corresponding station?	The details are available in reference documents under Part-4, and may be referred to.
27.	<p>Part 2, Section VI, Volume 4, Clause 6.3.17, Page 38</p> <p>Security features such as Authentication, Authorization &amp; Accounting (AAA), Secure Shell Protocol (SSH), MAC Limiting per Ethernet Flow-point, Unicast/ Multicast/ Broadcast Storm Control Blocking, Layer-2 ACL, Layer-3 ACLs for IPv4 &amp; IPv6 and DHCP Snooping shall be available on the WAN.</p>	Please let us know the services and the no. of users for sizing the AAA server.	Being design & build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.
28.	<p>Part 2, Section VI, Volume 4, Clause 6.5.1.3, Page 40</p> <p>Layer-3 Switches shall be capable of working with DC Power Supply with range of -40 to -54V. Power Supply Module should be redundant and inbuilt in the switch.</p>	If the Layer-3 Switches & Layer-2 switch does not work on this power supply, then can we plan an additional converter?	Being design & build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.
29.	Part 2, Section VI, Volume 4, Clause 6.8.1, Page 42	We understand that each Site refers to each station. Please confirm and if there are any other locations rather than stations kindly provide the	Each site refers to locations where data networking equipment (Layer 3 Switch, Layer 2 Switch, Wi-Fi access

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	The Contractor shall provide at each Site, the Local Access to Maintenance Staff to the necessary NMS Functions via a Laptop/Engineers Terminal, equipped with appropriate NMS Software.	details.	equipment etc.) have been provided.
30.	Part 2, Section VI, Volume 4, Chapter 10	Quantity of 25watt VHF transceivers along with power supply & associated accessories are not mentioned anywhere in the chapter 10.	Bidding Document is sufficiently clear. Also, refer Clause 10.1.1.1 & 10.1.1.2 of PS/Telecommunication works.
31.	Drawings	Please provide the Signalling Plan & Telecom System Architecture	Signalling Plan & Telecom System Architecture should be proposed by the Bidder/contractor.
32.	Part 2, Section VI, Volume 4	Please provide the system specific information of station interfacing at Dadri station & Khurja station with other interfacing contractors.	Bidding Document is sufficiently clear. Further details are available in reference documents under Part-4, and may be referred to.
33.	Part 2, Section VI, Volume 4, Clause 11.3.1.2, Page 86  The IP Fixed Video Cameras shall be strategically placed to ensure 100% coverage of Main Entrances Gate, Incoming Bay Area, Outgoing Bay Area, Transformer Area & Power Supply Control Room Building Area of TSS.	Please provide the details of minimum quantity of Camera are to be provided in the requirement which can be adjusted to design the system.	Provisions of Bidding document are sufficiently clear. Also, refer Part-4 of bidding document
34.	Part 2, Section VI, Volume 1, Clause 4.4.4  The Design Submission Program shall: (a) be deemed to be consistent with relevant Coordination Dates and latest work	Co-ordination dates are not available in the Bid document. Please provide them.	Provisions of Bidding document are sufficiently clear. Bidder's attention is invited to provisions of Chapter 10, Interface Management which specifies responsibility of the Contractor for interfacing with 'Other contractors' for Coordination dates

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	program;		and Integrated Works Programme.
35.	Project sheet no.-39	In Boraki Halt (towards Dadri), 1 in 12 points are shown with pink colour & pink colour is not shown in legend. Please confirm this alteration work is also scope of CP-105.	Pink Colour works are not in the scope of this contract package.
36.	ESP of New Boraki with EDFC connection to Dadri & WDFC(KM 1408/931)	In this drawing Work is shown in two phases i.e. Phase-1 & Phase-2. Please confirm works related to these two phases are scope of contract CP-105.	Works shown in Phase 2 are not in the scope of this contract package.
37.	N.A.	We need Chawa Pail Junction station yard plan	The need for Chawa Pail Junction station yard plan is not understood.
38.	N.A.	In the yard plans given, there is a dotted line shown in red (common loop below Main line). Should we consider the same as part of present scope and provide signals & points (or) the same will be in future only & not part of present contract.	This is not part of the present contract.
39.	General Supply diagram Part -4	Common loop line does not have motorised/manual isolator for power supply. We request to clarify whether Isolator is required to be provided.	Please Refer to Addendum No. 7, S. No 63.
40.	General Supply diagram Part -4	Type of isolator is not visible. We request to kindly clarify the type of isolator	Please refer Sub Clause 8.3.1. Vol-2, Part-2 of the Bidding Document.  The provisions in the Bidding Document are self-explanatory and shall prevail.
41.	Schematic diagram of 132/54 kV TSS	132 kV D/C line is shown, kindly clarify whether the transmission line is Single circuit or double circuit	Please refer Clause 2.2. Vol-2, Part-2 of the Bidding Document.  The provisions in the Bidding Document are self-explanatory and

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
			shall prevail.
42.	Page 463 of 1231 clause 5.1.5 Emergency Feeding Scenario	Kindly mentioned the distance at which Ibrahimpur TSS is located in order to calculate N-1 Scenario	Please refer Addendum No. 7, S. No. 62.
43.	Page 464 of 1231 clause 5.1.8 Second failure condition (N-2)	Kindly clarify in detail N-2 Scenario, feeding Scheme and Distance of the source	Please refer reply at S.No.42 above.
44.	Page 489 of 1231 clause 7.6 Batteries and Charger	The requirement of two battery bank and two charger is mentioned. But as per our experience the second battery bank will not be useful. We will suggest 1 battery bank and two charger. We request to kindly consider the above.	The Provisions of the Bidding Document shall prevail.
45.	Page 492 of 1231 clause 7.8.2 point (2) Gravel spreading shall be minimum 150 mm	As per IEEE- 80, a 0.08–0.15 m (3–6 in) layer of high resistivity material, such as gravel, is often spread on the earth's surface above the ground grid to increase the contact resistance between the soil and the feet of persons in the substation. Kindly change it to minimum 80 mm and maximum 150 mm.	The Provisions of the Bidding Document shall prevail.
46.	General Query	Kindly confirm the minimum amount/value for RITES inspection for RDSO/CORE material	The query is not clear. Since the reference clause is not mentioned.  However, please refer Addendum No. 7, S. No. 4.
47.	Page 502 of 1231, Clause 8.4- OHE Conductor  Contact Wire - 150 Sq. Mm is defined as copper silver	As per our previous experience, we have found that copper silver is expensive and prone to theft. We suggest copper alloy based on the international specifications, EN 50149/ 50119. We request to kindly consider the above	The Provisions of the Bidding Document shall prevail.
48.	Section-III-Evaluation & Qualification Criteria-Clause 2.3- Personnel  Sr. Design Engineer (SCADA) , Project Manager-(Traction Sub Station 2x25 kV	As SCADA does not form part of Scope of Work in this project, hence we assume that there will not be requirement of personnel for SCADA. Please confirm.	Please refer Sub Clause 3.3.1(2) and 10.1.3, Vol-2, Part-2 of the Bidding Document.  The provisions in the Bidding

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	& SCADA)		Document are self-explanatory and shall prevail.
49	Part – 3, Particular Conditions  Sub clause 1.1.3.7 (appendix to Tender)  Defect Notification Period	Defect Notification Period may please be reduced to 1 year from 2 years as mentioned.	Request not accepted. The Provisions of the Bidding Document shall prevail.
50.	Part – 3, Particular Conditions  Sub-Clause 1.1.6.10 General Clauses Act 1897  Insert the following Sub-Clause 1.1.6.10: “Any word or expression used in this Contract shall, unless otherwise defined or construed in this Contract, bears its ordinary English meaning and, for these purposes, the General Clauses Act 1897 shall not apply.”	Bidder request to clarify ordinary English meaning mean English Dictionary meaning or Technical Dictionary meaning or whichever applicable.	Unless otherwise specified, the meaning of the English words refers to the ordinary English meaning and not the meaning included in the technical dictionary.
51.	Part – 3, Particular Conditions  Sub- clause 1.9 Errors in Employer's Requirements  (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.	Profit may be considered @ 15% for calculation purpose	Request not accepted. The Provisions of the Bidding Document shall prevail.
52.	(iii) the matters described in sub-paragraphs (a) and (b) above to the extent under paragraph (ii) above.”	This Clause is not clear. We request to kindly clarify this clause.	Item (iii) means that if the answer to the question at (i) is in the affirmative, then based on Engineer's assessment at (ii) as to what extent the Contractor could not have reasonably discovered the error earlier, the extent to which the

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
			extension of time is justified (as highlighted at a) and the extent of payment (as highlighted at b), shall be determined by the Engineer.
53.	<p>Part – 3, Particular Conditions</p> <p>New Sub- clause 1.15 Inspections and Audits by the Bank</p> <p><b>Add New Sub-Clause 1.15:</b>  “The Contractor shall permit, and shall cause its Subcontractors and sub-consultants to permit, the Bank and/or persons appointed by the Bank to inspect the Site and all accounts and records relating to the performance of the Contract and the submission of the Bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Contractor’s and its Subcontractors’ and sub-consultants’ attention is drawn to Sub-Clause 1.16 [Fraud and Corruption] which provides, inter alia, that acts intended to materially impede the exercise of the Bank’s inspection and audit rights provided for under Sub-Clause 1.15 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank’s prevailing sanctions procedures)”</p>	Bidder request to add "except Company's internal financial documents"	Request not accepted. The Provisions of the Bidding Document shall prevail.
54.	<p>Part – 3, Particular Conditions</p> <p><b>Sub- clause 2.1-Right of Access to</b></p>	Bidder find that the maximum ceiling of Rs. 2000/- (Two Thousand) per day for every KM and its prorata is very less now a days. Nothing would be	Request not accepted. The Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p><b>Site</b></p> <p>Replace the words "Performance Security" with "Performance Security and ESHS Performance Security" in the last line of the 1st Paragraph. <b>Insert</b> 'Formation, Track' between the words 'plant' and 'or' in 5th line of paragraph 1. <b>Delete the contents of Sub-Clause (b) in para 3 and replace with:-</b> "Payment of any such cost plus reasonable profit subject to a maximum of Rs.2000.00 (Two Thousand) per day for every km. For length less than a kilometre pro-rata amount shall be calculated provided further that if such delay in handing over does not affect the execution of Permanent Works under this Contract, provisions under para 2.1(b) of this sub- clause shall not apply.</p>	<p>compensated with this amount for the performance of this clause. Bidder request to consider the actual cost plus profit (15%) on such delay applicable for this clause.</p>	
55.	<p>Part – 3, Particular Conditions</p> <p>Sub-Clause 4.2 (Appendix to Tender)</p> <p>Amount of Environmental, Social, Health and Safety (ESHS) Performance Security</p>	<p>Bidder request to waive the amount of security deposit towards ESHS</p>	<p>Request not accepted. The Provisions of the Bidding Document shall prevail.</p>
56.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-clause 4.4 Subcontractors</b></p> <p><b>"Delete the first line of Sub-Clause 4.4 and substitute with the following:</b> "The Contractor shall not subcontract Works of value more than 30% of the</p>	<p>Bidder request to consider the subcontract value from 30% to 40% of accepted contract amount. Bidder request to clarify whether Engineer or Employer will give consent for the new Specialized Subcontractor apart from the approved list.</p>	<p>Request not accepted. The Provisions of the Bidding Document shall prevail.</p> <p>The Contractor can submit a request for replacement of a specialised sub – contractor during execution of the project.</p>



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Accepted Contract Amount in addition to the Works for which Specialized Subcontractor(s) are named in the Contract.” Add the following at the end of the Sub-Clause: “The Employer at his discretion may permit the replacement of Specialized Subcontractors, named in the Contract, provided new Specialized Subcontractor(s) have required qualification.”</p>		<p>In addition, the Contractor can also approach the Engineer for induction of new sub – contractors for the works to an extent of 30% of the Accepted Contract Amount.</p>
57.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-clause 4.7 Setting Out</b></p> <p><b>Delete paragraph 2, 3 &amp; 4 of Sub-clause 4.7 and substitute with the following:</b> “Accuracy of these specified items of reference shall be deemed to have been verified by the Contractor. Accordingly, the Contractor shall have no right to claim towards time or cost caused due to errors in these specified items of reference.”</p>	<p>Bidder request to consider the Contractor's losses (time plus cost) for the delay if suffered by the contractor due to default of Employer in setting out.</p>	<p>Request not accepted. The Provisions of the Bidding Document shall prevail.</p>
58.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-Clause 4.10 Site Data</b> Add at the end of <b>paragraph 1 of Sub-Clause 4.10.</b> “Accordingly, the Contractor shall have no claim in this regard.” <b>In paragraph 2 of Sub-Clause 4.10. Delete</b> the words “To the extent which</p>	<p>Bidder request to consider the losses to be suffered for the delay, if any, by the contractor on account of non-availability of site data from the employer</p>	<p>Request not accepted. The Provisions of the Bidding Document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>was practicable (taking account of cost and time)".  <b>Start</b> the word "'the' with a capital letter."  <b>Delete</b> "To the same extent" from the fourth line and <b>Start</b> the word "the" with a capital letter.</p>		
59.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-Clause 4.11 Sufficiency of the Accepted Contract Amount</b></p> <p>DFCC project being funded by the World Bank, qualifies for exemption from payment of custom duty and Excise duty on goods supplied/intended to be supplied to the Project in terms of Government of India's Customs notification no. 84/97 – customs dated 11.11.1997 and Central Excise Notification no. 108/95-CE dated 28.08.1995 (read along with all subsequent amendments) respectively, provided the goods brought in to the project are not withdrawn by the supplier or the Contractor. Under various notifications of the Department of Excise and Customs, Government of India, goods brought in to the project funded by the International Bank of Reconstruction and Development (IBRD) and / or awarded after conducting process under the International Competitive Bidding are exempt from Customs and Excise duties and / or are eligible for Deemed Export</p>	<p>As GST has been implemented, hence excise duty is no more applicable.</p> <p>We request to kindly clarify whether this project is exempt from payment of GST. If GST is exempt, please clarify that what is the time period for getting the 'Exemption Certificate " for both GST and deemed exports from the employer so as to procure the materials at the earliest. Also it is presumed that there will be no service tax applicable for the project.</p>	<p>The Bidder's presumption is correct; there will be no service tax applicable for the project.</p> <p>As per the new Tax regime, there is no Excise Duty with effect from 1st July 2017. Also, at present, there is no notification from Govt. of India regarding exemption of GST for this Project.</p> <p>The Bidders are requested to refer to Addendum No. 7, S. No. 59 in this regard.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Benefits, provided the said goods are not withdrawn by the supplier or Contractor.		
60.	Part – 3, Particular Conditions  Sub-clause 4.12 Unforeseeable Physical Conditions  (b) the Contract Price shall not be adjusted to take account of any unforeseen physical conditions.”	Bidder feel that the employer should consider the compensation towards the delay arising out of the unforeseen physical condition for which contractor is not responsible. Contractor should be entitled for additional time and cost for the same.	Request not accepted. The Provisions of the Bidding Document shall prevail.
61.	Part – 3, Particular Conditions  Sub-clause 5.1 General Design Obligations  <b>Last paragraph:</b> ..... If and to the extent that (taking account of cost and time) an experienced Contractor exercising due care would have discovered the error, fault or other defect when examining the Site and the Employer's Requirements with reference to purpose, scope, design and/or other technical criteria for the works before submitting the Tender, the Time for Completion shall not be extended and the Contract Price shall not be adjusted.”	Bidder request to consider the time and cost compensation, if contractor could not foresee during examination at site.	Request not accepted. The Provisions of the Bidding Document shall prevail.
62.	Part – 3, Particular Conditions  <b>Sub-Clause 8.2 Time for Completion</b>  <b>Delete this Sub-Clause and substitute</b>	Bidder request to Clarify whether Employer will take <b>over the work on milestone basis.</b> Also, bidder request to confirm at which date Employer would hand over the site in totality to the contractor.	Provisions of Bidding document are sufficiently clear. The Employer will not take over the work on milestone basis. Bidder's attention is also invited to provisions of Chapter 10,

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>with the following:  "Whole of the Works shall be completed within 640 (Six Hundred forty) days from the Commencement Date.  <b>Milestone-1: 300 (Three Hundred ) days</b></p>		<p>Interface Management of General Specifications, Part – 2 which specifies responsibility of the Contractor for coordination with 'Other contractors' for all his interface requirements, including access dates.  For Access schedule please refer to Addendum No. 7, S. No.61.</p>
63.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-Clause 8.3 Programme</b></p> <p><b>Insert the following after 1st sentence in paragraph 1:</b> "Each programme shall take into account the progress of the Works under execution of Civil Works Contract Package 302 of the same section under the same Project [Eastern Dedicated Freight Corridor Project-3]."  <b>Delete paragraph 3 of Sub- Clause 8.3</b>  "The Contractor shall ..... [Variation Procedure]."</p>	<p>Bidder wish to clarify that delay in execution of the Civil Contract-work may delay of this contractor's work. Therefore contractor would be entitled for time and cost compensation.</p>	<p>The Bidder is requested to refer to Clause 2.1 – Right of Access to the Site wherein the compensation in this regard has been identified</p>
64.	<p>Part – 3, Particular Conditions</p> <p><b>Sub Clause 8.8 Suspension of Works</b></p> <p><b>(b)</b> necessary for proper execution of Works or by reasons of weather condition or by some default on the part of the Contractor;</p>	<p>Bidder's observation is that the contractor is no way responsible for the suspension caused by weather condition, Bidder feel that the contractor should be entitled for additional cost for suspension of work, if any, caused by weather condition as this will come under the force majeure (clause 19.1) of GCC.</p>	<p>Request not accepted. The Provisions of the Bidding Document shall prevail.</p>
65.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-Clause 10.2 Taking Over of Parts</b></p>	<p>Please confirm that what clause under the contract will be applicable if the Employer use any part of the work prior to issue of taking over</p>	<p>It is not likely for the Employer to use any part of the work prior to issue of the "taking over certificate". However,</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p><b>of the Works</b></p> <p>Delete the Sub-Clause 10.2 in its entirety.</p>	certificate.	in the unlikely event of any such exigency, the line of action would be mutually decided between the Engineer and the Contractor.
66.	<p>Part – 3, Particular Conditions</p> <p>Sub-Clause 13.5 (Appendix to Tender)</p> <p>Provisional Sum</p>	In this clause it is mentioned that no provisional sum is payable where as in Sub-Clause 14.2 (a) it speaks about Provisional Sums. Bidder request to clarify.	In the present contract, the value of the provisional sums is zero. As such, Sub – Clause 14.2 (a) should be read treating the provisional sums as zero.
67.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-Clause 14.9 Payment of Retention Money</b></p> <p><b>Delete first para of Sub-Clause 14.9 and substitute with the following:</b></p> <p>A retention amounting to 10 (ten) per cent of the value of the work done shall be deducted by the Engineer in the first and following Interim Payment Certificates, until the amount so retained reaches a limit of retention money of 5 (five) percent of the Contract Price.</p>	Bidder request to waive this retention clause	Request not accepted. Provisions of the Bidding Document shall prevail.
68.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-Clause 16.2 Termination by the Contractor</b></p> <p><b>Delete the Sub-Clause 16.2 (d)</b></p> <p><b>Delete the following words from 16.2 (e)</b></p> <p>“ or Sub-clause 1.7 [Assignment]”</p>	This clause 16.2 (d) has been deleted. But bidder request to clarify whether Contractor is entitled to terminate the work in case employer substantially fails to perform its obligation	The contractor is not entitled to terminate the work in such a case.
69.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-Clause 17.3 Employer's Risks</b></p>	Bidder's request not to delete this clause	Request not accepted. Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<b>Sub-paragraph (h) - Delete</b>		
70.	<p>Part – 3, Particular Conditions</p> <p><b>Sub-Clause 18.5 Professional Indemnity Insurance</b></p> <p><b>Add the following new Sub-Clause:</b>“The Contractor shall obtain the professional indemnity insurance, to cover the risk of professional negligence in the design of the Works carried by him, for the amount(s) stated in the Appendix to Tender and the insurance shall be maintained in full force and effect from the Commencement Date of the Works until 03 (three) years after the expiry of the Defects Notification /Extended Defects Notification Period. The insurance policy is required to indemnify the Employer as joint insured and the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured.The Engineer will not certify any Payment Certificate until the Contractor has provided evidence of this insurance.</p>	<p>Time period may please be reduced from 03 (three) years to 1 (one) after the expiry of defect notification period.</p>	<p>Request not accepted. Provisions of the Bidding Document shall prevail.</p>
71.	<p>Part – 3, Particular Conditions</p> <p><b>Sub Clause 20.6 Arbitration</b></p> <p><b>Delete Sub-Clause 20.6 and substitute with the following:</b> “Any dispute not settled amicably and in</p>	<p>Bidder feel that Arbitration process will be as per the Amendment Act 2015 of Arbitration &amp; Conciliation Act 1996. Please clarify</p>	<p>Please refer to Addendum No. 7, S. No.60.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	respect of which the DAB's decision (if any) has not become final and binding shall be finally settled by arbitration. Unless otherwise agreed by both parties, arbitration shall be conducted as follows:.....		
72.	<p><b>Part -1</b></p> <p><b>Section-IV- Bidding Forms-Price Schedule 2.0 - Apportionment of Contract Price for Payments According to Cost Centres</b></p> <p>Apportionment of Contract Price for Payment according to cost centres.</p>	<p>We request to kindly <b>revise the weightage of cost centre</b> for following as under:-</p> <p><b>2.1 – Electrical Works</b>  2.1.1- Surveys, Investigations, Studies, Design &amp; Documents, O &amp; M Manuals and As Built Drawings,  Training of Staff- <b>6.5%</b></p> <p>2.1.8 -Integrated Testing, Commissioning and Final Taking over of Works – <b>2.5%</b></p> <p><b>2.2- Signalling Works</b></p> <p>2.2.1- Design &amp; Documentation- <b>6.5%</b>  2.2.6- Integrated Testing &amp; Commissioning and Final Taking-Over- <b>2.5%</b></p> <p><b>2.3- Telecommunication Works</b>  2.3.1- Design and Documentation-<b>15.5%</b>  2.3.5- Integrated Testing &amp; Commissioning and Final Taking-Over – <b>2.5%</b></p>	Request not accepted. Provisions of Bidding Document shall prevail.
73.	<p><b>Part 2, Employers' Requirements, Volume 4</b></p> <p><b>Telecommunication Works- Chapter-5-Clause 5.1.1-Pg 927 of 1231</b></p> <p>The OFC System shall be a highly</p>	Please suggest the number of SDH Nodes to be considered in the BOM. Also indicate the number of SDH nodes i.e. STM-16 to be considered in First network and STM-4 to be considered in Second network.	Being design & build contract, the Number of SDH shall be determined by Bidder/ Contractor.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	reliable system since it shall be the primary means of communications between OCC, .....		
74.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works- Chapter-5-Clause 5.5.1.3-Pg 935 of 1231</b></p> <p>At least 50% Spare Traffic Bandwidth and capacity between nodes shall be provided for SDH Network and Primary Multiplexer Network. Spare capacity shall be achieved by providing additional cards and/or modules</p>	<p>As per the clause, you require 50% spare bandwidth.  We are proposing STM-16 for First network and STM-4 for second network. Kindly clarify the Bandwidth is required in terms of STM-16 / STM-4 or in terms of number of SDH Ports.</p>	<p>Provisions of Bidding Document are sufficiently clear.</p>
75.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works- Chapter-5-Clause 5.5.1.1 (6)- Pg 935 of 1231</b></p> <p>Optical link budget calculations for all the transmission links;</p>	<p>Please indicate the distance between the stations i.e. for the first network (STM-16) and for the second network (STM-4). Distances are required to calculate the link engineering.</p>	<p>Please refer Part 4 of the Bidding Document.</p>
76.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works- Chapter-5-Clause 5.5.1.1 (10)- Pg 935 of 1231</b></p> <p>The details of the synchronisation network design and a synchronisation plan which describes the fall back arrangement,.....</p>	<p>Request you to please provide the indicative network diagram with provision of First network and second Network.</p>	<p>Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.</p>
77.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works- Chapter-</b></p>	<p>It is mentioned in the tender document, Clause no. 5.3.7.7 that The Flexible Access Multiplex Equipment shall be provided with 1+1</p>	<p>Provisions of Bidding Document shall prevail.</p>



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p><b>5-Clause 5.5.3.3 (7)- Pg 937 of 1231</b></p> <p>(7) Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels (VF, Data, etc.) with automatic switch over in case of fault.</p>	<p>Redundancy for E1 Channels.</p> <p>1+1 redundancy for voice and data is not feasible in case of Flexible Access Multiplexer. Neither it is required as per the requirement Both the statement are contradictory. Request you to Kindly amend or delete this clause from tender.</p>	
78.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works- Chapter-5-Clause 5.5.3.3 (10e)- Pg 937 of 1231</b></p> <p>Nx64 kbps synchronous data interfaces complying with ITU-T Rec. V.11 and V.35 interface; etc....</p>	<p>V.35 etc. interfaces is not required in DFCCIL requirement.  Kindly amend or delete this clause from tender.</p>	<p>Provisions of Bidding Document shall prevail.</p>
79.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works- Chapter-5-Clause 5.5.3.4 (3)-Pg 34 of 141</b></p> <p>The NMS shall be equipped with a proven real-time, multi-tasking operating system to support centralised network management of SDH and PDH equipment from OCC.</p>	<p>Network management System for the SDH and PDH are different with Different hardware and different software.</p>	<p>Network management System for the SDH and PDH can be on same hardware or on different hardware.</p>
80.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works</b></p> <p>Laptops for maintenance....</p>	<p>Can we provide the same laptops loaded with different sub-system management software.</p>	<p>Provisions of Bidding Document shall prevail.</p>
81.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works</b></p> <p>Redundancy of NMS</p>	<p>Redundancy of NMS for each sub-system is required. But there is not backup OCC. Can we proposed single NMS for each sub-system</p>	<p>Query not clear.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
82.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works CHAPTER 6 - DATA NETWORKING SYSTEM- Clause 6.1.9-Pg 939 of 1231</b></p> <p>At New Boraki Station Wi-Fi Facility, compliant with IEEE 802.11g Standards shall be provided for WAN Connectivity to users (which also include drivers of passing trains) via Wireless Enabled Devices and Equipment. A minimum of 10 simultaneous users may use the Wi-Fi Connectivity at Station. This Wi-Fi Facility shall as a minimum cover Station Building and EDFC Tracks up to 500 meters in both directions</p>	<p>1. Kindly provide the inputs whether you need Licensed band and Unlicensed band for wifi.</p> <p>2. Kindly provide the central point on which coverage of 500 meters is required.</p> <p>3. Please provide the total distance for wi-fi coverage on platform, and both sides of platform also.</p>	<p>Unlicensed band shall be used for Wi-Fi facility.</p> <p>From center of station building.</p> <p>Provisions of Bidding Document are sufficiently clear.</p>
83.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works - CHAPTER 11 - Pg 989 of 1231</b></p> <p>VIDEO SURVEILLANCE SYSTEM REQUIREMENTS</p>	<p>What would be the backbone network for CCTV System.</p>	<p>It should be provided using Data networking System.</p>
84.	<p><b>Part 2, Employers' Requirements, Volume 4</b>  <b>Telecommunication Works - CHAPTER 9 - MASTER CLOCK SYSTEM- Clause 9.1.3-Pg-980 of 1231</b></p> <p>This Synchronized Time Information shall also be provided to other Interfacing Systems/Sub-systems and shall be achieved by means of the Network Time Protocol</p>	<p>Kindly clarify how synchronization of OFC equipment is provide from NTP based clock.</p>	<p>Query not clear.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	(NTP).		
85.	<b>Part 2, Employers' Requirements, Volume 4 Telecommunication Works - CHAPTER 10</b>  VHF Communication system	Kindly provide the location of installation of tower.	Bidder is expected to survey the section in accordance with the clause 7.2 of the ITB, Part 1, Section I.
86.	<b>Part 2, Employers' Requirements, Volume 4 Telecommunication Works - CHAPTER 10</b>  VHF Communication system	Kindly provide the technical specifications i.e. safety factor, overturning factor etc. for VHF Towers.	Being design & build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.
87.	<b>Part 2, Employers' Requirements, Volume 4 Telecommunication Works - CHAPTER 12 - 48 V DC BATTERY BACKUP SYSTEM REQUIREMENTS-Clause 12.2.2-Pg 999 of 1231</b>  Provision of suitable Earth Leakage Detector and Alarms shall be made individually at each location (OCC, Station, Auto Location Huts, GSM-R Locations etc.).	Earth leakage detection is not required in Telecom equipments i.e. equipments running on -48VDC are already earthed. Hence this will always give a False alarm. Request you to Kindly amend or delete this clause form tender.	Wherever -48V DC is not being used, earth leakage detector and alarm shall be provided.
88.	<b>Part 2, Employers' Requirements, Volume 4 Telecommunication Works - Chapter-5-Clause 5.3.9.11 (7)-Pg 933 of 1231</b>  A summary alarm shall be provided at the rack top to indicate the alarm status of any element within the rack. The	Summary alarm is not feasible. Kindly amend the clause.	Please refer Addendum No. 7, S. No. 39.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	summary alarm shall be reset automatically upon the alarm is cleared.		
89.	Section III: Evaluation and Qualification Criteria  2.2 Financial Resources The Audited Financial Statements of the latest completed Financial Years (as required in paragraph 3.1 of Section III - Eligibility and Qualification criteria of Prequalification Document) are to be submitted.	We understand that Only audited financial statements of latest 5 years (2012-2016) needs to be submitted and forms FIN 3.1 and FIN 3.2 with updated information need not required to be submitted. Kindly clarify.	It is clarified that Forms FIN 3.1 and FIN 3.2 are not required to be submitted with the Bid.
90.	Part 3, Section VIII, Particular conditions  1.7 Assignment	Kindly retain sub clause 1.7 as given in FIDIC Yellow Book	Request not accepted. Provisions of the Bidding Document shall prevail.
91.	Part 3, Section VIII, Particular conditions  1.9 and 5.1 Errors in Employer's requirements- to be understood with reference to "purpose, scope, design and/or other technical criteria for the works"	Please define the "purpose" of the works with reference to the use of the term "purpose, scope, design and/or other technical criteria for the works"	The attention of the Bidder is invited to Para 1 and its sub – paras of Chapter – 1 of Volume 1, General Specifications, Part – 2 of the Bid Document which clearly bring out the purpose and the scope of the work.
92.	Part 3, Section VIII, Particular conditions  2.1 Right to access to site: the cost compensation is deleted in case of delay in getting access to site	Kindly retain Sub-Clause 2.1 as given in FIDIC Yellow book	Request not accepted. Provisions of the Bidding Document shall prevail.
93.	Part 3, Section VIII, Particular conditions  4.7 Setting out	Kindly retain Sub-Clause 4.7 as given in FIDIC Yellow book	Request not accepted. Provisions of the Bidding Document shall prevail.
94.	Part 3, Section VIII, Particular conditions  4.1 Site Data	Kindly retain Sub-Clause 4.10 as given in FIDIC Yellow book	Request not accepted. Provisions of the Bidding Document shall prevail.
95.	Part 3, Section VIII, Particular conditions	Kindly retain Sub-Clause 4.12 as given in FIDIC	Request not accepted. Provisions of

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>4.12 Unforeseeable Physical Conditions: In this Sub-Clause, "physical conditions" means man-made or natural physical conditions including sub-surface and hydrological conditions which the Contractor encounters at site during the execution of the Works.</p> <p>Except as otherwise stated in the Contract:</p> <p>(a) the Contractor accepts total responsibility for having foreseen all difficulties and physical conditions; and</p> <p>(b) the Contract Price shall not be adjusted to take account of any unforeseen physical conditions</p>	Yellow book	the Bidding Document shall prevail.
96.	<p>Part 3, Section VIII, Particular conditions</p> <p>5.1 General Design Obligation</p>	<p>Please define purpose.</p> <p>We request modification to following clause:  - Para 2, 2nd sentence: "The Contractor undertakes that the designers shall be available to attend discussions with the Engineer at all reasonable 9times, until the expiry date of t11he relevant Defects Notification Period."- Siemens design personnel will be available for the meetings but not necessarily the same personnel</p> <p>We request to delete the following requirements / clauses :  - Para 4, 2nd sentence : "If and to the extent that (taking account of cost and time) an experienced contractor exercising due care would have discovered the error, fault or other defect when examining the Site and the Employer's</p>	<p>For the definition of "Purpose", please refer to the response for query no. 91.</p> <p>Request not accepted. Provisions of the Bidding Document shall prevail.</p>

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
		Requirements before submitting the Tender, the Time for Completion shall not be extended and the Contract Price shall not be adjusted.	
97.	Part 3, Section VIII, Particular conditions 8.8 Suspension of works	Please delete the last paragraph of PC 8.8	Request not accepted. Provisions of the Bidding Document shall prevail.
98.	Part 3, Section VIII, Particular conditions 10.2 Taking over of parts of the works	Kindly retain Sub-Clause 10.2 as given in FIDIC Yellow book	Request not accepted. Provisions of the Bidding Document shall prevail.
99.	Part 3, Section VIII, Particular conditions 13.3 Variation Procedure: No price adjustment for Variations	Please allow price adjustment on Variations to the extent allowed in respective Price Schedules	Request not accepted. Provisions of the Bidding Document shall prevail.
100.	Part 3, Section VIII, Particular conditions 15.3 Valuation at the date of termination	Kindly retain the clause 15.3 of FIDIC Yellow Book	Request not accepted. Provisions of the Bidding Document shall prevail.
101.	Part 3, Section VIII, Particular conditions 16.2 Termination by the contractor	Kindly retain Sub-Clause 16.2 as given in FIDIC Yellow book	Request not accepted. Provisions of the Bidding Document shall prevail.
102.	Part 3, Section VIII, Particular conditions 17.3/18.2 Employer's risks/Insurance of works and Contractor's equipment	Kindly retain Sub Clause 17.3(h), 18.2 sub-para 4(d) as given in FIDIC Yellow Book	Request not accepted. Provisions of the Bidding Document shall prevail.
103.	G.C.C. - FIDIC Yellow Book 1999 1.10 Employer's Use of Contractor's Documents	We request to delete sub-paragraph (b) and substitute: b) entitle the Employer's Personnel in proper possession of the relevant part of the Works to copy, use the Contractor's Documents for the purposes of completing, operating, maintaining the Works	Request not accepted. Provisions of the Bidding Document shall prevail.
104.	G.C.C. - FIDIC Yellow Book 1999 1.12 Confidential details The Contractor shall disclose all such confidential and other information as the	Please confirm the nature of the confidential information that may be required.	This would include any information which the Engineer may reasonably require in order to ensure the Compliance of the Contractor with the provisions of the Contract.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Engineer may reasonably require in order to verify the Contractor's compliance with the Contract		
105.	G.C.C. - FIDIC Yellow Book 1999  1.13 Compliance with Law : (b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the design, execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.	We request to Insert at the end of Sub-Clause 1.13:  However, the Contractor shall submit, in good time, the details of Goods to the Employer, who shall then promptly obtain all import permits or licences required for these Goods.	Request not accepted. Provisions of the Bidding Document shall prevail.
106.	G.C.C. - FIDIC Yellow Book 1999  2.2. Permits, Licences or Approvals	The Contractor shall be responsible to get only those Permits, Approvals or License which are required in the Contractor's name for the performance of this Contract. Please confirm.  Further, we request DFCCIL to issue the necessary Road Permit/Octroi Exemption Certificate, if applicable for transporting the project related material / equipments in the respective states	Request not accepted. Provisions of the Bidding Document shall prevail.
107.	G.C.C. - FIDIC Yellow Book 1999  2.5 Employers' claim Para (2) The notice shall be given as soon as practicable after the Employer became aware of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be	We request you to Insert in paragraph 2, behind the words "as soon as practicable":  and not later than 28 days	Request not accepted. Provisions of the Bidding Document shall prevail.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	given before the expiry of such period.		
108.	G.C.C. - FIDIC Yellow Book 1999  4.1 Contractor's General Obligations: The Contractor shall design, execute and complete the Works in accordance with the Contract, and shall remedy any defects in the Works. When completed, the Works shall be fit for the purposes for which the Works are intended as defined in the Contract.	We request you to delete paragraph 1, 2nd sentence containing the condition "Fit for purpose" since such a phrase is open to interpretation.	Request not accepted. Provisions of the Bidding Document shall prevail.
109.	G.C.C. - FIDIC Yellow Book 1999  4.1 Contractor's General	We request to delete the following words in paragraph 3 of Sub-Clause 4.1.  ...(although not mentioned in the Contract).	Request not accepted. Provisions of the Bidding Document shall prevail.
110.	G.C.C. - FIDIC Yellow Book 1999  4.3 Contractor's Representative	We request to delete following two paragraphs :  Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.  The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Contractor's Representative or appoint a replacement.	Request not accepted. Provisions of the Bidding Document shall prevail.
111.	G.C.C. - FIDIC Yellow Book 1999	We request to delete Sub-Clause 4.5.	Request not accepted. Provisions of



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	4.5 Nominated Subcontractors		the Bidding Document shall prevail.
112.	G.C.C. - FIDIC Yellow Book 1999  4.6 Co-operation	<p>We request to delete Sub-Clause 4.6 and substitute:</p> <p>The Contractor shall, in accordance with the Engineer's instructions, afford to other contractors engaged by the Employer to work on the Site and persons lawfully upon the Site all reasonable opportunities for carrying out their work provided that the same shall not obstruct or disturb the progress of the Works and, when leaving his area of work, clean-up such part of the Site. The Contractor shall also afford such opportunities to the employees of the Employer.</p> <p>If the Contractor, on the written request of the Engineer, makes available any Contractor's Equipment or provides any other service, the Employer shall pay the Contractor accordingly. The amount to be paid shall be certified by the Engineer and added to the Contract Price.</p>	Request not accepted. Provisions of the Bidding Document shall prevail.
113.	G.C.C. - FIDIC Yellow Book 1999  4.13 Rights of way and facilities	Kindly delete this clause.	Request not accepted. Provisions of the Bidding Document shall prevail.
114.	G.C.C. - FIDIC Yellow Book 1999  4.15 Access Route	<p>Delete paragraph 1, 1st sentence.</p> <p>Delete paragraph 2, including sub-paragraphs (a) to (e), and substitute: However, if the Contractor encounters non-suitability or non-availability, for the use required by the Contractor, of access routes, gives a notice to the Engineer as soon as practicable describing the relevant circumstances, and suffers delay and/or incurs Cost due to these circumstances,</p>	Request not accepted. Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		<p>the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:</p> <p>(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and</p> <p>(b) payment of any such Cost, which shall be included in the Contract Price.</p>	
115.	<p>G.C.C. - FIDIC Yellow Book 1999</p> <p>4.19 Electricity, Water and Gas</p>	<p>We request to delete paragraphs 1 and 2 and substitute:</p> <p>The Employer shall be responsible for the provision of all power, water and other services the Contractor may reasonably require. The Contractor shall be entitled to use for the purposes of the Works and for the accommodation of the Contractor's and his Subcontractor's Personnel such supplies of electricity, water, gas and other services, the details and prices of which are given in the Employer's Requirements.</p>	Request not accepted. Provisions of the Bidding Document shall prevail.
116.	<p>G.C.C. - FIDIC Yellow Book 1999</p> <p>4.22 Security of the Site</p> <p>(a) the "Contractor" shall be responsible for keeping unauthorised persons off the Site, and</p>	<p>It is requested to modify sub-paragraph (a) as under:</p> <p>" the Contractor Employer shall be responsible for keeping unauthorised persons off the Site, and"</p>	Request not accepted. Provisions of the Bidding Document shall prevail.
117.	<p>G.C.C. - FIDIC Yellow Book 1999</p> <p>11.1.1.3.7 Defects Liability</p>	<p>We understand that the Defects Liability period and the Defects Notification period as mentioned in cl. 1.1.3.7 (pg. 4 of FIDIC Yellow Book) are the same. Please confirm.</p>	Yes, it is confirmed that they are the same
118.	<p>G.C.C. - FIDIC Yellow Book 1999</p> <p>15.2 Termination by employer</p>	<p>We request, at the end of paragraph 2 ("... may by notice terminate the Contract immediately."), add:</p> <p>In any case, and notwithstanding the above,</p>	Request not accepted. Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		<p>Employer's right to terminate the Contract hereunder shall be subject to the express proviso that the Employer cannot reasonably be expected to remain bound by the Contract.</p> <p>Delete paragraph 3 ("... shall not prejudice any other rights ...") and substitute:</p> <p>The Employer's election to terminate the Contract shall be in lieu of and to the exclusion of any rights of the Employer, under the Contract or otherwise, other than provided in Sub-Clause 15.4 [Payment after Termination].</p>	
119.	G.C.C. - FIDIC Yellow Book 1999 15.5 Employer's Entitlement to Termination	<p>Insert at the end of Sub-Clause 15.5:</p> <p>The Employer shall also pay to the Contractor the amount of any loss of profit or other loss or damage resulting from this termination.</p>	Request not accepted. Provisions of the Bidding Document shall prevail.
120.	G.C.C. - FIDIC Yellow Book 1999 17.6 Limitation of Liability	The clause provides for liability being capped to "Accepted" contract value. Does this mean total contract value, please clarify	The total liabilities of the Contractor shall not exceed the Accepted Contract Amount as indicated in the Contract Agreement.
121.	Form FIN 3.3, Section IV, Bidding Forms Table for Financial Resources	We understand that we have to indicate the details of proposed sources of financing by way of Solvency Certificate. Kindly confirm our understanding.	Source of financing means working capital derived from the Latest Audited Balance Sheet submitted by the Applicant and project specific Line of Credit allowed by a commercial bank. The Solvency Certificate from a bank is not a source of financing.
122.	Form CCC, Section IV, Bidding Forms Form CCC	We request you to retain the format provided during Pre-qualification stage for form CCC.	Request not accepted.
123.	ITB 29.8 of Bid Data Sheet and Sub-	With the introduction of GST from 1st July, 2017,	Since the contract price is inclusive

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Clause 4.11 of Particular Conditions</p> <p>DFCC project being funded by the World Bank, qualifies for exemption from payment of custom duty and Excise duty on goods supplied/intended to be supplied to the Project in terms of Government of India's Customs notification no. 84/97 – customs dated 11.11.1997 and Central Excise Notification no. 108/95-CE dated 28.08.1995 (read along with all subsequent amendments) respectively, provided the goods brought in to the project are not withdrawn by the supplier or the Contractor. Under various notifications of the Department of Excise and Customs, Government of India, goods brought in to the project funded by the International Bank of Reconstruction and Development (IBRD) and / or awarded after conducting process under the International Competitive Bidding are exempt from Customs and Excise duties and / or are eligible for Deemed Export Benefits, provided the said goods are not withdrawn by the supplier or Contractor. The certificates required for claiming exemption of customs duty and excise duty and / or for claiming deemed export benefits on goods by the Contractor shall be issued by the Employer. The Contractor shall be solely responsible for obtaining such duty exemptions and / or deemed export</p>	<p>we understand that the benefit of deemed export benefit would be continued only to the extent of Basic Customs Duty &amp; Customs Cess. However, all other taxes applicable under GST Act would continue to remain applicable. Accordingly, Contractor would charge appropriate GST while raising invoice on DFCC. Similarly, please clarify that for offshore supplies, DFCC would be required to be clear goods under its own IEC and GSTIN, if any. For offshore supplies as well IGST would be payable in the name of DFCC. Please also clarify whether IGST So payable by DFCC is to be included in the contract price since payment of IGST upon customs clearance is a tax assessed on and payable by DFCC.</p>	<p>of duties, taxes and other levies payable by the Contractor under the contract, or for any other cause, as on the date 28 days prior to the deadline for submission of bids, shall be included in the total Bid Price submitted by the Bidder as per ITB 29.8 of Bid Data Sheet. With introduction of GST from 1st July, 2017, the contract price will include GST.</p> <p>In regard to the exemption of the Custom Duty and Custom Cess, the attention of Bidder is invited to the last sub – para of ITB 29.8 of Addendum No 7, S. No. 1.</p> <p>The Bidder has to clear the offshore supplies under its own IEC and GSTIN.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>benefits and in case of failure to avail such benefits for any reasons whatsoever; the Employer shall not reimburse any such duties.</p> <p>The above stated certificate(s) shall be issued for the bonafide and reasonable quantities of goods to be used as input in the construction of Works, on the recommendations of the Engineer taking in to account the Work Programme [Sub-Clause 8.3 of the Conditions of Contract] and approved methodology. Any delay in procurement of the goods as a result of any delay, in the issuing of the above mentioned certificates and / or availing the exemptions, shall not be entertained as a reason for granting any Extension of Time for Completion and / or additional cost.</p>		
124.	<p>ITB 29.8 of Bid Data Sheet and Sub-Clause 4.11 of Particular Conditions</p> <p>Service Tax department vide their Notification No. 25/2012 - Service Tax dated 20.06.2012, has exempted the services by way of construction, erection, commissioning, or installation of original works pertaining to railways. The Bidder shall examine to make his own assessment in regard to service tax liability in the Contract. No separate Service Tax reimbursement will be made by the Employer.</p>	<p>Under GST Act, similar exemption with respect to services provided for the project does not exist and accordingly, GST would be as well applicable on the services portion of the contract.</p> <p>It is requested to modify the clause suitably considering GST in force since July 1, 2017.</p>	<p>The Bidders are requested to refer to Addendum No. 7, S. No. 1 &amp; 59 in this regard.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
125.	<p>Part – 3, Particular Conditions</p> <p>Sub clause 14.1- Contract Price</p> <p>“The Contract Price includes all duties, taxes, royalties, premiums for various insurances, licenses and fees that may be levied in accordance with the laws and regulations in force as on the Base Date on the Contractor's Equipment, Plant, Materials and supplies acquired for the purpose of the Contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from its responsibility to pay any tax including any tax that may be levied in India on profits made by it in respect of the Contract.”</p>	<p>Since GST is the applicable law in force for the purpose of indirect tax levy. Contract price would be required to be considered in accordance with the customs law and GST law. A confirmation to this effect would be highly appreciated.</p>	<p>Contract Conditions are amply clear in this regard.</p>
126.	<p>Part – 3, Particular Conditions</p> <p>Sub clause 14.2- Advance Payment</p> <p>Mobilization Advance The Employer shall pay, on written request from the Contractor, an interest free Mobilization Advance up to (Ten) 10 per cent of the Contract Price. The Mobilization Advance shall be released in two installments as under: (a) Up to (Five) 5 per cent: On Submission of Performance Security and commencement of mobilization process; and (b) Up to (Five) 5 per cent: On</p>	<p>Since the contract price is inclusive of all indirect taxes applicable for the project, 10% advance would be of the total contract price including the Taxes and Duties included in the contract. This is also in line with provisions under GST law which requires payment of GST on receipt of advance. Please confirm correctness of our understanding.</p>	<p>The Contract Price for the purpose of this clause is the Accepted Contract amount as included in the Agreement between the Contractor and the Employer.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Submission of the Inception Report and details of utilization of initial Mobilization Advance of 5% to the satisfaction of Engineer. The Advance Payment will be released on submission of unconditional Bank Guarantee for an amount equivalent to the component of the advance payment requested by the Contractor.</p>		
127.	<p>Part – 3, Particular Conditions  Sub clause 14.1- Contract Price</p>	<p>Various State GST legislations provide for the road permits / way bills for facilitating the entry of goods into the DFCCIL site in the respective State. It is our understanding that all required road permits/ way bills etc. would be issued by DFCCIL. Please confirm the same.</p>	<p>Obtaining of any road permits / way bills which may become necessary for successful execution of the work shall be the responsibility of the Contractor.</p>
128.	<p>Part – 3, Particular Conditions  Sub clause 14.1- Contract Price</p>	<p>We have the experience of executing Turnkey Design and build lump sum contracts funded by World Bank / JICA / Other Multilateral funding agencies wherein High Sea Sales are permitted and payments are made through LC. This is a standard industry practice in order to clear goods in the name of ultimate consumer of the goods. The mode of this transaction would be as follows: The bill of lading will be endorsed in the name of DFCCIL and ownership is transferred on high seas. Also, a high sea sale agreement is executed between DFCCIL and Contractor. The material is issued by DFCCIL to the contractor for the purpose of installation. The responsibility towards custody of such materials lies with contractor till the Taking over Certificate is issued by the Employer. The above high sea sale transaction shall enable the DFCCIL to avail Custom Duty exemptions.</p>	<p>The Employer will not involve itself for purchase of goods in the High Seas. As such, the ownership of the goods will lie with the Contractor who will also be responsible for payment of any duty (ies) for release of the goods.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		Please confirm whether Contractor can sale the imported goods on High Sea Sale basis to DFCCIL.	
129.	<p>Part – 3, Sec VIII Particular Conditions Sub Clause 14.9</p> <p>“Delete first para of Sub-Clause 14.9 and substitute with the following:  “A retention money amounting to 10 (ten) per cent of the value of the work done shall be deducted by the Engineer in the first and following Interim Payment Certificates, until the amount so retained reaches a limit of retention money of 5 (five) percent of the Contract Price. ....”</p>	<p>It is requested to modify the clause as under:  “A retention money amounting to 5 (five) per cent of the value of the work done shall be deducted by the Engineer in the first and following Interim Payment Certificates, until the amount so retained reaches a limit of retention money of 5 (five) percent of the Contract Price. ....”</p>	Request not accepted. Provisions of the Bidding Document shall prevail.
130.	<p>Part – 1, ITB 30.1 of Bid Data Sheet</p> <p>The currency(ies) of the bid and the payment currency (ies) shall be as described below:  a) The prices shall be quoted by the Bidder entirely in Indian Rupees (the name of the currency of Employer's country) and further referred to as “the local currency”. A Bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country (referred to as “the foreign currency requirements”) shall indicate the percentage (s) of the Bid Price in the Appendix to Bid, Section IV, Bidding Forms, Part 1 of Bidding Documents, needed by him for the payment of such foreign currency requirements, limited to</p>	<p>In line with the practices followed in many Design and Build Turnkey projects funded by World Bank/ JICA / Other Multilateral funding agencies, we request to permit as follows:  Each member of the consortium will invoice for their respective portions in the quoted currencies under the covering letter of lead member of consortium enclosing the invoices mentioning therein respective account nos. It is requested to disburse payments directly to each member of the consortium for their respective scope as per the designated accounts.  A clear billing breakup identifying the details of currency vise split up among the various members of by the consortium shall be submitted along with second stage financial submission.</p>	<p>The provisions of the Bidding Document are self-explanatory and shall prevail.</p> <p>In this regard, please also refer to Clause 14.7 of Particular Conditions of Contract which permits payments of the amount due in each currency to be made into the Bank account of the Contractor (Sole/JV/JVA) or its individually authorized member(s), nominated by the Contractor in the payment country (for this currency) specified in the Contract.</p>



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>no more than three foreign currencies.</p> <p>b) For the purpose of conversion of foreign currency in to local currency i.e. Indian Rupees (INR) or vice versa, Bidders shall use the Reference Rates of Foreign Currency published by Reserve Bank of India (<a href="http://www.rbiorg.in">www.rbiorg.in</a>), on the Base Date (28 days prior to the last date of second stage bid submission)</p> <p>In case a particular currency rate is not published by Reserve Bank of India, then the selling rate of such currency shall be taken from the following internet web site on the Base Date: <a href="http://www.oanda.com">http://www.oanda.com</a></p> <p>In case the exchange rates are not available on the above website also, then mid-market rate of such currency shall be taken from the alternate web site <a href="http://www.xe.com">http://www.xe.com</a> for the same date.</p> <p>c) In respect of procurement of goods and services from off shore sources Indian cost indices shall not apply but wholesale cost index for the relevant input of the respective country shall apply. In case a published index for such goods or services is not available, the wholesale prices index of relevant category of the respective country shall be used.</p> <p>The rates of exchange as mentioned above shall apply for all payments under the Contract so that no exchange</p>	<p>Issuance of TDS certificate in favour of the individual consortium Members.</p> <p>Kindly confirm as these are standard practices in Design &amp; Build and Multilateral funded projects and moreover they are in line with RBI, FEMA, FERA and other financial regulations.</p>	

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	risk will be borne by the successful bidder.		
131.	<p>Part – 3, Particular Conditions</p> <p>G.C.C. - FIDIC Yellow Book 1999 &amp; Section VIII. Particular conditions Clause no 18.3</p> <p>The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.</p> <p>This insurance shall be for a limit per occurrence of not less than the amount stated in the Appendix to Tender, with no limit on the number of occurrences.</p> <p>If an amount is not stated in the Appendix to Tender, this Sub-Clause shall not apply.</p> <p>Unless otherwise stated in the Particular Conditions, the insurances specified in this Sub-Clause:</p> <p>(a) shall be effected and maintained by the Contractor as insuring Party,</p> <p>(b) shall be in the joint names of the</p>	<p>Kindly request you to have an aggregate limit for this liability or restrict the number of occurrences. It is impossible to have an insurance cover for unlimited liability.</p> <p>This clause mentions that the insurance policy shall be in the joint names of the parties. Our proposal is to include DFCCIL as an additional insurer.</p> <p>Please confirm.</p>	Request not accepted. Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Parties,  (c) shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and  (d) may however exclude liability to the extent that it arises from:  (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,  (ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and  (iii) a cause listed in Sub-Clause 17.3 [Employer's Risks], except to the extent that cover is available at commercially reasonable terms.  The insurance clause shall include a cross liability clause such that the insurance shall apply to the Employer, the contractor and Sub contractors (wherever applicable) as separately insured Minimum amount of third party insurance:- INR 100 million for any one occurrence.</p>		
132.	<p>Part – 3, Particular Conditions   Sub Clause 18.2 (d) Appendix to Tender   Minimum amount of deductibles for</p>	<p>It is requested to replace the word zero deductibles to minimum deductibles since such policy is not available and as per industry practice, the policy with minimum deductible is allowed.</p>	<p>Request not accepted. Provisions of the Bidding Document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	insurance of the Employer's risk is Zero Deductible.		
133.	Part – 3, Particular Conditions  Sub Clause 4.2 & Appendix to tender  ESHS Performance Security	A requirement for submission of Performance Security already exists. The insertion of ESHS submission is an additional requirement. In light of the 10% PBG and 5% retention already available in the contract provisions, it is requested to delete the additional PBG on EHS.	Request not accepted. Provisions of the Bidding Document shall prevail.
134.	Part – 3, Particular Conditions Sub clause 4.11 of Particular Conditions  “DFCC project being funded by the World ..... Employer, if applicable.”	Kindly Confirm on applicability of following Taxes/CESS: <ul style="list-style-type: none"> <li>• Withholding Tax on Off shore payment</li> <li>• Building and other construction works.</li> </ul>	The contract revenue from Building and other construction work arising to a foreign company is taxable in India and subject to TDS in India.
135.	Part – 1, Section –I –ITB Clause 4.1  Bidder may be a private entity or a government-owned entity—or any combination of such entities in the form of a joint venture, or association (JVA) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent.  In the case of a joint venture, or association: JVA all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms, and JVA shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any	In line with the practices followed in many Design and Build Turnkey projects funded by World Bank/ JICA / Other Multilateral funding agencies, we request to permit the proposed consortium wherein the members will have clear split among them with respect to scope of work & quoted prices. In this context, it will be the bidders responsibility to provide the clear cut scope split amongst them. Kindly confirm.	Request not accepted. Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	and all the partners of the JVA during the bidding process and, in the event the JVA is awarded the Contract, during contract execution.		
136.	<p>Part – 3, Particular Conditions</p> <p>Appendix to Tender GCC 14.2</p> <p>Mobilization Advance The Employer shall pay, on written request from the Contractor, an interest free Mobilization Advance up to (Ten) 10 per cent of the Contract Price. The Mobilization Advance shall be released in two installments as under: (a) Up to (Five) 5 per cent: On Submission of Performance Security and commencement of mobilization process; and (b) Up to (Five) 5 per cent: On Submission of the Inception Report and details of utilisation of initial Mobilization Advance of 5% to the satisfaction of Engineer. The Advance Payment will be released on submission of unconditional Bank Guarantee for an amount equivalent to the component of the advance payment requested by the Contractor. Such Bank Guarantees can be split in to a maximum of 5 (Five) Bank Guarantees for each of 5% mobilisation advance (at the option of the Contractor) to be released on repayments. All such Bank</p>	Request to confirm the "Mobilization Process" since the definition is not provided in the tender document	Engineer will decide the activities which should be completed to conclude that the Mobilization Process has commenced.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Guarantee(s) shall remain effective until the advance payment has been repaid pursuant to the provisions of Sub-Clause 14.2 of the Conditions of Contract, but the amount thereof shall be progressively reduced by the amount repaid by the Contractor as indicated in Interim Payment Certificates issued in accordance with this Clause.</p>		
137.	<p>Part – 1, ITB 7.2 &amp; PC clause 1.9</p> <p>“If the Contractor suffers delay and/or incurs Cost as a result of an error in the Employer's Requirements with reference to purpose, scope, design and /or other technical criteria for the works and an experienced Contractor exercising due care would not have discovered the error when scrutinizing the Employer's Requirements with respect to purpose, scope, design and/or other technical criteria for the works under Sub-Clause 5.1 [General Design Obligations], the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:</p> <p>(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.</p>	<p>Request for clarification on the definition of “reasonable profit”</p>	<p>Provisions of the Bidding document are sufficiently clear.</p>
138.	<p>ITB Clause no. 14.1</p>	<p>Request to clarify our understanding as below: The certificate of origin shall be provided only for</p>	<p>This clause will apply to all offshore supply of material, equipment and</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	To establish the eligibility of the materials, equipment and services in accordance with ITB Clause 5, Bidders shall provide documentary evidence consisting of a statement on the country of origin of the materials, equipment and services offered.	off-shore supplies. For off-shore services and local supplies self declaration will be provided by contractor.	services.
139.	Volume 3: Particular Specifications – Signalling Works	Normal Breaking distance of Freight train is not mentioned in the Tender Contract. Please inform.	The nominal signal spacing of 2 Kms as specified at Para 3.2.1(1) of PS (Signalling) is sufficient for signalling design at this stage. The actual Braking distance will be provided to the Contractor at design stage after award of contract.
140.	3.2.1 (3) Pg no: 743  Absolute block working on lines connections in New Boraki – Dadri (IR) and New Boraki – WDFC yard sections shall be provided using Solid State Block proving by Axle Counter as per RDSO spec. RDSO/SPN/175/2005 or Block proving by Axle Counter using UFSBI as per RDSO spec. IRS: S105/2012. Wherever provision of Absolute Block working, as described above, is not feasible provision of Slot working with all necessary safety features and counters be considered	As per the mentioned para and Page 872 Appendix 6 Signaling system Architecture, we have to provide UFSBI for block section. Can we replace UFSBI working by using our own interlocking system by keeping the same logic? Please confirm	Bidder's request not accepted. Provisions of Bidding documents shall prevail.
141.	2.2.3 3) Technical requirements  While the TPWS is not required to be installed by the Contractor but the	Please clarify if the socket/termination board is required for providing power supply to TPWS trackside equipment (LEU).	Bidder's query is not understood. The referred clause does not exist.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Contractor should provide a socket/ termination board at all Signal posts. He should also demonstrate the ability of the system to permit the up gradation for incorporating TPWS at a later date. For this purpose the Contractor would be called upon to conduct the trials as identified in Annexure "C" of Appendix 3.		
142.		As mentioned TPWS is not required to be installed by the contractor – please clarify if the 01 set of onboard and 10 set of trackside are to be included in scope of work in this contract?	TPWS is not in the scope of present contract, hence TPWS equipment – 01 set of onboard and 10 set of trackside is not to be supplied in this work. Otherwise also, Appendix 2 is the generic Procedure Order for Cross acceptance/approval of software embedded Electronic Systems and New Imported Technology Products for Railway Signalling for DFCCIL and Annexure 'C' is for duration of field trial of such equipment. Please refer to Para 5.2.4 of PS(Signalling) and Note at the beginning of Appendix 2, which clearly specifies that the Procedure Order of Appendix 2 shall be used only for Cross acceptance/approval of Electronic Interlocking and Digital Axle Counter.
143.	Annexure C of Appendix 2 Pg No: 853  Duration of field trail	Please provide the understanding of 01 set of On Board. Also provide the understanding of 10 set of Trackside –is this for 10 Signals/10 LEU etc? Also please specify the model of LOCOs which is required to design TPWS on board.	Please refer response to query at S. No. 142.
144.	Annexure C of Appendix 2 Pg No: 853	Which specification for TPWS shall be followed and what are the performance requirements	Please refer response to query at S. No. 142.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Duration of field trail		
145.	<p>Part-2, Volume 3, PS- Signalling work, 3.2.5</p> <p>Track-vacancy detection system (2) (g) Pg no: 750</p> <p>The track-vacancy detection system in New Khurja – New Boraki block section and Up and Down lines connecting New Boraki Junction Station to Point zone controlling movement to/from Dadri ICD yard-Dadri area shall have Main system and Supervisory system. The Main and Supervisory systems shall be provided on different rails. The Supervisory system shall have a track section for every two Main system track sections. The purpose of providing the Supervisory system is to enable smooth operation by avoiding manual resetting during failure of a track section. In case the track section(s) of the Main system fail(s) with its corresponding track section of the Supervisory system showing clear or vice versa, it will automatically reset the failed track section(s). A typical scheme for Track vacancy detection system using MSDAC in Automatic Block Section is placed at Appendix 4.</p>	Is Supervisory TVD System (double Detection) required for the Block section? Request to clarify	Provisions of bidding documents are sufficiently clear and shall prevail. Please also refer to Addendum No.7, S. No. 25 & 26.
146.	<p>7.5.4.1 Pg no: 958</p> <p>The VRS shall provide recording of</p>	Kindly confirm if new VRS system needs to proposed for CP 105 or existing VRS system of CP-104, & CP-203 can be expanded to cater to CP 105 requirement as well.	Refer Clauses 7.3.9.1 & 7.3.9.2 of PS/Telecommunication Works.  Also, please refer Addendum No. 7,

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	stipulated voice conversations over Telephone System and Mobile Train Radio Communication System.	Please confirm the subscriber count and Active subscriber ratio in case new VRS system needs to be proposed	Sr. No. 49.
147.	7.5.4.1  The VRS shall provide recording of stipulated voice conversations over Telephone System and Mobile Train Radio Communication System.	We understand VRS system for GSM-R package is independent of other packages. Kindly confirm	Please refer Addendum No. 7, S. No. 49.
148.	8.6.4 Pg No: 979  Wherever the equipment of MTRC System being provided under Contract Package CP- 104 and CP- 203 is being upgraded / augmented / reconfigured, this upgradation / augmentation / reconfiguration shall not in any way utilize available provision of expansion.	We understand complete new MTRC system needs to be proposed for CP-105 package. Kindly confirm	Provisions of Bidding Document are sufficiently clear.
149.	Vol 4: 5.1.1  The OFC System shall be a highly reliable system since it shall be the primary means of communications between OCC,	Please suggest the number of SDH Nodes to be considered in the BOM. Also indicate the number of SDH nodes i.e. STM-16 to be considered in First network and STM-4 to be considered in Second network.	Being design & build contract, the number of SDH nodes shall be determined by Bidder/Contractor.
150.	Vol 4: 5.1.3  The OFC System shall be capable to transport all of the user communication requirements. The OFC System shall provide sufficient bandwidth to cater for the communication requirements of various systems under this Contract as well as outside this Contract and shall	As per the clause, you require 50% Spare bandwidth. We are proposing STM-16 for First network and STM-4 for second network.  Kindly clarify the Bandwidth is required in terms of STM-16 / STM-4 or in terms of number of SDH Ports.	Provisions of Bidding Document are sufficiently clear.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	provide an additional spare bandwidth of at least 50% of the total used bandwidth for future system expansion.		
151.	Vol 4: 5.5.1.1 (6)  Optical link budget calculations for all the transmission links;	Please indicate the distance between the stations i.e. for the first network (STM-16) and for the second network (STM-4). Distances are required to calculate the link engineering.	Please refer Part 4 of Bidding Document
152.	Vol 4: 5.5.1.1 (10)  The details of the synchronisation network design and a synchronisation plan which describes the fall back arrangement,	Request you to please provide the indicative network diagram with provision of First network and second Network.	The Network diagram shall be developed by Bidder/ Contractor as per Clause 5.3 of PS/ Telecommunication Works, Part 2, Section VI, Vol. 4.
153.	Vol 4: 5.5.3.3(7)  (7) Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels (VF, Data, etc.) with automatic switch over in case of fault.	It is mentioned in the tender document, Clause no. 5.3.7.7 that The Flexible Access Multiplex Equipment shall be provided with 1+1 Redundancy for E1 Channels.  1+1 redundancy for voice and data is not feasible in case of Flexible Access Multiplexer. Neither it is required as per the requirement Both the statement are contradictory. Request you to Kindly amend or delete this clause from tender.	Provisions of Bidding Document shall prevail.
154.	Vol 4: 5.5.3.3(10 e)  Nx64 kbps synchronous data interfaces complying with ITU-T Rec. V.11 and V.35 interface; etc....	V.35 etc. interfaces is not required in DFCCIL requirement. Kindly amend or delete this clause from tender.	Provisions of Bidding Document shall prevail.
155.	Vol 4: 5.5.3.4(4)  The NMS shall be equipped with a proven real-time, multi-tasking operating	Network management System for the SDH and PDH are different with Different hardware and different software.	Network management System for the SDH and PDH can be on same hardware or on different hardware.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	system to support centralised network management of the OFC equipment .....		
156.	Laptops for maintenance....	Can we provide the same laptops loaded with different sub-system management software.	Provisions of Bidding Document shall prevail.
157.	Redundancy of NMS	Redundancy of NMS for each sub-system is required. But there is not backup OCC. Can we proposed single NMS for each sub-system	Query not clear.
158.	Vol 4: 6.1.9  At New Boraki Station Wi-Fi Facility, compliant with IEEE 802.11g Standards shall be provided for WAN Connectivity to users (which also include drivers of passing trains) via Wireless Enabled Devices and Equipment. A minimum of 10 simultaneous users may use the Wi-Fi Connectivity at Station. This Wi-Fi Facility shall as a minimum cover Station Building and EDFC Tracks up to 500 meters in both directions.	1. Kindly provide the inputs whether you need Licensed band and Unlicensed band for wi-fi.  2. Kindly provide the central point on which coverage of 500 meters is required.  3. Please provide the total distance for wi-fi coverage on platform, and both sides of platform also.	1. Unlicensed band shall be used for Wi-Fi facility.  2. From center of station building.  3. Provisions of Bidding Document are sufficiently clear.
159.	Vol 4: Chapter-11  VIDEO SURVEILLANCE SYSTEM REQUIREMENTS	What would be the backbone network for CCTV System.	It should be provided using Data Networking System.
160.	Vol 4: 9.1.3  The synchronized time information shall be provided to other interfacing systems via the OFC System. Synchronization of the time information of other systems shall be achieved by means of the Network Time Protocol (NTP)	Kindly clarify how synchronization of OFC equipment is providing from NTP based clock.	Query not clear.
161.	Vol 4: Chapter-10  VHF Communication system	Kindly provide the location of installation of tower.	Bidder is expected to survey the section in accordance with the clause 7.2 of the ITB, Part 1,Section

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
162.	Vol 4: Chapter-10 VHF Communication system	Kindly provide the technical specifications i.e. safety factor, overturning factor etc for VHF Towers.	I. Being design & build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.
163.	Vol 4: 12.2.2 Provision of suitable Earth Leakage Detection and Alarms shall be made individually at each location (OCC, Station, Auto Signal Location, LC Gate Location, etc.).	Earth leakage detection is not required in Telecom equipments i.e. equipments running on -48VDC are already earthed. Hence this will always give a False alarm. Request you to Kindly amend or delete this clause form tender.	Wherever -48V DC is not being used, earth leakage detector and alarm shall be provided.
164.	Vol 4: 5.3.9.11(7) A summary alarm shall be provided at the rack top to indicate the alarm status of any element within the rack. The summary alarm shall be reset automatically upon the alarm is cleared.	Summary alarm is not feasible. Kindly amend the clause.	Please refer Addendum No. 7, S. No. 39.
165.	Part 2, Section VI, Volume 4; Clause 8.2.3 It is envisaged that Network Sub-system (NSS) of MTRC System of Indian Railway used for Ghaziabad-Mughalsarai section shall also be used for MTRC System of Dadri- Khurja section of EDFC. Details of NSS of MTRC System of IR are given in Appendix-II. This NSS shall be upgraded under Contract Packages CP-104 and CP-203, if required, to meet the	We understand that by the word "integrated" DFCCIL means "interoperable" as mentioned in clause 8.4.6.4 . Kindly clarify.  Also please specify the Make, Model and Version of the NSS of Indian Railways located at New Delhi	Provisions of Bidding Document are sufficiently clear.  Please refer to Appendix II of PS/Telecommunication Works.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	requirements of EDFC Phase-1 and Phase-2. This NSS of MTRC System of IR shall be further upgraded, if required, by the Contractor to meet the requirements of Dadri- Khurja sections of EDFC.		
166.	<p>Part 2, Section VI, Volume 4; Clause 8.4.6.1</p> <p>Base station subsystem (BSS) being provided under this contract shall comply with the inter-operability requirements for mobile equipment (Cab Radio &amp; Hand Portable as per EIRENE) specifications to be supplied under this contract, in use over Indian Railways and to be supplied for other GSM-R networks of DFCCIL.</p>	Requirement is not clear, kindly elaborate	Provisions of Bidding Document are sufficiently clear.
167.	<p>Part 2, Section VI, Volume 4; Clause 8.5.1.1 (5)</p> <p>Short Message Service Centre (SMSC) interfaced to above Network Sub-systems (NSS) for exchange of text messages. This SMSC is being provided under Contract Package CP-104. The Contractor shall be responsible for upgradation/reconfiguration, if required, of this SMSC being provided under Contract Package CP-104 to meet the requirement of Dadri-Khurja section of EDFC</p>	<p>As requirement here is for Short Message Service Centre (SMSC) to be interfaced with R4 Network Sub-systems (R4-NSS) of CP-304, therefore it is recommended that there should be provision for supplying of new SMSC only.</p> <p>Please provide the SMSC equipment finalized for CP-104.</p>	<p>Provisions of Bidding Document shall prevail.</p> <p>The information/details may be obtained by the successful bidder.</p>
168.	Part 2, Section VI, Volume 4;	As requirement here is for Voice Recording	Provisions of Bidding Document shall

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Clause 8.5.1.1 (6)</p> <p>Voice Recording System (VRS) interfaced to above Network Sub-systems (NSS) for recording voice communications taking place on RDC, Cab Radio and OPH. All voice communications of Radio Dispatcher Console, Cab Radio and Operation Radio shall be recorded by the Voice Recording System (VRS) being provided under Contract Package CP-104. The Contractor shall be responsible for upgradation/ reconfiguration, if required, of Voice Recording System (VRS) being provided under Contract Package CP-104 to meet the requirement Dadri - Khurja Section of EDFC.</p>	<p>System (VRS) to be interfaced with R4 Network Sub-systems (R4-NSS) of CP-304, therefore it is recommended that there should be provision for supplying of new VRS only.</p> <p>Please provide the VRS equipment finalized for CP-104</p>	<p>prevail.</p> <p>The information/details may be obtained by the successful bidder.</p>
169.	<p>Part-2, Vol-4, Cl: 4.6.2</p> <p>Unless otherwise specified, all indoor Telecommunication Equipment installations shall be designed for operation continuously in environmental temperatures range of -5°C to +55°C</p>	<p>Typically Telecom Switching equipment is installed in air-conditioned environment and supported temperature rating is from 0 to +40°C. IT equipment (Servers etc.) requires even more stringent +35°C. Hence getting all telecom equipment to support -5°C to +55°C is not practically feasible. This requirement may be restricted to only Outdoor installed equipment.</p>	<p>Provisions of Bidding Document shall prevail.</p> <p>Also refer clause 4.6.3 of PS Telecom.</p>
170.	<p>Part-2, Vol-4, Cl: 5.5.3.3 (1)</p> <p>Flexible Access Multiplex Equipment shall conform to ITU-T Rec. G.703, G.704, G.706, G.707, G.708, G.709, G.711, G.732 and G.823.</p>	<p>Please note that the following standards: ITU-TG.707, ITU-T G.708 and ITU-T G.709 are applicable to SDH equipment. Hence, they may be removed as requirements from Flexible Access Multiplex Equipment.</p>	<p>Only applicable standards shall be used for Flexible Access multiplexer while designing the Telecom System.</p>
171.	<p>Part-2, Vol-4, Cl: 5.5.3.3 (8)</p>	<p>The Flexible Access Multiplexer is required to</p>	<p>Only applicable standards shall be</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	The optical line interfaces shall conform to ITU-T Rec. G.957	interface with SDH equipment at E1 level (Electrical interface). Similarly, it is required to provide sub-2Mbps interfaces (Voice interfaces, RS232, etc.). All of these are Electrical interfaces. Hence, there is no requirement for Optical Interfaces and requirement for ITU-T G.957 is not relevant. Please clarify under what circumstances, this standard will be applicable for Flexible Access Multiplexer.	used for Flexible Access multiplexer while designing the Telecom System.
172.	Part-2, Vol-4, Cl: 5.5.3.3 (6)  Adequate numbers of Primary Multiplexers shall be provided so that there is no loss of Communication at any point of time.	Normally, loss of communication is prevented by building Controller card and Power supply redundancy in the equipment. Please clarify how "Adequate number of Primary Multiplexers" shall be computed.	Being design & build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.
173.	Part-2, Vol-4, Cl: 5.5.3.3 (7)  Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels (VF, Data, etc.) with automatic switch over in case of fault.	Please confirm that "1+1 protection for all channel level (VF, Data, etc.) with Automatic Switchover" corresponds to SNCP equivalent functionality at the E1 backhaul link.	Provisions of Bidding document shall prevail.
174.	Part-2, Vol-4, Cl: 5.3.5.6  Flexible Access Multiplexer or Primary Order Multiplexer shall have minimum 50% spares for all types of Channel Circuits (Minimum 1 for all types of Channel Circuits).	Please clarify what is the meaning of 50% spares for all types of channels – Is the contractor required to provide 50% spare channels between nodes at the backhaul link?	The Bidder/Contractor is required to provide 50% spare channels between Nodes.
175.	Part-2, Vol-4, Cl: 5.3.3.2  The First Network shall be formed by two optical fibre cables 24F (min),preferably one laid along the up-track and the other laid along the down-track ensuring route diversity, from	Please clarify if "All Works" include Augmenting / installing RCIL Equipment? Please clarify the interface point and scope of work of the contractor and RCIL respectively.	Query is not clear as the clause is not pertaining to CP-105.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Sahnawal to Pilkhani and terminated on Optical Distribution Frames (ODFs) in TERs at Stations. Employer shall hire from M/S RCIL required STM-16 Bandwidth for the section between Pilkhani POP of RCIL and Khurja POP of RCIL. All works from New Pilkhani TER to RCIL POP at Pilkhani shall be carried out by Contractor. Further all works from M/s RCIL POP at Khurja to TER at New Khurja station shall be carried out by the Contractor.</p>		
176.	<p>Part-2, Vol-4, Cl: 5.3.4.4</p> <p>Each SDH Node of the First Network shall be at least STM-16 level or higher in the SDH hierarchy. The exact level of SDH Node in SDH hierarchy shall be determined by the Contractor to meet the bandwidth requirements for sub-systems under this Contract with 50% Spare Capacity. SDH Node of First Network shall be equipped with minimum 2XSTM-16o and 4XSTM-4o Interfaces.</p> <p>For providing connectivity between New Pilkhani station and RCIL POP at Pilkhani, STM-16 nodes shall also be required to be provide that RCIL POP at Pilkhani by the contractor. This STM -16 nodes shall be integrated with RCIL equipment at RCIL POP at Pilkhani for carrying over the STM-16 traffic to RCIL POP at Khurja. Further STM -16 Nodes shall also be required to be provided by the contractor</p>	<p>Please clarify if it is necessary to provide the STM-16 Nodes at RCIL POP at Pilkhani and Khurja. Instead it may be possible to extend the connectivity over Optical fiber link from New Pilkhani and New Khurja.</p> <p>If it is necessary to provide STM-16 Nodes at RCIL POPs, please share clear interface requirements between RCIL and the contractor in terms of power availability, Air-conditioning, Rack space, etc.</p>	<p>Query is not clear as the clause is not pertaining to CP-105.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>at RCIL POP at Khurja. These STM-16 nodes shall be integrated with RCIL equipment at RCIL POP at Khurja and with STM-16 nodes provided at New Khurja station under Contract Package CP-104 &amp; Contract Package CP-105. These SDH nodes of RCIL POP at Khurja and New Khurja station shall be connected to each other in redundant architecture with linear multiplex section protection or SNCP by extending ring being provided under Contract Packages CP -104.</p> <p>With above integration, it shall be possible to make provisioning of VC4s and VC12s across SDH Nodes provided under this Contract as well as under Contract Packages CP-104 and CTP-14 to meet the requirement of various systems /subsystems under this Contract as well as under Contract Packages CP-104 &amp; CTP -14.</p>		
177.	<p>Part-2, Vol-4, Cl: 5.3.9.13 (2)</p> <p>The NMS shall allow the user to configure all existing and new circuits with the following functions:</p> <ul style="list-style-type: none"> <li>(a) frame position allocation</li> <li>(b) interface port allocation;</li> <li>(c) low speed (64 kbps &amp; lower) interface cards configuration;</li> <li>(d) lower order multiplex time slot allocation and routing;</li> <li>(e) higher order multiplex/cross-connect switch configuration;</li> </ul>	<p>Most of these features correspond to NMS of SDH equipment. Does this entire configuration also apply to NMS of Flexible Access Multiplexer?</p>	<p>Clause "5.3.9.13(2)(h)" does not exist in CP-105.</p> <p>Only applicable functions shall apply to NMS of Flexible Access multiplexer while designing the Telecom System.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	(f) logging of circuit routing data logged into configuration database; (g) operator's configuration checks function prior to main and backup database update; and (h) the OFC links from junction stations to the adjacent station of IR		
178.	Part-2, Vol-4, Cl: 5.3.9.13 (2)  The NMS shall allow the user to configure all existing and new circuits with the following functions: (a) frame position allocation (b) interface port allocation; (c) low speed (64 kbps & lower) interface cards configuration; (d) lower order multiplex time slot allocation and routing; (e) higher order multiplex/cross-connect switch configuration; (f) logging of circuit routing data logged into configuration database; (g) operator's configuration checks function prior to main and backup database update; and (h) the OFC links from junction stations to the adjacent station of IR	SDH NMS cannot monitor the OFC links from junction stations to the adjacent station of IR unless there is an SDH connectivity established. Please clarify the type of monitoring required.	Clause "5.3.9.13(2)(h)" does not exist in CP-105.
179.	Part-2, Vol-4, Cl: 9.5.4  The Master Clock System shall be capable of working from 230 Volts +/- 10% AC 50 Hz Power Supply.	The Master Clock Unit and Sub-Master Clock Units will be deployed in the TERs and stable battery backed up -48V DC supply is present at TER. Therefore, DC may be permitted as a source for Master Clock System. Similarly, the Clocks may be powered by POE. Hence, these	Provisions of Bidding document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		options may be permitted.	
180.	Part-2, Vol-4, Cl: 13.3.6  Provision of Lighting, Power Outlets, Fans, Ventilator and Air-Circulation shall be made in accordance with Interface Requirements as mentioned in Chapter-10 of General Specification.	Responsibility of Telecom Contractor is not clear since E&M interface is not defined. Please clarify.	Please refer Part 2, Vol.5: E&M and Associated Works of Bid Document.
181.	Part-2, Vol-4, Cl: 13.3.13  Smoke and Fire Detection System as per details in Chapter- 4 of this Particular Specification shall be provided in Telecom Equipment Rooms and Telecom Power Supply Equipment Rooms, with facility of Alarm Generation at station and OCC.	Responsibility of Telecom Contractor is not clear since E&M interface is not defined. Please clarify.	Please refer Part 2, Vol.5: E&M and Associated Works of Bid Document.
182.	Part-2, Vol-4, Cl: 13.7.6  Outdoor Signalling Cables and Outdoor Telecommunication Cables shall not be laid in same trench. If it is inescapable to lay Signalling Cables and Outdoor Telecommunication Cables in same trench, suitable separation shall be provided between the two as per the requirement of PS-Signalling Works, IRSEM and Indian Railway Telecommunication Manual and approved by the Engineer	Most of the time, separate trenches for Signaling and Telecom are not feasible due to lack of space availability. Hence, It is suggested that to maintain uniformity across project, the outdoor Signalling and Telecom Cables in same trench may be permitted at all locations.	Please refer Part 2, Vol.3: Signalling Works of Bid Document.
183.	Part-2, Vol-4, Cl: 13.11.2.6  The earthing methods, design and details shall be submitted to the Engineer for review and approval.	Though mentioned in the PS Telecom, this shall be the responsibility of E&M contractor. Please clarify.	Provisions of Bidding Document are sufficiently clear.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
184.	Part-2, Vol-4, Cl: 6.4.3.3  To improve the availability of Data Networking System various measure such as Resilient Ethernet Protocol, Pseudo wire Redundancy, Link Aggregation (IEEE 802.3ad) on Network/Access Ports, Rapid Spanning Tree Protocol (IEEE 802.1w), Multiple Spanning Tree Protocol (IEEE 802.1s), MPLS-TE Fast Reroute etc. as required shall be implemented.	Resilient Ethernet Protocol is CISCO proprietary protocol and is not an open standard protocol. Hence this requirement is in conflict with requirement mentioned in Clause 4.1.2 (2). Please clarify.	Please refer Addendum No. 7, S. No. 41.
185.	Environmental Management Framework  Environment Assessment Procedures	Do we have to do a separate Environment Impact assessment for the Scope of work, or can we get the EIA from DFCC for the route	The contractor shall develop its own Environment Management Plan in accordance with Employer's EIA report.
186.	Part 2, Sec – VI, Vol -2, PS, Ch-2, 2.2, 433 of 1231  Power Supply Arrangement - Eastern Freight Corridor	Kindly share the 132kV Incoming and Outgoing T/L Tower location nearest to TSS at Wair TSS along with incoming & Outgoing T/L direction wrt TSS Layout.	Please refer Item no.1, Table - 18.4.4, Chapter 18, Vol-2, Part-2 of the Bidding Document.
187.	Part 2, Sec – VI, Vol -2, PS, Ch-6, 6.3 (4), 473 of 1231  Design of Earth System	It is mentioned that "Earth rods below the mat shall be copper clad steel and all Earth mat joints shall be exothermic". Please note that using MS for main earth mat and Cu clad MS earth Rod below main earth mat is not advisable due to two dissimilar metals. As per IEEE-80 joints of earth rod shall be exothermic type whereas joint with earth mat and earth mat joints can be achieved by various other methods such as welding in case of MS. Kindly confirm the MS rod and Welding of the same instead of exothermic joints for earthing system as a whole.	The provisions in the Bidding Document are self-explanatory and shall prevail.
188.	Part 2, Sec – VI, Vol -2, PS, Ch-6, 6.8, 475 of 1231	Please note that IP: 65 for outdoor installations seems impracticable as Door has cutouts and	The Provisions of the Bidding Document shall prevail.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	Switchgear & Panels: Degree of Protection	gasket through which it is not possible to achieve. In our opinion IP 55 for Outdoor installations and IP: 3X for indoor installations seems ok, Kindly confirm.	
189.	Part 2, Sec – VI, Vol -2, PS, Ch-6, 6.9.8 (g), 477 of 1231  REF Protection for Auto Transformer	Please note that for Auto Trafos REF is not feasible due to different winding connections.	The Provisions of the Bidding Document shall prevail.
190.	Part 2, Sec – VI, Vol -2, PS, Ch-7, 7.2.3, 486 of 1231  Check Metering Equipment	Kindly confirm the location is it at TSS end or GSS end.	Please refer Item no. 4, Table - 18.4.4, Chapter 18, Vol-2, Part-2 of the Bidding Document. The Provisions of the Bidding Document shall prevail.
191.	Part 2, Sec – VI, Vol -2, PS, Ch-7, 7.3.2 (1) , 487 of 1231  Transformer transportation with N2 cushion	Due to safety hazard dry Air filled transportation is proposed in place of Nitrogen. Kindly confirm the acceptability of same.	The Provisions of the Bidding Document shall prevail.
192.	Part 2, Sec – VI, Vol -2, PS, Ch-7, 7.3.2 (2), 487 of 1231  Cooling pump and accessories shall be provided by the Employer in future.	Kindly clarify.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
193.	Vol 2 pg 476 of 1231  Cl No.6.9.8 The protection scheme shall meet to the requirements of EN 60076, EN 50119, IE Rules and ACTM and include the following protections as minimum but not limited to:	Please advise if a fully redundant protection system or only back-up over current protection is required for 132kV / 220kV protection system.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
194.	Vol 2 pg 476 of 1231  Cl. 6.9.8 (a) 132kV In-coming feeder from grid sub-	Please confirm that both functions can be implemented in same relay, please clarify requirement for redundancy (if any) and back-up protection (if any)	The Provisions of the Bidding Document are self-explanatory and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	station to TSS - Line differential protection as required - Under Voltage	Please clarify who will provide Line differential protection at utility end and FO or pilot wire connection	
195.	Vol 2 pg 477 of 1231  Cl. 6.9.8 (c & g) Main Traction Transformer & Auto Transformer Protection - Over current Instantaneous / IDMT - Restricted Earth fault (REF) - Differential Protection	Please confirm the functions may be implemented in one protection relay  Please confirm "Restricted Earth fault (REF)" may be not applicable depending on transformer vector group or may be part of Differential Protection	The Provisions of the Bidding Document shall prevail.
196.	Vol 2 pg 477 of 1231  Cl.6.9.8(D) 55/ 2x25kV LV side Transformer Protection - Over current Instantaneous / IDMT - Differential Protection	Please confirm LV side Transformer Differential Protection may be implemented in the "Main Traction Transformer Protection" relay	The Provisions of the Bidding Document are self-explanatory and shall prevail.
197.	Vol 2 Pg 512 of 1231  8.20.4 part 5(Separate and Distinct Earth Station for Lightning Arrestor )Work shall be taken up according to the approved Earthing & Bonding Plan prepared by the contractor and shall include as under:	Please note that to minimize EMC effects of lightning impulses the earth path from surge arrester to earth shall be as short as possible and the earthing resistance shall be reasonably small. Please confirm that preferably the existing earth system shall be used and only if not available a Separate and Distinct Earth Station.	The provisions in the Bidding Document are self-explanatory and shall prevail.
198.	Part2, Section VI, Vol-2, Chapter 8, Cl 8  Insulation over catenary and Feeder wire under all the Bridges, FOBs, ROB's and Over-line structures.	The location and length of all the bridges may please be provided.	Refer Alignment Plans in Part-4, Reference Document.  Also refer Indicative Drawing Title: Earthing & Bonding of OHE structure along the Bridge Girders(RCC) & Piers, Drawing No: GC/DFCC/OHE/E&B/GIRDERS/TYP/603

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
199.	Part2, Section VI, Vol-2, Chapter 8, CI 8.2.6  OHE structures on bridges	The location, cross section, length of these bridges may be provided.	Refer Alignment Plans in Part-4, Reference Document.
200.	Part2, Section VI, Vol-2, Chapter 8, CI 8.4  OHE Conductors – Contact wire	Contact wire will be AC type or BC Type may please specified. (Round bottom or Flat bottom)	The provisions in the Bidding Document are self-explanatory and shall prevail.  Please also refer Addendum No. 7, S. No. 14.
201.	Part2, Section VI, Vol-2, Chapter 8, CI 8.10.1  The cantilever assembly shall conform to EN 50119. The contractor may adopt the cantilever assembly conforming to RDSO / IR specifications/ design, if it meets the functional requirements of the project. In case the contractor offers any new Cantilever Assembly design, the same shall meet the proven design criteria as per clause 4.4.2 of chapter 4 of this specification. Cantilever made of fiber shall not be used.	Considering the minimum sizes of conductor to be considered as per the bidding document, it is requested to modify the clause as under:  "The cantilever assembly shall conform to EN 50119. "	The Provisions of the Bidding Document shall prevail.
202.	Part2, Section VI, Vol-2, Chapter 8, CI 8.10.3  The proposed cantilever frames will sustain the normal and worst case loading conditions with a factor of safety not less than 2.5.	As per EN 50119, CI 6.3, (Table 14) "Types of Structures and related load cases" only have to be considered. In view of the above, It is requested to delete the safety factor requirement of 2.5 from cantilevers.	The Provisions of the Bidding Document shall prevail.
203.	Part2, Section VI, Vol-2, Chapter 8, CI 8.10.4	Kindly elaborate.	The provisions in the Bidding Document are self-explanatory and shall prevail.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	The cantilevers shall be designed such that they can be pre-assembled off site for delivery to site. FEA (Finite Element Analysis) of the Cantilever Assemblies shall be carried out and got approved from the Engineer.		
204.	Part2, Section VI, Vol-2, Chapter 8, Cl 8.4 OHE Conductors – Contact wire	As per EN 50119, the maximum temperature rise is 80DegC, whereas the specification requires 100DegC. Kindly clarify.	Please refer Addendum No. 7, S. No. 14.
205.	Vol Pg 280 of 1309  Cl 6.21.5 The Engineer shall require the Contractor to submit and install one copy of all the applicable software as used by the Contractor for the Design excluding the train and traction Power Simulation Computer Program, duly licensed in the name of Employer and the Engineer and in accordance with Employer's Requirements of this specification including in-house software program / worksheets developed by the Contractor, computer input and program logic prior to the acceptance of any computer output. The Contractor shall submit the same to the Engineer without any additional cost	Please confirm, the "the train and traction Power Simulation Computer Program" is not part of this requirement.	The provisions in the Bidding Document are self-explanatory and shall prevail.
206.	Vol 1 Pg 275 of 1231  8. 15.1, 8.15.2, 8.15.3 TYPE TEST	Please confirm that type tests for equipment with comparable rating e.g. circuit breaker or current transformer or auxiliary transformer as required by international standard does not need to be repeated for DFCC project and content of test shall be in accordance to the relevant standard	The Provisions of the Bidding Document are self-explanatory and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
207.	<p>Vol2 pg 436 of 1231</p> <p>CI 3.1.3 The scope of work shall include any other associated Works related to satisfactory completion of the Work as defined above and under this specification</p>	<p>Please explain "other associated Works" Please provide examples.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The Provisions of the Bidding Document shall prevail.</p>
208.	<p>Vol2 pg 436 of 1231</p> <p>CI 3.2.4(9) Rail accessible &amp; Touch Potential within safe limits under Normal &amp; Fault Conditions including configuring earthing and bonding for the entire system (including those on adjacent structure and IR lines running parallel to DFC alignment); determination of sizes / Intervals of interconnection between AEW and BEC as required and their connection to mast/earth-station and rail without any compromise in safety of public/ Railway maintenance personnel even in case of OHE Short Circuit Fault while ongoing discontinuity in rail track system due to hair crack(s) as well as discontinuity in AEW;</p>	<p>Please confirm that fault conditions are not to be considered in adjacent structures and IR lines.</p> <p>Please confirm that fault conditions as mentioned "discontinuity in AEW" OR "discontinuity in rail track system" are to be considered as single faults (n-1) on a healthy system. In case multiple faults are to be considered, please define in detail.</p> <p>Please define "discontinuity in rail track system"; how many discontinuities are there in one section (from TSS to SP) with two tracks / 4 running rails.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The Provisions of the Bidding Document shall prevail.</p>
209.	<p>Vol2 page 439 of 1231</p> <p>3.3.1 (4) Execution of Cables, Cable containment system and feeder network. 25 kV AC cable/ overhead connections from TSSs/ SPs/ SSPs as required to OHE. All connections to across the track OHE from TSS/SSP/SP / shall be through Cables laid under the track (duly</p>	<p>Please confirm all connections from TSS/SSP/SP to running rails or OHE are to be realized by power cables.</p> <p>Please confirm Overhead Cross feeders across the tracks are not to be considered at all.</p> <p>Please confirm that maintenance requirements are not subject to this chapter or confirm that "any</p>	<p>The clause quoted under this Query is not matching with the requirement given in the Bid Document.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	protected ) obviating the need of the running of Overhead Cross feeders across the tracks and any need of both lines' power block for maintenance.	needs" shall be read "needs in conjunction with power cables".	
210.	Part-2, Vol-4, Cl: 4.6.2  Unless otherwise specified, all indoor Telecommunication Equipment installations shall be designed for operation continuously in environmental temperatures range of -5°C to +55°C	Typically Telecom Switching equipment is installed in air-conditioned environment and supported temperature rating is from 0 to +40°C. IT equipment (Servers etc.) require even more stringent +35°C. Hence getting all telecom equipment to support -5°C to +55°C is not practically feasible. This requirement may be restricted to only Outdoor installed equipment.	Provisions of Bidding Document shall prevail. Also refer clause 4.6.3 of PS Telecommunication Works.
211.	Part-2, Vol-1, Cl: 2.17.6 (1)  Class B1: Equipment Rooms with air-conditioning with possibility of failure of air-conditioning for a duration of 2 hours or more at a time.	Please specify the upper limit on duration of failure of air-conditioning equipment.	Provisions of Bidding document shall prevail.
212.	Part-2, Vol-1, Cl: 2.17.6 (2) (a)  Requirements for Class A: Temperature Min 5°C to Max 35°C, Humidity Minimum 0%, Nominal 65%, Maximum 95% (Non Condensing)	Typically Telecom and IT infrastructure rooms are air-conditioned such that humidity is well maintained much below the specified 95%. IT equipment being installed in Equipment room typically support 10% ~80% humidity. Hence, 95% Humidity limit clause may be modified to 10% to 80% Non-Condensing.	Provisions of Bidding document shall prevail.
213.	Part-2, Vol-1, Cl: 2.17.6 (2) (b)  Requirements for Class B1: Temperature Min -2.5°C to Max 45°C, Humidity Nominal 70%, Maximum 100% (Non Condensing)	Class B1 is defined as Air-conditioned Telecom Equipment Room. Hence, Humidity in the equipment room is well controlled. In addition, none of the Telecom and Switching equipment meant for deployment in Indoor Telecom Equipment Room support 100% Humidity (100% Humidity requirement is meant for Outdoor or Buried environment – Class-C and Class-D respectively). Hence, the Maximum Humidity requirement may be reduced to 10% to 90% Non-	Provisions of Bidding document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		Condensing for Air-conditioned rooms.	
214.	Part-2, Vol-4, Cl: 5.5.3.3 (1)  Flexible Access Multiplex Equipment shall conform to ITU-T Rec. G.703, G.704, G.706, G.707, G.708, G.709, G.711, G.732 and G.823.	Please note that the following standards: ITU-TG.707, ITU-T G.708 and ITU-T G.709 are applicable to SDH/OTN equipment. Hence, they may be removed as requirements from Flexible Access Multiplex Equipment.	Only applicable standards shall be used for Flexible Access multiplexer while designing the Telecom System.
215.	Part-2, Vol-4, Cl: 5.5.3.3 (8)  The optical line interfaces shall conform to ITU-T Rec. G.957	The Flexible Access Multiplexer is required to interface with SDH equipment at E1 level (Electrical interface). Similarly, it is required to provide sub-2Mbps interfaces (Voice interfaces, RS232, etc.). All of these are Electrical interfaces. Hence, there is no requirement for Optical Interfaces and requirement for ITU-T G.957 is not relevant. Please clarify under what circumstances, this standard will be applicable for Flexible Access Multiplexer.	Only applicable standards shall be used for Flexible Access multiplexer while designing the Telecom System.
216.	Part-2, Vol-4, Cl: 5.5.3.3 (6) Adequate numbers of Primary Multiplexers shall be provided so that there is no loss of Communication at any point of time.	Normally, loss of communication is prevented by building Controller card and Power supply redundancy in the equipment. Please clarify how "Adequate number of Primary Multiplexers" shall be computed.	Being a design & build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.
217.	Part-2, Vol-4, Cl: 5.5.3.3 (7)  Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels (VF, Data, etc.) with automatic switch over in case of fault.	Please confirm that "1+1 protection for all channel level (VF, Data, etc.) with Automatic Switchover" corresponds to SNCP equivalent functionality at the E1 backhaul link from Primary Order Multiplexer.	Provisions of Bidding document shall prevail.
218.	Part-2, Vol-4, Cl: 5.3.5.6  Flexible Access Multiplexer or Primary Order Multiplexer shall have minimum 50%spares for all types of Channel Circuits (Minimum 1 for all types of	Please clarify what is the meaning of 50% spares for all types of channels – Is the contractor required to provide 50% spare channels between nodes at the backhaul link?	The Bidder/Contractor is required to provide 50% spare channels between Nodes.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
219	<p>Channel Circuits).</p> <p>Part-2, Vol-4, Cl: 5.3.9.11, 5.3.9.12 and 5.3.9.13</p> <p>Alarm and Status Monitoring .....</p> <p>Performance Monitoring .....</p> <p>Network Configuration and Provisioning .....</p>	<p>Please confirm if the bidder is allowed to supply an SDH system that has built-in support for sub-2Mbps interfaces. If yes, the NMS can be common for both parts of the OFC system – SDH and FAM/P-MUX.</p> <p>If not, the bidder may be permitted to provide two independent NMSs for SDH and FAM/P-MUX (or upgrade an existing NMS being provided by CP-104 in accordance with Clause 5.3.9.3).</p> <p>However, in that case, most of these Alarms, Performance parameters and Configurations will selectively apply only to SDH NMS since many of the specified points are not relevant to FAM/P-MUX. Therefore, this may be clarified is these parameters apply to both SDH and FAM/P-MUX.</p>	<p>Provisions of Bidding Document shall prevail.</p>
220	<p>Part-2, Vol-4, Cl: 5.3.9.13 (2)</p> <p>The NMS shall allow the user to configure all existing and new circuits with the following functions:</p> <p>(a) frame position allocation</p> <p>(b) interface port allocation;</p> <p>(c) low speed (64 kbps &amp; lower) interface cards configuration;</p> <p>(d) lower order multiplex time slot allocation and routing;</p> <p>(e) higher order multiplex/cross-connect switch configuration;</p> <p>(f) logging of circuit routing data logged into configuration database;</p> <p>(g) operator's configuration checks function prior to main and backup</p>	<p>Most of these features correspond to NMS of an SDH equipment. Do all of these configuration also apply to NMS of Flexible Access Multiplexer?</p>	<p>Only applicable functions shall apply to NMS of Flexible Access multiplexer while designing the Telecom System.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	database update;		
221.	Part-2, Vol-4, Cl: 5.3.3.4  In addition to SDH Network, optical fibres shall also be used for Data Networking System (as stipulated in Chapter-6) and Signalling Systems, as required.	It is not clear how should the SCADA traffic be carried over Optical Fibre Cables. Is the bidder free to propose a design to carry SCADA traffic over DNS or SDH or Dark Fiber from Second Network OFC?	Being design & build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.
222.	Part-2, Vol-4, Cl: 5.5.3.5 (1)  Optical fibre cables shall be supplied as per RDSO specification no. IRS: TC 55-2006 with Latest Amendments from RDSO approved sources.	The RDSO standard proposes only 24 fiber cores per cable. What would be the standard to be applied to 48 fiber cable to be deployed from New-Boraki towards New Dadri?	Please refer Addendum No. 7, S. No. 38.
223.	Part-2, Vol-4, Cl: 5.3.9.1  At the OCC, a Network Management System (NMS) shall be provided to carry out Realtime centralised and remote monitoring and measurement of network status and performance, and the ability to take prompt action to control the flow of traffic when necessary.	Please clarify the expected functionality "the ability to take prompt action to control the flow of traffic when necessary"	The provisions in the Bidding Document are self-explanatory. Also, please refer clause 5.3.9.10 and Para 5.4 of PS Telecommunication Works.
224.	Part-2, Vol-4, Cl: 6.3.1  .... WAN shall connect OCC, New Boraki Station, TSS and IMSD using Optic Fibre Cable. ...	It is not practical to connect the New Boraki Station to OCC using Optical Fiber Cable. Please clarify if it is permitted to handover the DNS traffic to DNS of CP-104 at New Khurja and DNS of CTP-14 at New-Dadri for carrying to EDFC-OCC and WDFC respectively.	WAN shall be created using the Data Networking System being provided by CP-104 and CP-203. Also refer clause no. 6.3.2 & 6.3.4 of PS/Telecommunication Works.
225.	Part-2, Vol-4, Cl: 6.3.1  .... WAN shall connect OCC, New Boraki Station, TSS and IMSD using Optic Fibre Cable. ...	It is possible to extend the WAN to TSS and IMSD by means of Layer-2 Switches placed at these locations and connecting them to Layer-3 Switch at New Boraki Station by means of Second Network Optical Fiber Cable. Please confirm if it is mandatory to provide Layer-3 switches at TSS	Provisions of Bidding Document are sufficiently clear and shall prevail.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
		and IMSD.	
226.	Part-2, Vol-4, Cl: 6.6.1  Access Control Mechanisms shall be employed via Authentication, Authorization, and Cryptographic Key Validation, in accordance .....	Please confirm if the existing Access Control Mechanism (AAA, DNS, DHCP) being provided by CP-104 and/or CP-203 can be used for this purpose instead of providing a separate Access Control Mechanism (AAA, DNS, DHCP).	Please refer Addendum No. 7, S. No. 42.
227.	Part-2, Vol-4, Cl: 6.6.3  Network Perimeter Firewall shall be provided to protect WAN against above Malicious Activities/Events from outside the WAN.	Please confirm if the existing Firewall being provided by CP-104 and/or CP-203 can be used, for this purpose instead of providing a separate Firewall only for CP-105.	Please refer Addendum No. 7, S. No. 43.
228.	Part-2, Vol-4, Cl: 7.3.4, Cl: 7.3.7.7  7.3.4: The PBXs shall have connection to the Public Switched Telephone Network (PSTN). This shall allow pre-selected extensions to access the PSTN or vice versa. 7.3.7.7: Public Switch Telephone Network (PSTN) Lines shall also be integrated with Direct Line Communication System ...	The bidder will ensure that provision will exist to support connection from PSTN to the PBXs. However, please clarify who will provide the PSTN connection and who will bear the initial and recurring cost pertaining to these connections.	Only PSTN connection shall be provided by the Employer.
229.	Part-2, Vol-4, Cl: 7.3.7.6  Indian Railway Telephone Network shall be integrated with Direct Line Communication System, so that one touch dialling can be done from Direct Line Console to important Operation Locations of Indian Railway as decided by the Engineer.	Please clarify where and how will this integration take place. What will be the scope of responsibility of the bidder?	Provisions of Bidding Document are sufficiently clear.  Also, please refer Chapter 17 of PS/Telecommunication Works.
230.	Part-2, Vol-4, Cl: 7.3.8.2	Please note that Integration and interoperability	Provisions of Bidding Document are

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	After integration, Administrative Telephone Networks shall provide following feature transparency across all the PBXs/EPABXs provided under this Contract as well as under Contract Packages CP-104, CP-203, STP-5, STP-17 and CTP-14	depends on both sides supporting the feature in a standard manner, wherein the standard shall ideally be an International standard such as ITU, Indian Standard or an establish industry standard. Therefore, please confirm that the integration responsibility and feature transparency requirement shall be a joint responsibility.	sufficiently clear.  Also, please refer Chapter 17 of PS/Telecommunication Works.
231.	Part-2, Vol-4, Cl: 7.3.5.1  .... Approximate requirements of Telephone Sets, ....	The table provides the approximate Telephone requirement at different locations. Please confirm if the overall quantity of Telephones will remain same while the distribution across locations may change during the design.	Provisions of Bidding Document are sufficiently clear.  Overall requirement of Administrative Telephones will be same as specified in the table of clause 7.3.5.1.
232.	Part-2, Vol-4, Cl: 7.3.5.13  The Administrative Telephone Network shall have the capacity of ringing up to minimum of three telephone sets connected in parallel.	Digital Telephones cannot be connected in parallel. Hence, please confirm if this requirement will only apply to Analog Telephones of the Administrative Telephone Network.	Bidder's understanding is correct. Please refer Addendum No. 7, S. No. 45.
233.	Part-2, Vol-4, Cl: 7.5.1.9  The extension line interface in the exchange equipment shall match the extension equipment as required and fulfil the following requirements: (1) Loop resistance of subscriber connected on physical cable pairs shall be limited to 1200 Ohm. The minimum value of the leakage resistance of the line shall be 20 K Ohms; ....	Please note that this specification is applicable only to Analog Interface. Therefore, the clause may be modified as "The <b>Analog</b> extension line interface in the exchange equipment shall match".	Please refer Addendum No. 7, S. No. 48.
234.	Part-2, Vol-4, Cl: 7.5.4.1  The VRS shall provide recording of stipulated voice conversations over	Requirement of VRS for MTRC is covered in PS clause 8.3.17. Hence, " <b>Mobile Train Radio Communication System</b> " may be removed from this clause.	Please refer Addendum No. 7, S. No. 49.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Telephone System <i>and Mobile Train Radio Communication System</i> . It shall be a digital system providing sufficient capacity for recording up to 4 weeks before being overwritten. The VRS shall comply with the requirements as given below.		
235.	Part-2, Vol-4, Cl: 7.5.4.11  The VRS shall comply with the following specifications: 1 wow and flutter : < 0.8% peak 2 frequency response : 300 to 3400 Hz within + 3 dB; 3 Signal to noise ratio : > 42 dB; 4 Cross talk immunity : > 60 dB at 1 KHz; 5 Distortion : < 3% 6 Automatic gain control level : +3 dB in recording level for all input	These specifications pertain to Analog type of Recorders, especially those based on Tape. Herein, the VRS system is required to be a Digital system (PS Clause 7.5.4.1). Hence, these requirements are not applicable and shall be removed or suitably modified for a digital recording system.	Provisions of Bidding document shall prevail.
236.	Part-2, Vol-4, Cl: 7.4.2.2  The Contractor shall furnish for the following sub-systems/equipment, the reliability figures, MTBF Hours from the OEMs. (11) Control Communication Equipment; and (12) Emergency Control Communication Equipment.	There are only single RDSO approved sources for Control Communication Equipment and Emergency Control Communication Equipment. While, MTBF values are not available with the OEMs for these systems, OEMs have been awarded Part-1 supplier status by RDSO only after due diligence and ensuring high quality and durability in the actual field conditions. Hence, this requirement may be removed.	Provisions of Bidding document shall prevail.
237.	Part-2, Vol-4, Cl: 7.3.12.1  Emergency Control Communication which is an omnibus communication	Please clarify if Portable Telephones to be carried by the crew are part of scope of supply of Emergency Control Communication equipment.	Supply of Portable Telephones to be carried by the crew is not in the scope of CP-105.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>channel terminating at OCC with the Traction Power Controller shall be provided. This Emergency Control Communication shall not have selective calling facility. Emergency Control Communication shall have Emergency Sockets as per IR Standards for RE Areas at all the Automatic Signals to which this omnibus communication channel is terminated. <b><i>The Portable Telephone of IR Standard for RE Areas, which will be carried by the crew, can be plugged in case of emergency.</i></b></p>		
238.	<p>Part-2, Vol-4, Cl: 7.3.8.3</p> <p>After integration, functionality as mentioned in Clause 7.3.3 of this Particular Specification shall be available across Administrative Telephones provided under this Contract as well as under Contract Packages CP-104 and CP-203.</p>	<p>Reference to Clause 7.3.3 appears incorrect since the said clause does not mention any functionality related to integration. Please confirm.</p>	<p>Provisions of Bidding Document are correct and sufficiently clear.</p>
239.	<p>Part-2, Vol-4, Cl: 7.5.1.3</p> <p>PBXs to be supplied, installed and commissioned for Administrative Telephone Network at stations shall be equipped to, as a minimum and not limited to, the following: .....</p>	<p>Please confirm that this clause is applicable for OCC only if a new PBX is being provided at OCC. If the existing PBX at OCC is being augmented, then the Clause 7.5.1.4 will be applicable.</p>	<p>Bidder's understanding is correct.</p>
240.	<p>Part-2, Vol-4, Cl: 9.5.4</p> <p>The Master Clock System shall be capable of working from 230 Volts +/- 10% AC 50 Hz Power Supply.</p>	<p>The Master Clock Unit and Sub-Master Clock Units will be deployed in the TERs and stable battery backed up -48V DC supply is present at TER. Therefore, DC may be permitted as a source for Master Clock System. Similarly, the</p>	<p>Provisions of Bidding Document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		Clocks may be powered by POE. Hence, these options may be permitted.	
241.	Part-2, Vol-4, Cl: 13.7.6  Outdoor Signalling Cables and Outdoor Telecommunication Cables shall not be laid in same trench. If it is inescapable to lay Signalling Cables and Outdoor Telecommunication Cables in same trench, suitable separation shall be provided between the two as per the requirement of PS-Signalling Works, IRSEM and Indian Railway Telecommunication Manual and approved by the Engineer	Most of the time, separate trenches for Signaling and Telecom are not feasible due to lack of space availability. Hence, It is suggested that to maintain uniformity across project, the outdoor Signalling and Telecom Cables in same trench may be permitted at all locations.	Provisions of Bidding document shall prevail.
242.	ITB11.1 (i)/Page 41  (b) In case, the Bidder wishes to replace any specialized sub-contractor(s) already approved by Employer through Pre-qualification process, the Bidder shall submit the details establishing compliance of the proposed specialized sub-contractor with the requirement specified in the Prequalification document.	Can new/additional sub-contractor be introduced?	Replacement of the specialized subcontractors can only be permitted for the activities already identified in Section III of the PQ document provided the proposed specialised sub – contractor(s) fulfils the requirement as specified in the PQ Document.  The Bidder may please note that introduction of a new specialised sub – contractor will not be permissible.
243.	ITB 30.1/Page 45 The currency(ies) of the bid and the payment currency (ies) shall be as described below:	a) How does DFFCIL intend to pay? B) Can the individual JV members be paid for their portion of work. C) How will foreign currency be paid for goods quoted by us in foreign currency?	Please refer to GCC and PCC clause 14.7 (Payments) as per which Payments will be made in INR and foreign currency. Also, Payment of the amount due in each currency shall be made into the Bank account of the Contractor (Sole/JV/JVA) or its individually authorized member(s),

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
			nominated by the Contractor in the payment country (for this currency) specified in the Contract.
244.	Section IV- Bidding Forms/JV MOU/Page 72-73  % Share of the JV partners	What is the minimum % to be given to lead member. Also what is the minimum % requirement of individual members. Please clarify whether it is same as PQ or can be changed.	The JV/ Consortium structure has already been evaluated at the PQ stage and the same cannot be changed at the time of Technical Submission.
245.	Section IV- Bidding Forms/JV MOU/Para 8/Page 74  Bank Guarantee	Can the individual partners submit the BG for their respective portions totaling to the complete requirement or the JV/lead member/One member has to submit the BG's on behalf of all JV partners totaling to the required value	In case of Joint venture (JV), multiple Bidding Securities (maximum equal to the number of JV members) can be submitted by the Bidder. However, these shall be in the name the Joint Venture (JV).
246.	BDS/ITB 19.1/ Page 43  Deadline for Bid Submission	It may kindly be extended from 17.08.2017 to 16.10.2017. Request letters already mailed. Hard Copy for the same is also enclosed.	Please refer Part-1, Section II, BDS, Clause ITB 19.1 and ITB 21.1.
247.	Price Schedule/Page 127-170  Price Schedule 2.1,2.2,2..3	The details given in the price schedule are at a high level and for billing purposes further detailing will be required. Therefore we request you to kindly give the details.	Request not accepted. Payments will be made as per stages of payments identified in the Price Schedules.
248.	Warranty	DFCCIL to specify the warranty period for the project	No warranty period for the project has been specified in the Bidding Document. However, the warranty for identified equipment/design as specified in Part – 2 of the Bidding Document shall be applicable.
249.	Defect Liability	Since the project will be handed over on milestone basis, will defect liability for equipments starts from the date of achieving of milestone?	The Bidder may please note that the project will not be taken over on milestone basis.  The Defects Notification Period will start after Taking over of the complete project in accordance with Clause 10.1 of the GCC.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
250.	<p>Part -1 / Section VI / Volume 2 / Particular Specification / Clause 5.1.5 / Page No. 38 of 303</p> <p>Preliminary Design: The Inception Report and Simulation Study Reports along with sufficiently detailed drawings and documents shall be submitted for the purpose of review and approval of the Engineer. The approved inception report and traction simulation report shall then form the basis for the designs.</p>	<p>We assume that Inception report will only provide the approach to the design. On the basis of the Inception report &amp; Traction power Simulation report, the detailed design &amp; drawings can be carried out.</p> <p>Kindly confirm.</p>	<p>The provisions of the Bidding Document are self-explanatory and shall prevail.</p>
251.	<p>Part -1 / Section VI / Volume 2 / Particular Specification / Clause 5.1.5 / Page No. 38 of 303</p> <p>Emergency Feeding Scenario is defined as "A first failure condition (N-1)"</p>	<p>For traction simulation study under (N-1) scenario, we need to have the Curve &amp; Gradient details of the adjoining section upto next TSS location, Chainage &amp; Rating of Transformer installed at the adjoining TSS.</p> <p>Request to kindly provide the details as mentioned above.</p>	<p>Please refer Addendum No. 7, S. No. 62.</p>
252.	<p>Part -2 / Section VI / Volume 2 / Particular Specification / Clause 5.1.8 / Page No. 39 of 303</p> <p>Second failure conditions (N-2) performance requirement : Under second failure conditions, including failure of two consecutive Traction Substations viz. Ibrahimpur TSS and Biruni TSS of the adjoining New Bhaupur - Khurja Section, the traction power supply system of CP-105 section shall be designed to allow for a reduced train service. The Scenario may consider extended</p>	<p>For traction simulation study under (N-2) scenario, when both the TSS is under outage condition, we need to have the Curve &amp; Gradient details of the adjoining section upto next TSS location, Chainage &amp; Rating of Transformer installed at the adjoining TSS.</p> <p>Request to kindly provide the details as mentioned above.</p>	<p>Please refer our reply at Sr.No.251 above.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	headway/ reduced speed of trains to operate in the affected section. The TSS equipment sizing for second Failure condition (N-2) shall be supported by multi train simulation study. This shall have to be approved by Engineer and provision should exist with the operator to choose a combination of above or anyone of the above extended headway or reduced speed.		
253.	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 6.1.3 / Page No. 43 of 303  Traction Substations (TSSs): Auto transformers (as required by design);	Contract condition calls for the V-connected transformer also. If V-connected transformer with center tapping is used, it may eliminate the Auto transformer at TSS.  Kindly clarify whether AT at TSS is mandatory or depending on the outcome of the Simulation study.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
254.	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 7.1.5 / Page No. 45 of 303  ...As per preliminary designs no standalone auto-transformer posts (ATS) have been envisaged. If however, based on the traction simulation studies undertaken by the contractor, need arises for ATS, same shall be proposed and provided by the contractor at his cost. The proposal shall need approval of Engineer. <u>The auto transformer posts, which are stand-alone types, shall be suitably located in the ROW.</u>	Requirement of ATS shall be confirmed/determined only after the simulations. We request you to provide the provisional space & location requirement, if already identified for the same.	The provisions in the Bidding Document are self-explanatory and shall prevail.
255.	Part -2 / Section VI / Volume 2 / Particular Specification / Table 6.3.1 /	Maximum earth resistance for SSP is specified as 0.5 ohms Table 6.3.1. We would request to revise	The Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response								
(1)	(2)	(3)	(4)								
	<p>Page No. 48 of 303</p> <p>Table 6.3.1 Maximum Earth Resistance</p> <table border="1"> <tr> <td>Location</td> <td>Total Earth system resistance (ohms)</td> </tr> <tr> <td>TSS</td> <td>0.5</td> </tr> <tr> <td>SSP</td> <td>0.5</td> </tr> <tr> <td>Other Locations</td> <td>To meet the requirements of EN50122-1</td> </tr> </table>	Location	Total Earth system resistance (ohms)	TSS	0.5	SSP	0.5	Other Locations	To meet the requirements of EN50122-1	<p>it to 2.0 ohms as per the Indian Railways Manual of AC Traction, Volume II, Part II, and Para.5.</p> <p>Kindly confirm that the maximum earth resistance for SSP as well shall be acceptable within 2.0 ohms as per Indian Railway standards.</p> <p>Kindly note that the value of Earth resistance has been revised to 2.0 ohms for SSP locations in DFCC E&amp;M tenders.</p>	
Location	Total Earth system resistance (ohms)										
TSS	0.5										
SSP	0.5										
Other Locations	To meet the requirements of EN50122-1										
256.	<p>Part -2 / Section VI Volume 2 / Particular Specification / Clause 7.4.4 / Page No. 64 of 303</p> <p>The Auto transformer capacity as indicated as above is minimum for inter-distance of 13-17 km between TSS and SSP</p>	<p>V-connected transformer can eliminate the Auto Transformer at TSS. In that case, the distance between AT will not be maintained 13-17 kms.</p> <p>Kindly clarify whether it is mandatory to keep AT between 13-17 kms or it will be the outcome of the Simulation Study.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The Provisions of the Bidding Document shall prevail.</p>								
257.	<p>Part – 2 / Volume – 2 / Particular Specifications / Clause No. 8.14 / Page No. 82 of 303</p> <p>Structure/Uprights and their Foundations</p>	<p>Whether exposure of Foundation is allowed after maintaining the specified distance between center line of track and edge of foundation as per SOD. If exposure is allowed, then the permissible length provided shall be 400mm above ground level.</p> <p>Kindly clarify.</p>	<p>Being a design &amp; build contract, General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The Provisions of the Bidding Document shall prevail.</p>								
258.	<p>Part -2 / Section VI / Volume 2 / Particular Specification / Appendix – 8 / Page No 222 of 303</p> <p>The Traction Transformers shall be provided with Nitrogen Injection Fire Suppression System.</p>	<p>Kindly confirm whether Nitrogen Injection Fire Suppression system is required for the Auto Transformer also.</p>	<p>Please Refer to Addendum No. 7, S. No. 13.</p>								

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
259.	<p>Part 2 / Section VI / Volume 2 / Particular Specifications–2x25kV / AC Traction Electrification and Associated Works / Clause No: 18.4.3</p> <p>Interface with Indian Railways</p> <p>1) Items of interface With Railways Interfacing with Indian Railways will be required for</p> <p>a. Power Supply Interface at Junction stations and line connecting to IR,</p> <p>b. Data / Details Required for Simulation Studies,</p> <p>c. OHE layout including provision of Neutral section and OHE interface point between DFCC and IR</p> <p>d. Earthing of existing metallic structures of Railways in parallelism with DFCC Line</p> <p>2) Information Exchange The System Contractor (CP 105) shall share the system information and system design to establish compatibility with existing Indian Railway system</p> <p>3) Interface requirements The Interface requirements are described in Table –18.4.3.</p>	<p>The interface works with IR at Junction Stations will require Traffic blocks as well in addition to Power Blocks. We understand that the permission for traffic blocks from IR shall be obtained by DFCCIL similar to Power blocks and any cost towards the same shall be borne by DFCCIL.</p> <p>Kindly confirm.</p>	<p>The provisions of the Bidding Document are self-explanatory and shall prevail.</p>
260.	<p>Bid Document / Section IV. Bidding Forms/ PRICE SCHEDULE 2.1 / ELECTRICAL WORKS – COST CENTRE 2.1</p>	<p>Based on our experience in similar Design &amp; Build projects, we would like to bring to your notice that weightages assigned for 2.1.7 Supply of Contract spares and Special tools &amp; Instruments and 2.1.8 Integrated Testing, Commissioning and Final</p>	<p>The Provisions of the Bidding Document shall prevail.</p>



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response																																							
(1)	(2)	(3)	(4)																																							
	<table border="1"> <thead> <tr> <th>Price Schedule</th> <th>Price Schedule No.</th> <th>Cost Centre</th> <th>Weightage of Cost Centre 2.1 (%)</th> <th>Cost</th> </tr> <tr> <th>(1)</th> <th>(2)</th> <th>(3)</th> <th>(4)</th> <th>(5)</th> </tr> </thead> <tbody> <tr> <td rowspan="9" style="writing-mode: vertical-rl; transform: rotate(180deg);">2.1 [ELECTRICAL WORKS]</td> <td>2.1.1</td> <td>Surveys, Investigations, Studies, Design &amp; Documents, O &amp; M Manuals and As Built Drawings, Training of Staff</td> <td>5</td> <td rowspan="9" style="writing-mode: vertical-rl; transform: rotate(180deg);">% as applicable in for Cost Centre 2.0 of Appointment of Contract Price</td> </tr> <tr> <td>2.1.2</td> <td>OHE Works</td> <td>47</td> </tr> <tr> <td>2.1.3</td> <td>Traction Sub Station (TSS) Works</td> <td>28</td> </tr> <tr> <td>2.1.4</td> <td>Sub-Sectioning Post (SSP) Works</td> <td>10</td> </tr> <tr> <td>2.1.5</td> <td>SCADA Works</td> <td>1</td> </tr> <tr> <td>2.1.6</td> <td>E&amp;M Works</td> <td>2</td> </tr> <tr> <td>2.1.7</td> <td>Supply of Contract Spares and Special Tools &amp; Instruments</td> <td>3</td> </tr> <tr> <td>2.1.8</td> <td>Integrated Testing, Commissioning and Final Taking over of Works</td> <td>4</td> </tr> <tr> <td></td> <td><b>Total</b></td> <td><b>100%</b></td> </tr> </tbody> </table>	Price Schedule	Price Schedule No.	Cost Centre	Weightage of Cost Centre 2.1 (%)	Cost	(1)	(2)	(3)	(4)	(5)	2.1 [ELECTRICAL WORKS]	2.1.1	Surveys, Investigations, Studies, Design & Documents, O & M Manuals and As Built Drawings, Training of Staff	5	% as applicable in for Cost Centre 2.0 of Appointment of Contract Price	2.1.2	OHE Works	47	2.1.3	Traction Sub Station (TSS) Works	28	2.1.4	Sub-Sectioning Post (SSP) Works	10	2.1.5	SCADA Works	1	2.1.6	E&M Works	2	2.1.7	Supply of Contract Spares and Special Tools & Instruments	3	2.1.8	Integrated Testing, Commissioning and Final Taking over of Works	4		<b>Total</b>	<b>100%</b>	<p>Taking over appears to be very high as against the standard weightages given in other similar projects of approximately 1.5% for these two items. This might affect Contractor's cash flow adversely, as the price against these two items will be paid to the contractor only during final milestones.</p> <p>In view of this, we suggest to revise the schedule as shown below:</p> <p>2.1.7 Supply of Contract spares and Special tools &amp; Instruments - 1%</p> <p>2.1.8 Integrated Testing, Commissioning and Final Taking over – 0.5%. The remaining weightage shall be distributed proportionally among schedules 2.1.2 to 2.1.5.</p>	
Price Schedule	Price Schedule No.	Cost Centre	Weightage of Cost Centre 2.1 (%)	Cost																																						
(1)	(2)	(3)	(4)	(5)																																						
2.1 [ELECTRICAL WORKS]	2.1.1	Surveys, Investigations, Studies, Design & Documents, O & M Manuals and As Built Drawings, Training of Staff	5	% as applicable in for Cost Centre 2.0 of Appointment of Contract Price																																						
	2.1.2	OHE Works	47																																							
	2.1.3	Traction Sub Station (TSS) Works	28																																							
	2.1.4	Sub-Sectioning Post (SSP) Works	10																																							
	2.1.5	SCADA Works	1																																							
	2.1.6	E&M Works	2																																							
	2.1.7	Supply of Contract Spares and Special Tools & Instruments	3																																							
	2.1.8	Integrated Testing, Commissioning and Final Taking over of Works	4																																							
		<b>Total</b>	<b>100%</b>																																							
261.	<p>Part 2, Section VI, Volume 5 Particular Specifications – E&amp;M and Associated Works / Clause No: 4.2.2 - (1) (e)</p> <p>Each Auxiliary Sub-station shall have 2 step down transformers of adequate capacity. The Contractor shall consider the Capacity of the 11kV/0.433kV Transformers and other power equipment suitable to meet the power requirement with minimum 20% future load requirement. One of the two transformers shall act as a standby and also be able to work in parallel, if required. The transformers at all stations shall have same rating.</p>	<p>Please provide Transformer loading details for auxiliary transformer including 20% for future loading.</p> <p>Also provide permissible transformer losses.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The Provisions of the Bidding Document shall prevail.</p> <p>Please refer Sub Clause 5.3(4), Vol-5, Part-2 of the Bidding Document.</p>																																							
262.	<p>Part 2 / Section VI / Volume 2 / Particular Specifications–2x25kV / AC Traction Electrification and Associated Works / 4.4.2 Proven Design and Cross acceptance criteria / Clause No: (2)</p>	<p>Kindly allow for the procurement of materials from PGCIL/SEB approved vendor when the material is not covered by RDSO/CORE.</p>	<p>The provisions in the Bidding Document are self-explanatory and shall prevail.</p>																																							

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>The System, including all Sub-systems and Equipment shall generally be of approved RDSO/ CORE design/specifications, wherever applicable.</p>		
263.	<p>Part 2 / Section VI / Volume 2 / Particular Specifications–2x25kV, AC Traction Electrification and Associated Works / 8.4 OHE CONDUCTORS / Clause No: 2 (b)</p> <p>The contact wire shall be continuous, i.e. splicing or jointing of the conductors is not permitted between terminations or between cut-in insulators. Splices are primarily used during maintenance and shall not be used in the contact wire and /or catenary wire by way of installation or repair unless approved by the Engineer.</p>	<p>Thefts are common in lengthy section. Restrictions on "Splice not acceptable in new installation" should be relaxed. Request you to amend the tender clauses accordingly.</p>	<p>The provisions in the Bidding Document are self-explanatory and shall prevail.</p>
264.	<p>Part 2 / Section VI / Volume 2 / Particular Specifications–2x25kV / AC Traction Electrification and Associated Works / 8.2 FACTORS GOVERNING DESIGN OF OHE / Clause No: 8.2.1</p> <p>Track Structure And Formation The Contractor shall design the OHE &amp; Traction Return Supply system considering the Track formation Data.</p>	<p>Kindly confirm the soil to be used for embankment and their Soil bearing capacity.</p>	<p>Please refer to Sr.no 9 sub-clause 1.3.5, Vol-1, Part-2 of the Bidding Document.</p> <p>The provisions of the Bidding Document are self-explanatory and shall prevail.</p>
265.	<p>Part 2 / Section VI / Volume 5 Particular Specifications – E&amp;M and Associated Works / 17.6 DRAINAGE / Clause No: 17.6.2</p>	<p>Kindly share the Data for High flood level at TSS; SSP; SP and Parallel alignment &amp; Detour alignment area with respect to Existing ground level.</p>	<p>Please refer sub-clause 17.4, Vol.5, Part-2 of the bidding document.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Drainage of the Substation site shall be provided as per the best engineering practices, so as to prevent surface flooding and pooling of water.		
266.	<p>Bid Document / Section IV. Bidding Forms / Form LOP</p> <p>The Form LOP is addressed to: The Managing Director 5th Floor, Pragati Maidan Metro Station Building, New Delhi – 110 001</p> <p>However, as per ITB 19.1, For First Stage Technical Proposal, for submission purposes only, the Employer's address is:</p> <p>Dedicated Freight Corridor Corporation of India Limited, Metro Station Building Complex, Pragati Maidan 4th Floor, Room No. 432, New Delhi, 110001, India Attention: Mr. V.P. Singh, Group General Manager /Elect-1/EC Telephone: +91 11 2345 4840 Facsimile number: + 91 11 2345 4842 Electronic mail address: <a href="mailto:vpsingh@dfcc.co.in">vpsingh@dfcc.co.in</a></p>	Kindly clarify, whether the Form LOP has to be addressed to The Managing Director or to GGM/Elect-1/EC.	The provisions in the Bidding Document are self-explanatory and shall prevail. Please also refer Addendum No. 1 dated 01.08.2017
267.	Bid Document / Section IV. Bidding Forms / Form CU: Copyright Undertaking	Kindly clarify, whether the Form CU has to be addressed to The Managing Director OR to GGM/Elect-1/EC.	The provisions of the Bidding Document are self-explanatory and shall prevail. Please also refer Addendum No. 1

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>The Form CU is addressed to: The Managing Director Dedicated Freight Corridor Corporation of India Limited, Pragati Maidan Metro Station Building New Delhi – 110 001</p> <p>However, as per ITB 19.1, the For First Stage Technical Proposal, for submission purposes only, the Employer's address is:</p> <p>Dedicated Freight Corridor Corporation of India Limited, Metro Station Building Complex, Pragati Maidan 4th Floor, Room No. 432, New Delhi, 110001, India .Attention: Mr. V.P. Singh, Group General Manager /Elect-1/EC Telephone: +91 11 2345 4840 Facsimile number: + 91 11 2345 4842 Electronic mail address: vpsingh@dfcc.co.in</p>		dated 01.08.2017.
268.	<p>Volume – 1 / Section – II: BDS / ITB 30.1 (b)</p> <p>For the purpose of conversion of foreign currency in to local currency i.e. Indian Rupees (INR) or vice versa, Bidders shall use the Reference Rates of Foreign Currency published by Reserve Bank of India (www.rbiorg.in), on the Base Date (28 days prior to the last date of second stage bid submission)</p>	<p>For the purpose of conversion of foreign currency in to local currency i.e. Indian Rupees (INR) or vice versa, we would request DFCCIL to provide a specific date of conversion. This would help us to avoid re-working and preparation of CA Certificates for some of the Tender Forms (such as Form CCC, Form Fin-3.3 - Financial Resources, etc.) in case of any extension of bid submission date.</p>	Request not accepted. Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
269.	<p>Bid Document / Section IV / Bidding Forms / Form SUP</p> <p>Form SUP - Proposed Subcontractors and Suppliers for Major Items of Works</p>	<p>The Bidder is being asked to furnish the "Approximate Value of proposed Subcontracting Items (in percentage of the approximate total value of the Contract)". Since the first stage of Bidding is a Technical submission stage, this data may not be required to be furnished as the same can be calculated only at the time of Stage II: Financial bid submission.</p> <p>Hence, we request DFCCIL to remove this requirement and modify the Form suitably.</p>	<p>Request not accepted. The Provisions of the Bidding Document shall prevail.</p>
270.	<p>Section I - Instructions to Bidders / Clause 45 / Conversion to Single Currency</p> <p>For evaluation and comparison purposes, the currency (ies) of the bid shall be converted into a single currency as specified in the BDS.</p>	<p>As mentioned, in the referred clause there is no information available on the conversion to single currency for bid evaluation purpose.</p> <p>Kindly provide the same.</p>	<p>As per ITB 30.1 of Section II, Bid Data Sheet, Part – I of the Bidding Document, the currency of the Bid, in which the Bidder shall quote the Bid price is INR only. ITB 30.1 also covers the procedure for conversion of foreign currency into INR and vice-versa.</p>
271.	<p>General</p> <p>Details and Drawings of FOB, RUB, ROB, major and minor bridges.</p>	<p>Kindly provide us the details of FOB, RUB, ROB and major and minor bridges details for effective design review.</p>	<p>Refer Table No. 18.4.1, Chapter-18, Vol-2, Part-2 of the Bidding Document.</p>
272.	<p>Part 2 / Section VI / Volume 5 Particular Specifications – E&amp;M and Associated Works / Clause No: 6.2.15 - 2 C)</p> <p>The distribution boards shall serve the distribution of electrical power to lighting system, socket outlets, machinery/motors, etc. The loads shall be connected either directly to these boards or via sub-distribution boards.</p>	<p>The No. of points to be considered per circuit is not mentioned.</p> <p>Kindly provide the required information.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>Please also refer Clause 9.6(5), Chapter-9, Vol-5 of the Bidding Document.</p>
273.	<p>Part 2 / Section VI / Volume 5 Particular Specifications – E&amp;M and Associated</p>	<p>As per ASHRAE 62.1, normal room temperature considered is 24 degree C (+/- 1).</p>	<p>The provisions in the Bidding Document are self-explanatory and</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Works / Clause No: 15.3.2</p> <p>The contractor shall provide the requisite capacity air-conditioning system to achieve the Room temperature of 21 +/- 2 Degree Celsius at highest climatic/ ambient conditions.</p>	<p>Kindly clarify</p>	<p>shall prevail.</p>
274.	<p>Part 2 / Section VI / Volume 1 General Specifications / Clause No: 3.7.2</p> <p>The simulation study may involve a number of iterations to optimize the Solution.</p>	<p>Since the Simulation Study is a time bound process and done by some international expert, number of iteration in the Study will lead to the delay in design. So, it has been suggested that the Simulation Scenario, boundary conditions and the output format will get approved from the Engineer before conducting the study.</p> <p>Kindly clarify.</p>	<p>The provisions in the Bidding Document are self-explanatory and shall prevail.</p> <p>Please also refer to Para 3.7.1 of General Specifications, Part 2, Volume 1 of the bidding document.</p>
275.	<p>Part 2 / Section VI / Volume 2 / Particular Specifications–2x25kV / AC Traction Electrification and Associated Works / 13.2 CONTRACT SPARES / Table 13.2.1</p> <p>Aerial Earth Wire and BEC</p>	<p>Since installation of BEC will be the outcome of Simulation Study, Kindly clarify if the study eliminates BEC, then also is it required to be provided.</p>	<p>The provisions in the Bidding Document are self-explanatory and shall prevail.</p>
276.	<p>Part 1 / Section II / Bid Data Sheet / ITB 29.8</p> <p>The bidders may note that this DFCC project being funded by the World Bank, qualifies for exemption from payment of Customs Duty and Excise Duty on goods supplied / intended to be supplied to the project in terms of Government of India's Notification no. 84/97 – customs dated 11.11.1997 and Central Excise Notification no. 108/95-C E Dated</p>	<p>In view of implementation of GST from July 1<sup>st</sup>, 2017, request you to kindly clarify on the changes in taxation for this project and revise the clauses accordingly.</p>	<p>As per the new Tax regime, there is no Excise Duty with effect from 1<sup>st</sup> July 2017. As such, the Clause would now stand modified as per Addendum No. 7, S. No. 1.</p> <p>At present, there is no notification from Govt. of India regarding exemption of GST for this Project. The Bidders are Requested to refer to Addendum No. 7, S. No. 59 in this regard.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	28.08.1995 (read with all subsequent amendments including amendment dated 01.03.2008) respectively.		
277.	<p>Part 1 / Section III. Evaluation and Qualification Criteria/ Page 48 of 167/ 2.4</p> <p>**The Bidder shall also be required to submit a certificate, from the Developer/Vendor of the Software, that the Simulation Software has been validated by comparing its result to actual field measurements on a 2 x 25 kV Traction supply system.</p>	<p>We wish to highlight that it is extremely difficult to arrange such certificates due to various reasons, majorly</p> <ul style="list-style-type: none"> <li>- Design consultants, vendors of the software are generally not directly involved in with the End customer, so it impossible for them to obtain such certificate from the End customer.</li> <li>- There are no official organizations certifying &amp; validating the Simulation software by comparison to actual field measurements on a 2 x 25 kV Traction supply system.</li> </ul> <p>Therefore by having such criteria, will only limit the opportunity of selecting a good designer for the works. We shall therefore request you to amend the condition by modifying the requirement as below</p> <p><i>***The Bidder shall demonstrate through documentation that the proposed Simulation Software has been validated on a 2 x 25 kV Traction supply system.</i></p>	<p>The provisions in the Bidding Document are self-explanatory and shall prevail.</p>
278.	<p>Part-2 / Section VI / Volume-4 / Clause No: 4.6.2</p> <p>Unless otherwise specified, all indoor Telecommunication Equipment installations shall be designed for operation continuously in environmental temperatures range of -5°C to +55°C</p>	<p>Typically Telecom Switching equipment is installed in air-conditioned environment and supported temperature rating is from 0 to +40°C. IT equipment (Servers etc.) operates at +35°C.</p> <p>We request you to modify the temperatures range to 0 to +40°C for Indoor equipment.</p>	<p>Provisions of Bidding Document shall prevail.</p> <p>Also refer clause 4.6.3 of PS Telecommunication Works.</p>
279.	Part-2 / Section VI / Volume-1 / Clause No: 2.17.6 (1)	Kindly specify the upper limit on duration of failure of air-conditioning equipment.	Provisions of Bidding document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Class B1: Equipment Rooms with air-conditioning with possibility of failure of air-conditioning for a duration of 2 hours or more at a time.		
280.	Part-2 / Section VI / Volume-1 / Clause No: 2.17.6 (2) (a)  Requirements for Class A: Temperature Min 5°C to Max 35°C, Humidity Minimum 0%, Nominal 65%, Maximum 95% (Non Condensing)	Typically Telecom and IT infrastructure rooms are air-conditioned such that humidity is well maintained much below the specified 95%. IT equipment being installed in Equipment room typically supports 10% ~80% humidity.  Hence, we request you to modify the 95% Humidity limit clause to 10% - 80% Non-Condensing.	Provisions of Bidding document shall prevail.
281.	Part-2 / Section VI / Volume-1 / Clause No: 2.17.6 (2) (b)  Requirements for Class B1: Temperature Min -2.5°C to Max 45°C, Humidity Nominal 70%, Maximum 100% (Non Condensing)	Class B1 is defined as Air-conditioned Telecom Equipment Room. Hence, Humidity in the equipment room is well controlled. In addition, none of the Telecom and Switching equipment meant for deployment in Indoor Telecom Equipment Room support 100% Humidity (100% Humidity requirement is meant for Outdoor or Buried environment – Class-C and Class-D respectively).  Hence, we request you to modify the Maximum Humidity requirement may be reduced to 10% - 90% Non-Condensing for Air-conditioned rooms.	Provisions of Bidding document shall prevail.
282.	Part-2 / Section VI / Volume-4 / Clause No: 5.5.3.3 (1)  Flexible Access Multiplex Equipment shall conform to ITU-T Rec. G.703, G.704, G.706, G.707, G.708, G.709, G.711, G.732 and G.823.	Kindly note that the following standards: ITU-TG.707, ITU-T G.708 and ITU-T G.709 are applicable to SDH/OTN equipment. Hence, we request you to remove these requirements from Flexible Access Multiplex Equipment.	Only applicable standards shall be used for Flexible Access multiplexer while designing the Telecom System.
283.	Part-2 / Section VI / Volume-4 / Clause	The Flexible Access Multiplexer is required to	Only applicable standards shall be



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>No: 5.5.3.3 (8)</p> <p>The optical line interfaces shall conform to ITU-T Rec. G.957</p>	<p>interface with SDH equipment at E1 level (Electrical interface). Similarly, it is required to provide sub-2Mbps interfaces (Voice interfaces, RS232, etc.). All of these are Electrical interfaces. Hence, there is no requirement for Optical Interfaces and requirement for ITU-T G.957 is not relevant.</p> <p>Kindly clarify under what circumstances, this standard will be applicable for Flexible Access Multiplexer.</p>	<p>used for Flexible Access multiplexer while designing the Telecom System.</p>
284.	<p>Part-2 / Section VI / Volume-4 / Clause No: 5.5.3.3 (6)</p> <p>Adequate numbers of Primary Multiplexers shall be provided so that there is no loss of Communication at any point of time.</p>	<p>Normally, loss of communication is prevented by building Controller card and Power supply redundancy in the equipment.</p> <p>Kindly clarify how "Adequate number of Primary Multiplexers" shall be computed.</p>	<p>Being a design &amp; build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.</p>
285.	<p>Part-2 / Section VI / Volume-4 / Clause No: 5.5.3.3 (7)</p> <p>Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels (VF, Data, etc.) with automatic switch over in case of fault.</p>	<p>Kindly confirm that "1+1 protection for all channel level (VF, Data, etc.) with Automatic Switchover" corresponds to SNCP equivalent functionality at the E1 backhaul link from Primary Order Multiplexer.</p>	<p>Provisions of Bidding Document shall prevail.</p>
286.	<p>Part-2 / Section VI / Volume-4 / Clause No: 5.3.5.6</p> <p>Flexible Access Multiplexer or Primary Order Multiplexer shall have minimum 50% spares for all types of Channel Circuits (Minimum 1 for all types of Channel Circuits).</p>	<p>Kindly clarify the meaning of 50% spares for all types of channels – whether the contractor is required to provide 50% spare channels between nodes at the backhaul link.</p>	<p>The Bidder/Contractor is required to provide 50% spare channels between Nodes.</p>
287.	<p>Part-2 / Section VI / Volume-4 / Clause No: 5.3.9.11, 5.3.9.12 and 5.3.9.13</p>	<p>Kindly confirm whether the bidder is allowed to supply an SDH system that has built-in support for</p>	<p>Provisions of Bidding Document are sufficiently clear and shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>5.3.9.11: Alarm and Status Monitoring</p> <p>5.3.9.12: Performance Monitoring</p> <p>5.3.9.13: Network Configuration and Provisioning</p>	<p>sub-2Mbps interfaces. If yes, kindly clarify whether the NMS can be common for both parts of the OFC system – SDH and FAM/P-MUX.</p> <p>If not, the bidder may be permitted to provide two independent NMSs for SDH and FAM/P-MUX (or upgrade an existing NMS being provided by CP-104 in accordance with Clause 5.3.9.3).</p> <p>However, in that case, most of these Alarms, Performance parameters and Configurations will selectively apply only to SDH NMS, since many of the specified points are not relevant to FAM/P-MUX. Therefore, this may be clarified is these parameters apply to both SDH and FAM/P-MUX.</p>	
288.	<p>Part-2 / Section VI / Volume-4 / Clause No: 5.3.9.13 (2)</p> <p>The NMS shall allow the user to configure all existing and new circuits with the following functions:</p> <p>(a) frame position allocation</p> <p>(b) interface port allocation;</p> <p>(c) low speed (64 kbps &amp; lower) interface cards configuration;</p> <p>(d) lower order multiplex time slot allocation and routing;</p> <p>(e) higher order multiplex/cross-connect switch configuration;</p> <p>(f) logging of circuit routing data logged into configuration database;</p> <p>(g) operator's configuration checks function prior to main and backup database update;</p>	<p>Most of these features correspond to NMS of SDH equipment.</p> <p>Kindly clarify whether all of these configurations also apply to NMS of Flexible Access Multiplexer.</p>	<p>Only applicable functions shall apply to NMS of Flexible Access multiplexer while designing the Telecom System</p>
289.	<p>Part-2 / Section VI / Volume-4 / Clause No: 5.3.3.4</p>	<p>Kindly clarify how the SCADA traffic should be carried over Optical Fibre Cables.</p>	<p>Being a design &amp; build contract, the Bidder/Contractor has to propose his</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	In addition to SDH Network, optical fibres shall also be used for Data Networking System (as stipulated in Chapter-6) and Signalling Systems, as required.	Also clarify whether the bidder is free to propose a design to carry SCADA traffic over DNS or SDH or Dark Fiber from Second Network OFC.	own design and equipment based on requirements given in the Bidding Document.
290.	Part-2 / Section VI / Volume-4 / Clause No: 5.5.3.5 (1)  Optical fibre cables shall be supplied as per RDSO specification no. IRS: TC 55-2006 with Latest Amendments from RDSO approved sources.	The RDSO standard proposes only 24 fiber cores per cable. Kindly specify the standards to be applied to 48 fiber cable to be deployed from New-Boraki towards New Dadri.	Please refer Addendum No. 7, S. No. 38.
291.	Part-2 / Section VI / Volume-4 / Clause No: 5.3.9.1  At the OCC, a Network Management System (NMS) shall be provided to carry out Real time centralised and remote monitoring and measurement of network status and performance, and the ability to take prompt action to control the flow of traffic when necessary.	Kindly clarify the expected functionality - "the ability to take prompt action to control the flow of traffic when necessary"	The provisions in the Bidding Document are self-explanatory. Also refer clause 5.3.9.10 and Para 5.4 of PS Telecommunication Works.
292.	Part-2 / Section VI / Volume-4 / Clause No: 6.3.1  WAN shall be created using Layer-3 Switches equipped with minimum 4 Nos. of 10GigE Fibre Ports for backbone interconnections. WAN shall connect OCC, New Boraki Station, TSS and IMSD using Optic Fibre Cable. Further WAN shall connect TSS with New Boraki Station in Redundant Linear Topology using Optical Fibre Cable.	We understand that it is not practical to connect the New Boraki Station to OCC using Optical Fiber Cable.  Kindly clarify whether it is permitted to handover the DNS traffic to DNS of CP-104 at New Khurja and DNS of CTP-14 at New-Dadri for carrying to EDFC-OCC and WDFC respectively.	WAN shall be created using the Data Networking System being provided by CP-104 and CP-203.  Also refer clause no. 6.3.2 & 6.3.4 of PS/Telecommunication Works

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Locations of Layer-3 Switches can be clubbed based upon design of other Systems/Subsystems under this Contract while meeting overall Packet Data Communication Requirements.		
293.	<p>Part-2 / Section VI / Volume-4 / Clause No: 6.3.1</p> <p>WAN shall be created using Layer-3 Switches equipped with minimum 4 Nos. of 10GigE Fibre Ports for backbone interconnections. WAN shall connect OCC, New Boraki Station, TSS and IMSD using Optic Fibre Cable. Further WAN shall connect TSS with New Boraki Station in Redundant Linear Topology using Optical Fibre Cable. Locations of Layer-3 Switches can be clubbed based upon design of other Systems/Subsystems under this Contract while meeting overall Packet Data Communication Requirements.</p>	<p>Kindly clarify whether it is possible to extend the WAN to TSS and IMSD by means of Layer-2 Switches placed at these locations and connecting them to Layer-3 Switch at New Boraki Station by means of Second Network Optical Fiber Cable.</p> <p>Kindly confirm whether it is mandatory to provide Layer-3 switches at TSS and IMSD.</p>	<p>Provisions of Bidding Document are sufficiently clear and shall prevail.</p>
294.	<p>Part-2 / Section VI / Volume-4 / Clause No: 6.6.1</p> <p>Access Control Mechanisms shall be employed via Authentication, Authorization, and Cryptographic Key Validation, in accordance with IEEE 802.1X, to restrict WAN Access to Authorized Users only. Facilities shall be provided to ensure that the Confidentiality and Integrity of the Data Flows for the WAN cannot be compromised by, for example, Eavesdropping, or Interception and</p>	<p>Kindly confirm whether the existing Access Control Mechanism (AAA, DNS, DHCP) being provided by CP-104 and/or CP-203 can be used for this purpose instead of providing a separate Access Control Mechanism (AAA, DNS, DHCP).</p>	<p>Please refer Addendum No. 7, S. No. 42.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Content Modification.		
295.	<p>Part-2 / Section VI / Volume-4 / Clause No: 6.6.3</p> <p>Network Perimeter Firewall shall be provided to protect WAN against above Malicious Activities/Events from outside the WAN.</p>	<p>Kindly confirm if the existing Firewall being provided by CP-104 and/or CP-203 can be used, for this purpose instead of providing a separate Firewall only for CP-105.</p>	<p>Please refer Addendum No. 7, S. No. 43.</p>
296.	<p>Part-2 / Section VI / Volume-4 / Clause No: 7.3.4, and Clause No: 7.3.7.7</p> <p>7.3.4: The PBXs shall have connection to the Public Switched Telephone Network (PSTN). This shall allow pre-selected extensions to access the PSTN or vice versa.</p> <p>7.3.7.7: Public Switch Telephone Network (PSTN) Lines shall also be integrated with Direct Line Communication System ...</p>	<p>The bidder will ensure that provision will exist to support connection from PSTN to the PBXs.</p> <p>However, kindly clarify who will provide the PSTN connection and who will bear the initial and recurring cost pertaining to these connections.</p>	<p>Only PSTN connection shall be provided by the Employer.</p>
297.	<p>Part-2 / Section VI / Volume-4 / Clause No: 7.3.7.6</p> <p>Indian Railway Telephone Network shall be integrated with Direct Line Communication System, so that one touch dialling can be done from Direct Line Console to important Operation Locations of Indian Railway as decided by the Engineer.</p>	<p>Kindly clarify the process of integration and the scope of responsibility of the bidder.</p>	<p>Provisions of Bidding Document are sufficiently clear.</p> <p>Also, please refer Chapter 17 of PS/Telecommunication Works.</p>
298.	<p>Part-2 / Section VI / Volume-4 / Clause No: 7.3.8.2</p>	<p>Kindly note that Integration and interoperability depends on both sides supporting the feature in a standard manner, wherein the standard shall</p>	<p>Provisions of Bidding Document are sufficiently clear.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	After integration, Administrative Telephone Networks shall provide following feature transparency across all the PBXs/EPABXs provided under this Contract as well as under Contract Packages CP-104, CP-203, STP-5, STP-17 and CTP-14	ideally be an International standard such as ITU, Indian Standard or an establish industry standard.  Kindly confirm that the integration responsibility and feature transparency requirement shall be a joint responsibility.	Also, please refer Chapter 17 of PS/Telecommunication Works.
299.	Part-2 / Section VI / Volume-4 / Clause No: 7.3.5.1  Administrative Telephone Network shall provide voice communication between OCC, Stations, Auto Location Huts, Interfacing IR Station, GSM-R Locations, TSS, SSPs, IMSD and Residential Quarters. Approximate requirements of Telephone Sets, which include Analogue Telephones as well as Digital Telephones, are as given in Table below:	The table provides the approximate Telephone requirement at different locations.  Kindly confirm if the overall quantity of Telephones will remain same while the distribution across locations may change during the design.	Provisions of Bidding Document are sufficiently clear.  Overall requirement of Administrative Telephones will be same as specified in the table of clause 7.3.5.1.
300.	Part-2 / Section VI / Volume-4 / Clause No: 7.3.5.13  The Administrative Telephone Network shall have the capacity of ringing up to minimum of three telephone sets connected in parallel.	Digital Telephones cannot be connected in parallel. Hence, kindly confirm if this requirement will only apply to Analog Telephones of the Administrative Telephone Network.	Bidder's understanding is correct. Please refer Addendum No. 7, S. No. 45.
301.	Part-2 / Section VI / Volume-4 / Clause No: 7.5.1.9  The extension line interface in the exchange equipment shall match the extension equipment as required and fulfil the following requirements: (1) Loop resistance of subscriber	Kindly note that this specification is applicable only to Analog Interface.  Therefore, we request you to modify the clause as "The Analog extension line interface in the exchange equipment shall match ....".	Please refer Addendum No. 7, S. No. 48.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	connected on physical cable pairs shall be limited to 1200Ohm. The minimum value of the leakage resistance of the line shall be 20 K Ohms;		
302.	<p>Part-2 / Section VI / Volume-4 / Clause No: 7.5.4.1</p> <p>The VRS shall provide recording of stipulated voice conversations over Telephone System and Mobile Train Radio Communication System. It shall be a digital system providing sufficient capacity for recording up to 4 weeks before being overwritten. The VRS shall comply with the requirements as given below.</p>	<p>We understand that the requirement of VRS for MTRC is covered in PS clause 8.3.17.</p> <p>Hence, we request you to amend the clause by removing "Mobile Train Radio Communication System" from this clause.</p>	Please refer Addendum No. 7, S. No.49.
303.	<p>Part-2 / Section VI / Volume-4 / Clause No: 7.5.4.11</p> <p>The VRS shall comply with the following specifications:  1 wow and flutter : &lt; 0.8% peak  2 frequency response : 300 to 3400 Hz within + 3 dB;  3 Signal to noise ratio : &gt; 42 dB;  4 Cross talk immunity : &gt; 60 dB at 1 KHz;  5 Distortion : &lt; 3%  6 Automatic gain control level : +3 dB in recording level for all input</p>	<p>We understand that these specifications pertain to Analog type of Recorders, especially those based on Tape. Herein, the VRS system is required to be a Digital system (PS Clause 7.5.4.1).</p> <p>Hence, we request you to suitably modify this clause for a digital recording system.</p>	Provisions of Bidding document shall prevail.
304.	<p>Part-2 / Section VI / Volume-4 / Clause No: 7.4.2.2</p> <p>The Contractor shall furnish for the following sub-systems/equipment, the</p>	<p>We understand that there is only single RDSO approved source for Control Communication Equipment and Emergency Control Communication Equipment.</p> <p>While, MTBF values are not available with the</p>	Provisions of Bidding document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	reliability figures, MTBF Hours from the OEMs. (11) Control Communication Equipment; and (12) Emergency Control Communication Equipment.	OEMs for these systems, OEMs have been awarded Part-1 supplier status by RDSO only after due diligence and ensuring high quality and durability in the actual field conditions.  Hence, we request you to kindly amend the clause suitably.	
305.	Part-2 / Section VI / Volume-4 / Clause No: 7.3.12.1  Emergency Control Communication which is an omnibus communication channel terminating at OCC with the Traction Power Controller shall be provided. This Emergency Control Communication shall not have selective calling facility. Emergency Control Communication shall have Emergency Sockets as per IR Standards for RE Areas at all the Automatic Signals to which this omnibus communication channel is terminated. The Portable Telephone of IR Standard for RE Areas, which will be carried by the crew, can be plugged in case of emergency.	Kindly clarify whether Portable Telephones to be carried by the crew are part of scope of supply of Emergency Control Communication equipment.	Supply of Portable Telephones to be carried by the crew is not in the scope of CP-105.
306.	Part-2 / Section VI / Volume-4 / Clause No: 7.3.8.3  After integration, functionality as mentioned in Clause 7.3.3 of this Particular Specification shall be available across Administrative Telephones provided under this Contract as well as under Contract Packages CP-104 and CP-203.	We are unable to find any functionality related to integration in the said Reference Clause 7.3.3.  Kindly clarify.	Provisions of Bidding Document are sufficiently clear.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
307.	<p>Part-2 / Section VI / Volume-4 / Clause No: 7.5.1.3</p> <p>PBXs to be supplied, installed and commissioned for Administrative Telephone Network at stations shall be equipped to, as a minimum and not limited to, the following:</p>	<p>Kindly confirm whether this clause is applicable for OCC only if a new PBX is being provided at OCC and If the existing PBX at OCC is being augmented, then the Clause 7.5.1.4 will be applicable.</p>	<p>Bidder's understanding is correct.</p>
308.	<p>Part-2 / Section VI / Volume-4 / Clause No: 9.5.4</p> <p>The Master Clock System shall be capable of working from 230 Volts +/- 10% AC 50 Hz Power Supply.</p>	<p>We understand that the Master Clock Unit and Sub-Master Clock Units will be deployed in the TERs and stable battery backed up -48V DC supply is available at TER.</p> <p>Therefore, DC may be permitted as a source for Master Clock System. Similarly, the Clocks may be powered by POE.</p> <p>Hence, we request you to permit these options.</p>	<p>Provisions of Bidding Document shall prevail.</p>
309.	<p>Part-2 / Section VI / Volume-4 / Clause No: 13.7.6</p> <p>Outdoor Signalling Cables and Outdoor Telecommunication Cables shall not be laid in same trench. If it is inescapable to lay Signalling Cables and Outdoor Telecommunication Cables in same trench, suitable separation shall be provided between the two as per the requirement of PS-Signalling Works, IRSEM and Indian Railway Telecommunication Manual and approved by the Engineer</p>	<p>Most of the time, separate trenches for Signaling and Telecom are not feasible due to lack of space availability. Hence, It is suggested that to maintain uniformity across project, the outdoor Signalling and Telecom Cables in same trench may be permitted at all locations.</p> <p>Kindly confirm.</p>	<p>Provisions of Bid Document shall prevail.</p>
310.	<p>General</p>	<p>We understand that wherever upgradation / augmentation / reconfiguration of existing system installed by other contractors is permitted as per</p>	<p>Please refer to Clause 14.1.3 of General Specifications of the Bidding Document.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		respective clauses in the PS telecom, provision of upgradation / augmentation / reconfiguration will be treated as equivalent of supply of the respective item. Kindly Clarify.	
311.	<p>Part-2, Vol-4, Cl: 3.1.2</p> <p>The System excluding battery cells shall be so designed as to have a minimum of 15 years of Service Life operating continuously. The life of Valve Regulated Lead Acid Battery Cells shall not be less than 7 years. Further, the life of all the cables including Optical Fibre Cables, Jelly Filled Telecom Quad Cable, Telephone Cables and RF Cables shall not be lower than 25 years and life of Radio Towers/Mast shall not be less than 40 years.</p>	<p>As mentioned in the clause, the VRLA Batteries shall have 7 years of Service Life which is more than the normal codal life of batteries. Many batteries such as VHF handset batteries, Laptop batteries or those inside CPUs may also have a life issue.</p> <p>Request you to kindly modify this clause appropriately.</p>	Provisions of Bidding Document shall prevail.
312.	<p>Part-2, Vol-4, Cl: 5.3.3.3</p> <p>The Second Network shall be formed by two 24 Fibre (minimum) OF cables, preferably one laid along the up-track and the other laid along the down-track ensuring route diversity, from New Khurja (point where OF cable under Contract Package CP-104 is being laid) to New Boraki to Dadri station of IR and terminated on ODFs in TERs at New Boraki station and Dadri station of IR, Auto Location Huts, GSM-R Locations, TSS, SSPs, IMSD, Staff Quarters and any other locations as required. Locations of termination of optical fibre cables of Second Network can be clubbed based upon design of</p>	<p>We understand that the OFC doesn't have to be terminated at all Staff Quarter locations and it may be terminated as per the actual requirement.</p> <p>Kindly confirm.</p>	Provisions of Bidding Document are sufficiently clear.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	other Systems/Sub- systems under this Contract while meeting overall Telecommunication Requirements		
313.	Part-2, Vol-4, Cl: 5.3.3.5  At least 25% of fibres within each cable shall be reserved as spares for future use.	We understand that except the 25% spare fibres as mentioned in the clause, there is no other restriction on using the remaining fibres in the cable as per the contract.  Please confirm.	Provisions of Bidding Document are sufficiently clear.
314.	Part-2, Vol-4, Cl: 5.3.5.9  Ethernet Connections for each application need to be implemented through Ethernet Virtual Private Line Service	Please confirm if the same can be done through EVPL/EPL/ELAN.	Being a design & build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.
315.	Part-2, Vol-4, Cl: 5.3.9.4  The NMS shall be equipped with spare ports for future additional Workstations and the ports shall allow remote connection through commercially available modems	Modern NMS are connected over TCP/IP network and hence additional ports are not required. Also, as a security measure it is not recommended to allow remote connection through modems. Hence request you to modify the clause appropriately.	Provisions of Bidding Document shall prevail.
316.	Part-2, Vol-4, Cl: 5.5.3.4  (5) The NMS shall support Q Interface conforming to ITU-T Rec.G.732, Q.811 & Q.812, Qecc. Interface as per ITU-T Rec.G.784 and F interface of V.24/V.28 type.	V.24/V.28 is very old technology for F interface. Hence request you to modify the clause accordingly.	Please refer Addendum No. 7, S. No. 40.
317.	Part-2, Vol-4, Cl: 5.5.4.2  It shall be possible to insert additional SDH Nodes into the OFC Network without affecting the performance of the	Kindly specify the maximum number of additional nodes which may be inserted into the OFC network.	Being a design & build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Network, limits on this, if any, shall be specified by the Contractor for review by the Engineer		
318.	Part-2, Vol-4, Cl: 6.3.7  Layer-3 Switches at New Boraki shall be equipped with additional 2 Nos. 10GigE Fibre Ports.	As per PS Clause 6.3.1, Layer 3 switch to be equipped with 4 no. 10G ports. Kindly confirm if any free ports from the above requirement be used against the requirement of additional 2 ports mentioned in clause 6.3.7.	Provisions of Bidding Document are sufficiently clear.
319.	Part-2, Vol-4, Cl: 6.3.18  Security features such as Authentication, Authorization & Accounting (AAA), Secure Shell Protocol (SSH), MAC Limiting per Ethernet Flow-point, Unicast/ Multicast/ Broadcast Storm Control Blocking, Layer-2 ACL, Layer-3 ACLs for IPv4 & IPv6 and DHCP Snooping shall be available on the WAN.	We understand that the CP-105 DNS will be integrated with existing AAA and Firewall at OCC.  Kindly confirm.	Provisions of Bidding Document are sufficiently clear.
320.	Part-2, Vol-4, Cl: 7.3.5.6  The Administrative Telephone Network shall provide feature transparency across all the PBXs. The following PBX features shall be provided:	We understand that feature transparency across different technologies may be restricted by International Protocols.  Kindly confirm.	Provisions of Bidding Document are sufficiently clear and shall prevail.
321.	Part-2, Vol-4, Cl: 7.3.7.2  The Direct Line Telephone Network shall be built using PBXs at OCC and New Boraki Station. However, PBXs shall have separate extension/line interface cards and separate trunk interface cards to make Direct Line Telephone Network	Extension / Line interface cards have individual circuits for each line and therefore do not increase blocking. Hence, it is advisable to distribute critical circuits across multiple cards instead of keeping them on different cards. We request you to kindly modify this clause appropriately.	Provisions of Bidding document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	more reliable and non-blocking.		
322.	Part-2, Vol-4, Cl: 7.5.6.3 Multi-core cables shall be provided and connected from the distribution frames inside TER to the distribution frames at the MDF for connection between the PBX and the trunk circuits of PSTN. The interface between the Telephone system and the PSTN circuits shall be at the MDF	We understand that the PSTN connection up to MDF of EDFC station will be provided by EDFC.  Kindly confirm.	Only PSTN connection shall be provided by the Employer.
323.	Part-2, Vol-4, Cl: 9.5.3.8  The Slave Clocks shall be manufactured to be used in non-air-conditioned environment with high humidity exposure	Kindly Define High Humidity.	Please refer to Clause 2.17 of General Specifications of Bidding Document for climatic conditions of the locations where Slave Clocks are to be installed.
324.	Part-2, Vol-4, Cl: 10.1.1.4  48 V DC Battery Backup System under Chapter-11 shall be used as a Power Source for these 25 Watt VHF sets.	AS per RDSO standard, it requires the VHF system to be powered from AC power. We understand that the same shall prevail in this case. Kindly confirm.	Provisions of Bidding document shall prevail.
325.	Part-2, Vol-4, Cl: 11.3.1.2  The IP Fixed Video Cameras shall be strategically placed to ensure 100% coverage of Main Entrances Gate, Incoming Bay Area, Outgoing Bay Area, Transformer Area & Power Supply Control Room Building Area of TSS.	We understand that the "Power Supply Control Room Building Area" mentioned in the specified clause implies to the coverage of external area of the building only.  Kindly confirm.	Provisions of Bidding Document are sufficiently clear. Coverage shall include inside of Power Supply Control room building area of TSS.
326.	Part-2, Vol-4, Cl: 11.5.1.4  All equipment of Video Surveillance System shall work from 180 to 270 V 50 ±3% Hz AC single phase supply from UPS. Appropriate AC Supply	Kindly confirm if Cameras with PoE feed or AC to DC feed maybe permitted.	Provisions of Bidding Document are sufficiently clear and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Distribution Cubicles/Racks complying to IP54 with 20% spare capacity shall be provided for this. Equipment shall be capable of withstanding ripple of 2%		
327.	Part-2, Vol-4, Cl: 11.5.2.1.2  Fixed Box Type IP Video Cameras shall operate on 180 to 270 V AC voltage as required as per the design and implementation.	Kindly confirm that PoE shall be permitted for powering the Fixed Box Cameras.	Provisions of Bidding Document are sufficiently clear. Also Refer clause 11.5.2.1.1(16)
328.	Part-2, Vol-4, Cl: 11.5.2.2.2  LED Backlit Colour Monitors shall have following minimum specifications: 4: Video I/P: S-Video, Video/Composite Video, PC Analogue Input (RGB, D-Sub), HDMI, SVGA, VGA	Many of these inputs are no more available in the new generation monitors. The supported Video interface is HDMI or DVI. Video I/P shall be as required for system working instead of all of these. Kindly confirm.	Please refer Addendum No. 7, S. No. 51.
329.	Part-2, Vol-4, Cl: 11.5.2.6.5  Layer-2 Switches shall have console port with a RS-232 Interface for configuration and diagnostics purposes.	We request for allowing RS232 / RJ45 / USB based console interface.	Please refer Addendum No. 7, S. No.52.
330.	Part-2, Vol-4, Cl: 12.3.5  All Battery Cells shall be of the Valve Regulated Lead Acid Maintenance Free type to RDSO specifications IRS S93-96 with Latest Amendments for capacities up to and including 500 AH and to TEC Specifications No.GR/BAT-01/03 March 2004 with Latest Amendments for capacities beyond 500 AH. The life of these Battery Cells shall not be less than 7 years	As mentioned in the clause, the life of Batteries shall be minimum 7 years which is more than the normal codal life of batteries.  Request you to kindly modify this clause appropriately.	Provisions of Bidding document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
331.	<p>Part-2, Vol-4, Cl: 13.3.3</p> <p>Telecommunication Equipment Room/Telecom Power Supply Equipment Room at Auto Location Huts, Interfacing IR Stations, GSM-R Locations, TSS, SSPs and any other location as required shall be constructed by Contractor. These rooms shall be preferably be co-located with the Signaling Equipment Room/Signaling Power Supply Equipment Room. At these co-located locations a common S&amp;T Power Supply Equipment Room for housing Signaling Power Supply Equipment as well as Telecom Power Supply Equipment shall be provided with the approval of the Engineer.</p>	<p>We understand that If the requirement of telephone at Interfacing IR stations is being fulfilled through PIJF cable from nearest station, there is no requirement to construction / setup a TER and TP SER at Interfacing IR stations.</p> <p>Kindly confirm.</p>	<p>Being design &amp; build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.</p>
332.	<p>Part-2, Vol-4, Cl: 13.7.31</p> <p>(2) The Duct shall be bright Yellow in color. The Duct shall be supplied in length of 1000+/- 100 meters.</p>	<p>Please confirm whether duct of different Color Stripes shall be allowed or not.</p>	<p>Provisions of Bidding document shall prevail.</p>
333.	<p>General</p>	<p>Kindly confirm if one V-type traction transformer fails in one TSS, can we use the second transformer to provide power to the feeding zone between two SPs as per sound design practice used on 2x25 kV electrification projects overseas?</p> <p>We understand that this is better than extending the feeding zone from an adjacent TSS since train performance will be reduced as per EN 50388.</p>	<p>The provisions in the Bidding Document are self-explanatory and shall prevail.</p>
334.	<p>General</p>	<p>Kindly confirm if one V-type traction transformer fails in one TSS, can we use the OFAF rating of</p>	<p>The provisions in the Bidding Document are self-explanatory and</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		the second transformer in the same TSS (or the OFAF rating of one transformer in the adjacent TSS) to provide power to the corresponding feeding zone on a <u>continuous</u> basis?	shall prevail.
335.	General	Kindly confirm whether bidder can provide two V-type traction transformers <u>in all TSS</u> with sufficient "spare capacity" to provide power to the corresponding feeding zone under outage conditions of one transformer in the same TSS or outage of an entire TSS? If this is acceptable, we can offer to use the ONAF rating of the transformer in lieu of the OFAF rating. We believe that this solution is better than providing 3 transformers in alternate TSS, since DFCC will not benefit from the spare transformer in case of outage of one transformer in the adjacent TSS where only 2 transformers are provided? We note that the philosophy adopted on all 2x25 kV electrical projects overseas is to provide two traction transformers with sufficient spare capacity at all TSS.	The provisions in the Bidding Document are self-explanatory and shall prevail.
336.	Part 2 / Section VI / Volume 4 / Particular Specification / Telecommunication Works / Clause 8.5.3.4 & 8.5.3.5  8.5.3.4 The coverage level for a radio is defined as minimum field strength of downlink available at 4 metre above ground for at least 95% of the time over 95% of the area. The section of Indian Railways is being provided with minimum coverage level of -95 dbm above Railway Track.	We understand that the requirement of "coverage level of -78 dbm in outdoor terrain" as mentioned in the referred clause is only for the Detour Section & no modification/addition is required in the existing Indian Railway GSM-R system for the section where the CP-304 track is running parallel with a coverage level of -95 dbm above Railway Track (4 metre above ground for at least 95% of the time over 95% of the area). Kindly confirm.	This query do not belong to this contract. The provisions of the Bidding Document are self – explanatory and shall prevail.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	8.5.3.5 The coverage level shall be designed to provide satisfactory indoor and outdoor coverage in detour section for an operational radio and general purpose radio for all areas as specified, including indoor areas for which an extra margin shall be considered. Accordingly minimum coverage level of -78 dbm in outdoor terrain shall be available.		
337.	<p><b>Part – 1, Section II Bid Data Sheet ITB 30.2</b></p> <p>Foreign currency requirements shall be indicated only in respect of those goods and services which the bidder expects to procure from offshore</p>	Kindly confirm if payment can be made for such foreign currencies against sight irrevocable Letter of Credit as standard practice	<p>The Payments will be made as per payment procedure after achieving the stage identified in Price Schedules provided in Section IV of the Part – 1 of the Bidding Document.</p> <p>The Bidder may please note that no payment shall be made against the Letter of Credit.</p>
338.	<p><b>Part – 1, Section II Bid Data Sheet ITB 30.1</b></p> <p>The prices shall be quoted by the Bidder entirely in Indian Rupees (the name of the currency of Employer's country) and further referred to as "the local currency". A Bidder expecting to incur expenditures in other currencies for inputs to the Works... The rates of exchange as mentioned above shall apply for all payments under the Contract so that no exchange risk will be borne by the successful bidder.</p>	We seek clarity on the number of days (time) between the date of invoice to date of receipt of payment for all non LC payments.	Please refer to the reply of Query No. 337 which clarifies the issue.
339.	<b>Part – 1, Section IV Bidding Forms Price Schedule 2.0</b>	We request DFCCIL to keep the Permitted percentage range of contract price per cost	Request not accepted. The provisions of the Bidding Document

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Apportionment of Contract Price for Payments According to Cost Centres	centres & sub-cost centres to be kept flexible to make the offer competitive.	shall prevail.
340.	<b>Part – 1, Section IV</b> Bidding Forms Price Schedule 2.0 to 2.3	We request DFCCIL to share with us the Excel soft copy versions of the price schedules	Request not accepted.
341.	<b>Part – 1, Section IV.</b> Bidding Forms PRICE SCHEDULE 2.2 & 2.3  As per given clause, supply portion is around 65%-75% of these cost centres & payment of supply will be made against delivery of material at site, thus impacting cash flow adversely.	We would request you to please amend payment for supply as below: Supply of Material- FAT/Dispatch- 40% Supply of Material- Receipt at site- 40% Erection- 15% System Acceptance- 5% This will lead to improvement in negative aspect of cash flow & same is widely accepted in industry	Request not accepted. The provisions of the Bidding Document shall prevail.
342.	Part 1, Chapter 3, Clause 3.15.2  <b>Access to Site</b> The Contractor will be given access to the Site in accordance with the Contract. The Contractor shall manage the execution within allocated Right of Way (ROW). The Contractor shall coordinate with contractor of package CP-302 for the	Please provide Clear Access Dates, 1. Chainage wise access of Embankment, Track etc 2. Access dates for Level crossing area etc 3. Access for Station building, IMD, IMSD etc  Detail Civil Planning for work completion, as this contract will be dependent on Civil contractor work front provision.	Please refer Addendum No. 7, S. No.61.
343.	Part 2 volume 2 Clause No 6.4.6  Lightning arrestors shall be provided with leakage current monitor and surge counters for monitoring.	Please confirm that Leakage current and Surge Counts will be monitored locally not in SCADA.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
344.	Part 2 volume 2 Clause No <b>10.1.4</b>  (g) Work stations (for Dadri – Khurja	Please Clarify number of Operator in OCC.	Please refer Item no. 1, Table no. 18.4.2(A) of Vol-2, part-2 of the Bidding Document

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	section)at OCC,		The Provisions of the Bidding Document shall prevail.
345.	Part 2 volume 2 Clause No 10.1.4  (q) The SCADA system shall interface with Asset Management and Maintenance Planning System at OCC for acquiring real time fault details and equipment operation count.	Who will provide Asset Management and Maintenance Planning System.  Please clarify.	The provisions of the Bidding Document are self – explanatory and shall prevail.
346.	Part 2 volume 2 Clause No 10.5.1  LA on Secondary end and primary side need to be monitored	Please confirm that Leakage current and Surge count will be monitored locally not in SCADA.	Table 10.5.1 indicates signals for remote monitoring in SCADA.  However, Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.
347.	Part 2 volume 2 Clause No 10.5.1  Current and Potential Transformer need to be monitor	Please confirm that From CT and PT current and Voltage will be monitored in SCADA	Table 10.5.1 indicates signals for remote monitoring in SCADA.  However, Being a design & build contract General/Functional/Performance requirements have been specified. The detailed design is in the scope of the contractor.
348.	Part 2 volume 2 Clause No 10.8.1  (3) The SCADA system shall have levels of redundancy in its equipment and configuration as necessary to meet the System Performance requirements.	Please clarify the levels of redundancy. Processing cards / communication cards, Power supply cards will be redundant. Please clarify IO card redundancy is required?	Please refer Sub clause 10.2.1 (a), Vol-2, Part-2 of the Bidding Document for adequate redundancy in system.  Please also refer Sub clause 10.2.1(j), 10.7.1(a), 10.8.1(4 to 6), 10.10.2(47).

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
349.	Part 2 volume 2 Clause No 10.8.1  (4) As a minimum, the central servers shall have dual redundancy with one set of servers located at the OCC equipment room interconnected with multiple redundant and spatially diverse data communication links.	Redundant FEP server, SCADA server and web server will be provided. Please clarify the central servers with dual redundancy.	Please refer reply to query at S. N. 348.
350.	Part 2 volume 2 Clause No 10.10.1  (2) The software shall fully support data transfers between RTU & OCC as defined by different IEC 60870-5-104 series of standards;	As per our understanding The SCADA system shall support data transfers between RTU & OCC as defined by different IEC 60870-5-104/OPC UA series of standards;  Please confirm our understanding.	As per tender requirement data transfer between RTU & OCC is envisaged using IEC 60870-5-104 protocol.  The Provisions of the Bidding Document are self – explanatory and shall prevail.
351.	Part 2 volume 2 Clause No 10.10.2 (38)(4)  The RTU shall be capable of communicating over IEC60870-5-104 with Control Center, IEC 61850 for interface with Relays, BCU, IEDs; IEC 60870-5-103 for interface with protection equipment; Modbus protocol for communication with Energy and Multifunction meters on Ethernet communication with Intruder Detection system and Access Control System.	Please clarify the sentence “The RTU shall be capable of communicating over IEC60870-5-104 with Control Center” or over IEC60870-5-104/OPC UA	Please refer reply to query at S.N. 350.
352.	Part 2 Volume 5 Clause No 10.2.1 (3)  (3) Dedicated Work Stations / MMI terminals at OCC, Station and IMSD	Clarify number of Operator for Auxiliary SCADA in OCC?	Please refer Item no. 1, Table no. 18.4.2(A) of Vol-2, part-2 of the Bidding Document

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
			Please also refer Addendum No. 7, S. No. 67.
353.	Part 2 Volume 5 Clause No 10.2.1 (12) The Auxiliary SCADA system shall be full Hot Standby redundant system	Please clarify the full Hot standby redundant system. Redundancy will be provided in server level, Processing card level, Power supply card level. Please clarify IO card redundancy is required.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
354.	Drg No GC/DFCCC/TR/SCADA/701 Web Server and Training Simulator connected to Auxiliary SCADA. In 10.10.2 (31) (f) The simulator shall not be connected to any RTU (Other than a test RTU) or any other field equipment.	Please confirm that Training simulator shall not be connected to any field equipment.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
355.	Drg No GC/DFCCC/TR/SCADA/702 For IMSD only workstation is shown,	Remote I/o is missing in drawing. Please provide that.	Please refer Addendum No. 7, S. No. 67.
356.	Part 2, Employer's Requirements Section VI, Volume 1 General Specifications / 2.17.6 (1) Class B1: Equipment Rooms with air-conditioning with possibility of failure of air-conditioning for duration of 2 hours or more at a time.	Please specify the upper limit on duration of failure of air-conditioning equipment.	Provisions of Bidding document are sufficiently clear.
357.	Part 2, Employer's Requirements Section VI, Volume 1 General Specifications / 2.17.6 (2)  (a) Requirements for Class A: Temperature Min 5°C to Max 35°C, Humidity Minimum 0%, Nominal 65%, Maximum 95% (Non Condensing)	Typically Telecom and IT infrastructure rooms are air-conditioned such that humidity is well maintained much below the specified 95%. IT equipment being installed in Equipment room typically supports 80% humidity. Hence, 95% Humidity limit clause may be reduced to 80% non-condensing and also Most of the OEM's do not meet the Minimum Relative Humidity of 0% of Class A, Kindly amend the range accordingly.	Provisions of Bidding document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
358.	<p>Part 2, Employer's Requirements Section VI, Volume 1 General Specifications / 2.17.6 (2)</p> <p>(b) Requirements for Class B: Temperature Min -2.5°C to Max 45°C, Humidity Maximum 100% (Non Condensing)</p>	<p>Class B1 is defined as Air-conditioned Telecom Equipment Room. Hence, Humidity in the equipment room is well controlled. In addition, none of the Telecom and Switching equipment meant for deployment in Indoor Telecom Equipment Room support 100% Humidity (meant for Outdoor or Buried environment – Class-C and Class-D respectively). Hence, the Maximum Humidity requirement may be reduced to 90% Non-Condensing for Air-conditioned rooms.</p>	<p>Provisions of Bidding document shall prevail.</p>
359.	<p>Part 2, Employer's Requirements Section VI, Volume 1 General Specifications / 8.4.14</p> <p>All the equipment shall be installed in accordance with OEM's installation checklist. A certificate shall also be required to be issued that the installation has been done in accordance with the Installation checklist and Earthing and surge protection arrangements are in accordance with latest RDSO specification. The equipment shall not be commissioned unless such a certificate has been issued.</p>	<p>We understand that this clause is not applicable for Telecom Subsystem installation as the equipment used in Telecom are COTS products. Please confirm.</p>	<p>Provisions of Bidding document shall prevail.</p>
360.	<p>Part 2, Employer's Requirements Section VI, Volume 1 General Specifications / 13.1 (4)</p> <p>(4) The training instructors, for training courses, shall be qualified, competent, with sufficient years of practical experience and possess good communication skills in the relevant</p>	<p>Telecom Subsystem Training material are prepared in English language only, please amend the clause.</p>	<p>Provisions of Bidding document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	fields. The training shall be in the English and Hindi languages as required. All training material for these courses shall be in English and Hindi.		
361.	<p>Part 2, Employer's Requirements Section VI, Volume 1 General Specifications / 14.3.1 (2)</p> <p>(2) The Contractor shall deploy adequate, committed and competent resources for providing desired level Support and Call-out-services. As a minimum, the expert of each sub-system shall be provided by the contractor at every IMD/IMSD location. All the resources shall be trained before deployment.</p>	<p>We understand that Support based on call-out – services is required only and for that required team will be deployed. Please confirm.</p>	<p>Provisions of Bidding document are sufficiently clear and shall prevail.</p>
362.	<p>Part 2, Employer's Requirements Section VI, Volume 1 General Specifications / 14.5.2 (3)</p> <p>(3) The Operating/User Manuals and Maintenance Manuals of Systems/Sub Systems suitable for use at technician level, shall be prepared in both English and Hindi languages unless otherwise instructed by the Engineer.</p>	<p>Telecom Subsystem Operating / User Manuals and Maintenance Manuals are provided only in English language, please amend the clause.</p>	<p>Provisions of Bidding document shall prevail.</p>
363.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 3.1.2</p> <p>The System excluding battery cells shall be so designed as to have a minimum of 15 years of Service Life operating continuously. The life of Valve</p>	<p>Services Life of Battery cells for 7 years is not a commercially available product. Also please confirm whether Service Life indicates Service support?</p>	<p>Provisions of Bidding document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Regulated Lead Acid Battery Cells shall not be less than 7 years. Further, the life of all the cables including Optical Fibre Cables, Jelly Filled Telecom Quad Cable, Telephone Cables and RF Cables shall not be lower than 25 years and life of Radio Towers/Mast shall not be less than 40 years.		
364.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 3.1.6</p> <p>Wherever the equipment being provided under Contract Packages CP-104 &amp; CP-203 for EDFC is being upgraded / augmented / reconfigured, the service life of these Upgraded / augmented / reconfigured equipment shall be minimum 15 years from date of commissioning of this up gradation / augmentation / reconfiguration.</p>	We understand that clause related to service life is applicable only for upgraded/augment Hardware part or Software only and not applicable for whole equipment. Please confirm.	Provisions of Bidding document shall prevail.
365.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 4.5.1</p> <p>(2) The offered equipment shall be field proven with past history of successful performance in railway environment. (3) All equipment shall be designed and constructed to operate without degradation in quality, performance or loss of function in the electromagnetic environment prevalent in a standard Heavy Freight Corridor Railway System.</p>	All the considered Telecom Equipment's may not have the past history of installation in railway environment but they will meet all the performance and RAMS requirement. Please share your concurrence.	Provisions of Bidding document shall prevail.
366.	Part 2, Employer's Requirements	Typically Telecom Switching equipment is	Provisions of Bidding Document shall



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Section VI, Volume 4 Telecommunication Works / 4.6.2</p> <p>Unless otherwise specified, all indoor Telecommunication Equipment installations shall be designed for operation continuously in environmental temperature range of -5°C to +55°C.</p>	<p>installed in air-conditioned environment and supported temperature rating is from 0 to +40°C. IT equipment (Servers etc.) requires even more stringent +35°C. Hence getting all telecom equipment to support -5°C to +55°C is not practically feasible. This requirement may be restricted to only Outdoor installed equipment. Please confirm</p>	<p>prevail. Also refer clause 4.6.3 of PS Telecommunication works.</p>
367.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.3.2</p> <p>This First Network from New Boraki to New Dadri (WDFC) shall be integrated with First Network of WDFC being provided under Contract Package CTP-14. The Contractor shall lay 48 Fibre OF Cables one each along UP &amp; DN tracks from TER at New Boraki station upto the point where tracks of EDFC &amp; WDFC join. These 48 Fibres OF Cables of WDFC &amp; EDFC shall be spliced and made through between TERs at New Dadri and New Boraki Stations. The splicing shall be done by the Contractor. These OF Cables shall be terminated in ODF/FMS at the respective station TERs and jointly tested by the CTP-14 and CP-105 Contractors.</p>	<p>Kindly specify the scope of supply and installation of ODF/FSM at CP14 will fall, under which contractor.</p>	<p>The provisions of the Bidding Document are sufficiently clear. Also refer clause 17.3.3. of PS Telecommunication works.</p>
368.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.3.3</p> <p>The Second Network shall be formed by two 24 Fibre (minimum) OF cables,</p>	<p>Please clarify in the secondary network, TSS/SSP location can be connected by linear architecture or separate OFC needs to be considered</p>	<p>Provisions of bidding documents are sufficiently clear and shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>preferably one laid along the up-track and the other laid along the down-track ensuring route diversity, from New Khurja (point where OF cable under Contract Package CP-104 is being laid) to New Boraki to Dadri station of IR and terminated on ODFs in TERs at New Boraki station and Dadri station of IR, Auto Location Huts, GSM-R Locations, TSS, SSPs, IMSD, Staff Quarters and any other locations as required. Locations of termination of optical fibre cables of Second Network can be clubbed based upon design of other Systems/Subsystems under this Contract while meeting overall Telecommunication Requirements.</p>		
369.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.3.10</p> <p>Optical Fibre Cable shall also be laid from SER/TER of Stations/Auto Location Huts to Field Units/Track Devices of Track Vacancy Detection System, as required, to meet the requirements of Particular Specifications-Signalling Works.</p>	<p>Please clarify the number of OFC core to be provided or is it up-to the system design requirement</p>	<p>Being a design &amp; build contract, the Bidder/Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.</p>
370.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.4.3</p> <p>The Second Network shall carry all Voice (including Emergency Communication) and Data (including</p>	<p>Please clarify, do we need to provide SDH at all location or can it be provided based on the design requirement?</p>	<p>Being a design &amp; build contract, the Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Traction Power SCADA and Auxiliary SCADA) Communication between New Boraki Station, Auto Location Huts, Interfacing IR Stations, GSM-R Locations, TSS, SSPs, IMSD, and Staff Quarters etc.		
371.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.4.3</p> <p>The Second Network shall also carry all Signal Control Information, Track Vacancy Detection Information and other Vital &amp; Safety Related Information between New Boraki Station, New Khurja Station, Auto Location Huts, and Interfacing IR Station. All Vital &amp; Safety Related System using OFC System shall be implemented as per EN-50159.</p>	Please clarify whether Signalling Traffic are to be carried over SDH or fibre.	Being a design & build contract, the Contractor has to propose his own design and equipment based on requirements given in the Bidding Document. Also, please refer to Para 6.3.2(9) of PS (Signalling), Vol. 3, Part 2.
372.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.5.6</p> <p>Flexible Access Multiplexer or Primary Order Multiplexer shall have minimum 50% spares for all types of Channel Circuits (Minimum 1 for all types of Channel Circuits).</p>	Please clarify what is the meaning of 50% spares for all types of channels – Is the contractor required to provide 50% spare channels between nodes at the backhaul link?	The Bidder/Contractor is required to provide 50% spare channels between Nodes.
373.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.9.3</p> <p>NMS Workstation shall be installed at the OCC in TER (or any other location</p>	Do we need to Upgrade the NMS servers or Work stations? Also provide the Model/Make of supplier provided under Contract Package CP-104.	Provisions of bidding documents are sufficiently clear. The information shall be obtained by the successful bidder. Also, please refer Chapter 17 of PS/Telecommunication Works.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	as decided by the Engineer) for the operation of the NMS. If feasible, NMS being provided under Contract Package CP-104 shall be upgraded to meet the requirement under this Contract.		
374.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.9.13 (2)</p> <p>The NMS shall allow the user to configure all existing and new circuits with the following functions:</p> <ul style="list-style-type: none"> <li>(a) frame position allocation;</li> <li>(b) interface port allocation;</li> <li>(c) low speed (64 kbit/s &amp; lower) interface cards configuration;</li> <li>(d) lower order multiplex time slot allocation and routing;</li> <li>(e) higher order multiplex/cross-connect switch configuration;</li> <li>(f) logging of circuit routing data logged into configuration database; and</li> <li>(g) Operators configuration checks function prior to main and backup database update.</li> </ul>	Most of these features correspond to NMS of SDH equipment. Do all of these configurations also apply to NMS of Flexible Access Multiplexer?	Only applicable functions shall be used for Flexible Access multiplexer while designing the Telecom System.
375.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.4.2.2 (3)</p> <p>The Contractor shall furnish for the following sub-systems/equipment, the reliability figures, MTBF Hours from the OEMs:</p> <ul style="list-style-type: none"> <li>(1) SDH Node Equipment</li> <li>(2) Flexible Access Multiplexer or Primary Order Multiplexer</li> </ul>	NMS Workstation MTBF may not be available for calculation and it is understood that we need to do Reliability for NMS Server level only. Please confirm.	Provisions of Bidding document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	(3) Network Management System		
376.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.4.4.2</p> <p>The service life of the OFC System (equipment) shall not be less than 15 years. Service life of all types of cables shall not be less than 25 years.</p>	<p>Service life of 15 years for the COTS product is not feasible by most of the OEM. It is understood that equivalent models with same functionality can be considered during 15 years' service life. Please confirm.</p>	<p>Provisions of Bidding document shall prevail.</p>
377.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.5.3.3 (1)</p> <p>(1) Flexible Access Multiplex Equipment shall conform to ITU-T Rec. G.703, G.704, G.706, G.707, G.708, G.709, G.711, G.732 and G.823.</p>	<p>Please note that the following standards: ITU-TG.707, ITU-T G.708 and ITU-T G.709 are applicable to SDH equipment. Hence, they may be removed as requirements from Flexible Access Multiplex Equipment.</p>	<p>Only applicable standards shall be used for Flexible Access multiplexer while designing the Telecom System.</p>
378.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.5.3.3 (5)</p> <p>(5) Flexible Access Multiplex Equipment shall have in-built feature to provide details of performance data like AS, ES, SES, DM, etc. via NMS or via Laptop Service Terminal.</p>	<p>All the Performance parameter shall not be applicable; it will be based on the OEM specifications. Kindly consider.</p>	<p>Provisions of Bidding document shall prevail.</p>
379.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.5.3.3 (6)</p> <p>Adequate numbers of Primary Multiplexers shall be provided so that there is no loss of Communication at</p>	<p>Normally, loss of communication is prevented by building Controller card and Power supply redundancy in the equipment. Please clarify how "Adequate number of Primary Multiplexers" shall be computed.</p>	<p>Being a design &amp; build contract, the Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	any point of time.		
380.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.5.3.3 (7)</p> <p>(7) Flexible access multiplexer equipment shall be provided with 1+1 protection for all channel levels (VF, Data, etc.) with automatic switch over in case of fault.</p>	<p>Please confirm that "1+1 protection for all channel level (VF, Data, etc.) with Automatic Switchover" corresponds to SNCP equivalent functionality at the E1 backhaul link.</p>	<p>Provisions of Bidding Document are sufficiently clear.</p>
381.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.5.3.3 (8)</p> <p>(8) The optical line interfaces shall conform to ITU-T Rec. G.957.</p>	<p>The Flexible Access Multiplexer is required to interface with SDH equipment at E1 level (Electrical interface). Similarly, it is required to provide sub-2Mbps interfaces (Voice interfaces, RS232, etc.). All of these are Electrical interfaces. Hence, there is no requirement for Optical Interfaces and requirement for ITU-T G.957 is not relevant. Please clarify under what circumstances, this standard will be applicable for Flexible Access Multiplexer.</p>	<p>Only applicable standards shall be used for Flexible Access multiplexer while designing the Telecom System.</p>
382.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 6.1.2</p> <p>The Wide Area Network (WAN) shall provide sufficient bandwidth to cater for the Packet Data Communications requirements of various Sub-systems under this Contract as well as outside this Contract. This Wide Area Network (WAN) shall also provide sufficient bandwidth to cater for the Packet Data Communications requirements of Khurja – Dadri section of EDFC for other applications such as Freight Operation</p>	<p>Please share the location of the servers for Freight Operation Information System (FOIS), Crew Management System (CMS) and Wagon Management System (WMS)</p>	<p>Details will be provided by the Engineer during Design stage.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Information System (FOIS), Crew Management System (CMS) and Wagon Management System (WMS).		
383.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 6.1.6</p> <p>Wide Area Network (WAN) shall be integrated with Wide Area Network (WAN) provided under Contract Packages CP-104 &amp; CP-203 of EDFC and Wide Area Network provided under Contract Packages STP-5, STP-17 and CTP-14 of WDFC to meet the requirement of this Particular Specification.</p>	Kindly share the product make/model for Contract Packages CP-104 & CP-203 of EDFC and Wide Area Network provided under Contract Packages STP-5, STP-17 and CTP-14 of WDFC	The information/details may be obtained by the successful bidder. Also, please refer Chapter 17 of PS/Telecommunication Works.
384.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 6.4.3.3</p> <p>To improve the availability of Data Networking System various measure such as Resilient Ethernet Protocol, Pseudo wire Redundancy, Link Aggregation (IEEE 802.3ad) on Network/Access Ports, Rapid Spanning Tree Protocol (IEEE 802.1w), Multiple Spanning Tree Protocol (IEEE 802.1s), MPLS-TE Fast Reroute etc. as required shall be implemented.</p>	Resilient Ethernet Protocol is CISCO proprietary protocol and is not an open standard protocol. Hence this requirement is in conflict with requirement mentioned in Clause 4.1.2 (2). Please clarify.	Please refer Addendum No. 7, S. No. 41.
385.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 6.5.1.3</p> <p>Layer-3 Switches shall be capable of</p>	Most of the OEMs are not support for DC supply of -40 to -54V range. Kindly revise the parameter to -42 to -54V	Provisions of Bidding document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	working with DC Power Supply with range of -40 to -54V. Power Supply Module shall be redundant and inbuilt in the switch.		
386.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 6.8.3</p> <p>The Work Station for NMS at OCC shall include high quality colour printing facilities for report generation.</p>	Additional printer for CP105 at OCC is requested for NMS? Please confirm	Provisions of Bidding document are sufficiently clear and shall prevail.
387.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.5.1</p> <p>Administrative Telephone Network shall provide voice communication between OCC, Stations, Auto Location Huts, Interfacing IR Station, GSM-R Locations, TSS, SSPs, IMSD and Residential Quarters. Approximate requirements of Telephone Sets, which include Analogue Telephones as well as Digital Telephones, are as given in Table below:</p>	Please provide the distance of residential Quarters, from nearest Station to estimate the Cable BOQ.	Please refer Part 4 of the Bid Document.
388.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.7.8 (1)</p> <p>(1) Direct Line Telephone shall be provided in the other locations such as IR Sectional Control Centre, Interfacing Station Master Room of IR, Crew Control</p>	Please provide the location of Crew control room, Depot Control Rooms, Important Civil Engineering Maintenance & Work related Locations.	Details will be provided by the Engineer during Design stage.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Rooms, Depot Control Rooms, Switching/Feeding Posts, TPC Maintenance Staff Rooms, Important Civil Engineering Maintenance &amp; Work related Locations and Important S&amp;T Maintenance &amp; Work related Locations etc., to meet communication requirement as mentioned in Clause 7.3.7.1 above.</p>		
389.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.8.8</p> <p>If integration at OCC is done by providing new PBX, Telephony Server, Media Gateway and associated equipment at OCC:</p>	<p>To estimate the BOQ for integrating newly provided equipment/servers with existing one or to upgrade existing system, please provide Technical Specification, Protocol and technology used for PBX, Telephony Server, Media Gateway, IP Video Phones used under CP-104, CP-304 and CP-203 will be required. Please share the same.</p>	<p>The information/details may be obtained by the successful bidder.</p> <p>Also refer Clause ITB-7.2 of the Bidding Document. Also, please refer Chapter 17 of PS/Telecommunication Works.</p>
390.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.8.9 (2)</p> <p>(2) The Contractor shall be responsible and liable for upgraded PBX, Telephony Server, Media Gateway, Telephone NMS and other associated equipment during Defect Notification Period and during Service Life.</p>	<p>We understand that liability during Defect Notification period shall be limited to upgraded part only and not for the complete equipment. Please confirm.</p>	<p>Please refer to Clause 14.1 of General Specification of the Bidding Document.</p>
391.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.9.2</p> <p>A centralised Voice Recording System</p>	<p>To analyse the up-gradation /augmentation requirement, please provide technical detail/specification of existing equipment/servers provided under VRS.</p>	<p>The information/details may be obtained by the successful bidder. Also, please refer Chapter 17 of PS/Telecommunication Works.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	(VRS) is being provided at OCC, to record telephone conversations of all controllers at OCC and Stations of EDFC Phase-1, under Contract Package CP-104. If feasible, Contractor may upgrade / augment / reconfigure this VRS provided under Contract Package CP-104 to meet the requirements of this Particular Specifications.		
392.	Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.10.1  A Network Management System with a workstation, system database, logging printers and mass storage devices shall be provided at the designated place as decided by the Engineer. If feasible, Contractor may upgrade/augment/reconfigure Network Management System provided under Contract Package CP-104 to meet the requirements of this Particular Specifications.	Additional printer for CP105 at OCC is requested for NMS? Please confirm.  Kindly share the product make/model for the existing Network Management System	Provisions of Bidding Document are sufficiently clear. The information/details may be obtained by the successful bidder. Also, please refer Chapter 17 of PS/Telecommunication Works.
393.	Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.5.4.1  The VRS shall provide recording of stipulated voice conversations over Telephone System and Mobile Train Radio Communication System.	We understand VRS system for GSM-R package is independent of other packages. This is applicable on the all packages CP-104, CP-105, CP-203 & CP-304. Kindly confirm	Please refer Addendum No. 7, S. No. 49.
394.	Part 2, Employer's Requirements	Please provide the BSS locations / co-ordinates	Being a design & build contract, the

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Section VI, Volume 4 Telecommunication Works / 8.2.2</p> <p>However in sections, where track alignment of Dadri-Khurja Section of EDFC is taking a detour (Including Link Lines) and cannot be served by Base Station Sub-system (BSS) of IR, BSSs of DFCCIL shall be provided by the Contractor.</p>	<p>for the CP105 section.</p>	<p>Contractor has to propose his own design and equipment based on requirements given in the Bidding Document.</p>
395.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 8.3.6.5 (3)</p> <p>The following call related services are to be supported for each type of mobile radio: Restriction of display of user identity</p>	<p>This is a network feature and should be removed from mobile handsets.</p>	<p>Provisions of Bidding document shall prevail.</p>
396.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 8.3.17</p> <p>All voice communications of Radio Dispatcher Console, Cab Radio and Operation Radio shall be recorded by the Voice Recording System (VRS) being provided under Contract Package-104. The Contractor shall be responsible for upgradation /reconfiguration, if required, of Voice Recording System (VRS) being provided under Contract Package-104.</p>	<p>Please share the VRS make/model with the software version for other contract for the integration. Kindly provide the information as per the Appendix II format.</p>	<p>The information/details may be obtained by the successful bidder. Also, please refer Chapter 17 of PS/Telecommunication Works.</p>
397.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 8.5.3.5</p>	<p>Please provide the minimum coverage level for indoor areas also.</p>	<p>Being design &amp; build contract, the Contractor has to propose his own design and equipment based on</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>The coverage level shall be designed to provide satisfactory indoor and outdoor coverage in detour section for an operational radio and general purpose radio for all areas as specified, including indoor areas for which an extra margin shall be considered. Accordingly minimum coverage level of -78 dbm in outdoor terrain shall be available.</p>		<p>specifications provided for in the Bidding Document. Provisions of Bidding Document are sufficiently clear and shall prevail.</p>
398.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 9.1.4</p> <p>Whenever existing equipment of Master Clock System being provided under Contract Packages CP-104 is upgraded / augmented / reconfigured to meet the requirement of this Particular Specifications, the available provision for redundancy in existing equipment shall not be compromised and subsequent to up-gradation / augmentation / reconfiguration they shall meet the Technical Requirement and Performance Requirement as stipulated in this Particular Specifications.</p>	<p>Kindly share the product make/model for Contract Packages CP-104 of EDFC.</p>	<p>The information/details may be obtained by the successful bidder. Also, please refer Chapter 17 of PS/Telecommunication Works.</p>
399.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 9.5.4</p> <p>The Master Clock System shall be capable of working from 230 Volts +/- 10% AC 50 Hz Power Supply.</p>	<p>The Master Clock Unit and Sub-Master Clock Units will be deployed in the TERs and stable battery backed up -48V DC supply is present at TER. Therefore, DC may be permitted as a source for Master Clock System. Similarly, the Clocks may be powered by POE. Hence, these options may be permitted.</p>	<p>Provisions of Bidding Document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
400.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 13.7.6</p> <p>Outdoor Signalling Cables and Outdoor Telecommunication Cables shall not be laid in same trench. If it is inescapable to lay Signalling Cables and Outdoor Telecommunication Cables in same trench, suitable separation shall be provided between the two as per the requirement of PS-Signalling Works, IRSEM and Indian Railway Telecommunication Manual and approved by the Engineer.</p>	<p>Most of the time, separate trenches for Signaling and Telecom are not feasible due to lack of space availability. Hence, It is suggested that to maintain uniformity across project, the outdoor Signalling and Telecom Cables in same trench may be permitted at all locations.</p>	<p>Provisions of Bidding document shall prevail.</p>
401.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 13.11.2.6</p> <p>The earthing methods, design and details shall be submitted to the Engineer for review and approval.</p>	<p>Though mentioned in the PS Telecom, this shall be the responsibility of E&amp;M contractor. Please clarify.</p>	<p>Provisions of Bidding Document are sufficiently clear.</p>
402.	<p>Part 2, Section VI, Vol 1 General Specifications : Chapter 11.1 and Chapter 8.4</p> <p>Chapter 11.1 The contractor shall maintain &amp; implement a quality management system that shall remain in effect during the execution of the works. The contractor's Quality Management System shall be tailored specifically to the contract and the works in accordance with ISO 9001 – Quality</p>	<p>Please provide clarification regarding the ISO9001 Standard's version?</p> <p>Chapter 11 requests ISO 9001: latest edition Chapter 8 requests ISO 9001:2008.</p> <p>Both are contradicting.</p>	<p>Latest edition of ISO 9001 will be applicable.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Management System, the latest edition of the International Standard ISO 9001, and the contractor shall submit his quality management system titled as the project Quality Assurance Plan for Engineer's review as specified here in.</p> <p>Chapter 8.4: The Contractor's management system shall emphasize quality assurance and quality controls and shall be based on ISO 9001:2008 standards. The procurement, supply and manufacturing and Quality Assurance Plan together with the Comprehensive Testing Program shall adequately ensure an acceptable level of quality of the items manufactured and supplied. The concept of Total Quality Assurance shall be based on the principle that Quality is a basic responsibility of Contractor's organisation shall be evidenced by.....and ensuring their compliance.</p>		
403.	<p>Part-2, Section-VI VOLUME 3: PARTICULAR SPECIFICATIONS - SIGNALLING WORKS 3.2.10 (4)</p> <p>The TMS of Bhaupur – Khurja section will be a computer based information storage cum retrieval system located in the Operational Control Centre (OCC) at Allahabad. The system shall be suitably extended/upgraded by the Contractor to collect and display signalling information</p>	<p>Based on input availability from adjacent sections of EDFC/WDFC, the indication to be provided. It may be limited to Train identification/timetable info of approaching trains.</p> <p>The interface information between TMS-Other TMS (EDFC TMS to WDFC TMS) is based on the standard protocols.</p> <p>Please confirm.</p>	<p>Provisions of Bidding document are sufficiently clear. The TMS system of CP 105 will be an extension of the TMS system of CP 104. The Bidder has to suitably extend /upgrade the TMS system of CP 104 for seamless integration.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	of the CP 105 sections, New Khurja – New Boraki – Dadri (ICD) - Dadri area & New Boraki – WDFC on real time basis.		
404.	Part-2, Section-VI, Signaling Works 1.4.1(4)  There are at present 13 level crossing gates in this section which are planned to be replaced with RUBs by DFCCIL/IR	Please confirm these gates are planned to de-commission before CP-104 design start. Or required to consider for interlocking.	The Interlocking of these LC Gates is not in the scope of work of present contract.
405.	Part-2, Section-VI, Signaling Works 3.1.5  It is an objective to install a system that will be designed to have a prolonged life cycle. As such, any of its sub-systems installed, should be capable of mid-life upgrade with minimal disruption to traffic operations. The equipment is expected to remain operational through wide range of environmental conditions along the proposed route.	For RDSO approved equipment's mid-life upgrade will be provided as per RDSO guidelines, please confirm.	Bidder's understanding is correct.
406.	Part-2, Section-VI, Signaling Works 3.2.1(4)  Design and Implementation of the Signalling works using Electronic interlocking and MSDAC, including power supply system at New Boraki Junction station. This shall include all the Signalling works, using Electronic interlocking and MSDAC including power supply system on a continuous stretch of Up and Down Lines extending up to and including Point Zone	Necessary material for alteration in Dadri Station e.g. relays, indoor cables, terminals and fuses, etc are not in system contractor scope(CP 105), please confirm	Bidder has not referred to correct Para, which in this case is 1.4.1(1) instead of 3.2.1(4). Provisions of Bidding document are sufficiently clear. Please refer to provisions of Para 1.4.1(4) of PS (Signalling).

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	controlling movement to/from Indian Railway's Dadri (ICD) yard – Dadri area.		
407.	<p>Part-2, Section-VI, Signaling Works 3.2.2(2) (a)</p> <p>Design and Implementation of Absolute Block/ Slot Working on lines connecting New Boraki Junction Station/Area (EDFC) to Indian Railway's Dadri (ICD) yard –Dadri area. This shall include carrying out all Signalling Works including track detection system on EDFC line connections (one Up line and one bidirectional line) to Dadri ICD yard up to and including Home Signal and Advance Starter at IR end.</p>	IR side Home & Advance Starter signals will be control from IR station only. Please confirm the scope.	Bidder has not referred to correct Para, which in this case is 1.4.1(4) instead of 3.2.2(2)(a). Bidder's understanding is however correct.
408.	<p>Part-2, Section-VI, Signaling Works 3.2.2(2) (b )</p> <p>The System shall be designed in such a manner that the failure of a single item of equipment shall not cause loss of overall system functionality. The use of redundancy, hot standby and cold standby shall be considered accordingly while meeting the system objectives.</p>	Kindly clarify applicability of this clause specific to cables provision for signalling equipment. E.g.-No redundancy will be provided for signal feeding, point operation and detection, LC, CH control, etc. functionality.	Bidder has not referred to correct Para, which in this case is 3.1.5 instead of 3.2.2(2)(b). Provisions of Bidding Documents are sufficiently clear. In case of cables, the redundancy referred in this clause, will be met through provision of sufficient spares as per Para 6.3.2 of PS(Signalling).
409.	<p>Part-2, Section-VI, Signaling Works 3.2.2(2) (d)(vi)</p> <p>Station area shall be designed for maximum flexibility and shall be fully signalled in accordance with current IR practices</p>	Kindly confirm which zonal railway practice shall be followed.	Bidder has not referred to correct Para, which in this case is 3.2.1(4). The IR Practices as per IRSEM shall be followed.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
410.	<p>Part-2, Section-VI, Signaling Works</p> <p>The Main running signals shall be Multi unit Colour Light Signals as per RDSO spec. No. IRS: S26-64 and relevant RDSO drawings</p>	<p>Kindly confirm Main running signals shall be Multi unit Colour Light Signals as per RDSO spec. No. IRS: S26-64 or RDSO/SPN/194/2006</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.2(2)(a) instead of 3.2.3(4)(f). Provisions of bidding documents are sufficiently clear and shall prevail.</p>
411.	<p>Part-2, Section-VI, Signaling Works 3.2.3(5)</p> <p>All signals, Subsidiary shall use Light Emitting Diode (LED) Signal lighting unit as per RDSO specification No. RDSO/SPN/153/2011</p>	<p>Kindly confirm all Main signals Light Emitting Diode (LED) Signal lighting unit shall be provided as per RDSO specification No. RDSO/SPN/153/2011 or RDSO/SPN/199/2010 Rev.1.0 as RDSO/SPN/153/2011 will be discontinued in future.</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.2(2)(b) instead of 3.2.3(5). Please refer to Addendum No. 7, S. No. 22.</p>
412.	<p>Part-2, Section-VI, Signaling Works 3.2.4(1)(c )</p> <p>Emergency sockets shall be installed on the Signal posts under PS - Telecommunications Works, Vol. 4, Part 2.</p>	<p>Please confirm Emergency sockets shall be installed in station section in addition to block section.</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.2(2)(d)(vi) instead of 3.2.4(1)(c). Please refer to Addendum No. 7, S No. 44, 46, 47.</p>
413.	<p>Part-2, Section-VI, Signaling Works 3.2.5(2)(g)</p> <p>The system shall have provision for accommodating additional 25% of the I/O used as minimum spare provision, including corresponding processor capacity for future use</p>	<p>Only space is to be provided as spare for accommodating additional 25%of the I/O used or I/o bits to be provided as spares. Please confirm.</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.3(4)(f) instead of 3.2.5(2)(g). Please refer to Addendum No. 7, S. No. 23. Under the clause, the Bidder need not provide additional 25% I/O cards but shall only keep provision for accommodating the same. However, the Contract spares shall be provided as per Item 4 of Table at Para 10.2.7(2).</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
414.	<p>Part-2, Section-VI, Signaling Works 3.2.5(2) (h)</p> <p>Mid-section modified semi-automatic signal in each direction in New Khurja - New Boraki block section shall be provided as per Indian railways General Rules referred at Para 3.2.1(2) above. The mid-section semi-automatic stop signal SPT (Signal Post Telephone) design, as approved by the Engineer, shall only be provided by the Contractor.</p>	Please provide the communication details from SPT to SM.	Bidder has not referred to correct Para, which in this case is 3.2.3(5) instead of 3.2.5(2)(h). Being a Design build contract, the design of the SPT system shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract
415.	<p>Part-2, Section-VI, Signaling Works 3.2.5(2)(j)(i &amp; ii)</p> <p>The Control terminal shall have hard SM key/ smart card or login facility to authenticate the operator for operation and transfer from one Control terminal to another.</p>	Log in facility will be provided.	Bidder has not referred to correct Para, which in this case is 3.2.4(1)(c) instead of 3.2.5(2)(j)(i & ii).  Provisions of Bidding Documents are sufficiently clear and shall prevail.
416.	<p>Part-2, Section-VI, Signaling Works 3.2.5(2)(j) (iii)</p> <p>The track-vacancy detection system in New Khurja – New Boraki block section and Up and Down lines connecting New Boraki Junction Station to Point zone controlling movement to/from Dadri ICD yard-Dadri area shall have Main system and Supervisory system.</p>	Please confirm the Supervisory DP where and all required. Please check cl 3.2.5(2)(h).	Bidder has not referred to correct Para, which in this case is 3.2.5(2)(g) instead of 3.2.5(2)(j) (iii). Please refer to Addendum No. 7, S. No. 25 & 26.
417.	Part-2, Section-VI, Signaling Works 3.2.5(2)(k)(I& ii)	Supervisory Required only Automatic block section area. Please confirm.	Bidder has not referred to correct Para, which in this case is 3.2.5(2)(h) instead of 3.2.5(2)(k)(I& ii).

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	The track-vacancy detection system at New Boraki Junction Station shall have only Main system with no Supervisory system.		Please refer to Addendum No. 7, S. No. 25 & 26.
418.	<p>Part-2, Section-VI, Signaling Works 3.2.5(2) (l)(i)(a)</p> <p>(i) Separate Evaluators shall be provided for UP and DOWN lines.</p> <p>(ii) The Supervisory system, where used, shall have a separate Evaluator from the Main system.</p>	Can we combine the UP supervisory and DN main in one system and Vice versa please confirm.	<p>Bidder has not referred to correct Para, which in this case is 3.2.5(2)(j)(i)&amp;(ii) instead of 3.2.5(2) (l)(i)(a).</p> <p>No, the UP Supervisory cannot be combined with DN Main in one system and vice versa. Provisions of Bidding Documents are sufficiently clear.</p>
419.	<p>Part-2, Section-VI, Signaling Works 3.2.5(2) (l)(i)(c)</p> <p>Spare sets of CPU card(s) fully programmed and configured shall be provided for each Evaluator and kept ready for replacement. This shall be over and above the 'Contract Spares' provided under Para 10.2.7 of this specification.</p>	Where the solution comprises of an Evaluator for each DP, Can we provide only communication card as spare instead of CPU card(s) since the failure of evaluator affects only that particular track section & not multiple sections. Please confirm	<p>Bidder has not referred to correct Para, which in this case is 3.2.5(2)(j)(iii) instead of 3.2.5(2) (l)(i)(c)</p> <p>Provisions of Bidding Documents are sufficiently clear.</p>
420.	<p>Part-2, Section-VI, Signaling Works 3.2.5(3) (c)</p> <p>(i) The transmission between Central Evaluator and Field units of Main and Supervisory systems shall be in separate cables, preferably of different kinds, say OFC and quad</p> <p>(ii) The transmission between Central Evaluator and Field units of Main and Supervisory systems shall be in</p>	<p>Few OEM axle counter system do not support OFC communication from DP to evaluator so for diversity two different quad cables will be used for main and supervisory system</p> <p>Can we combine the UP supervisory and DN main in one cable and Vice versa please confirm.</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.5 (2) (k) (i &amp; ii) instead of 3.2.5(3) (c).</p> <p>No, the UP Supervisory cannot be combined with DN Main in one cable and vice versa.</p>

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	separate cables, preferably of different kinds, say OFC and quad.		
421.	Part-2, Section-VI, Signaling Works 3.2.6(1) (a)  A suitable resetting scheme shall be designed by the contractor for manual resetting of axle counter track sections at stations and block sections. This shall be achieved through a mix of system design and the operating procedures. The scheme should avoid, to the extent possible, physical verification of track at site without affecting safety	Please specify Line verification to be provided for all track sections or only in point zones.	Bidder has not referred to correct Para, which in this case is 3.2.5 (2)(l)(i)(a) instead of 3.2.6(1) (a). Provisions of the Bidding document are sufficiently clear. Suitable resetting scheme will be proposed by the Contractor and approved by the Engineer at design stage after award of contract.  Also, refer response to query at S. No. 6.
422.	Part-2, Section-VI, Signaling Works 3.2.6(2) (d)  Provision shall be made to record every operation of resetting by non-resettable counter. The counter shall count, every time the resetting is done and shall not reset back on failure of control terminal /power supply	Only one counter shall be provided to record every operation of resetting irrespective of track section.	Bidder has not referred to correct Para, which in this case is 3.2.5 (2)(l)(i)(c) instead of 3.2.6(2) (d). Provision of counters shall be as per relevant RDSO specifications of MSDAC/SSDAC
423.	Part-2, Section-VI, Signaling Works 3.2.6(3) (c )  Where feasible, the trackside equipment shall be housed in sturdy lockable location boxes as an anti-theft measure. Additional anti-theft measures shall be proposed by the Contractor and approved by the Engineer at the time of installation.	Few OEM axle counter system do not have the trackside electronics (expect wheel sensor) and junction boxes are provided with suitable locking arrangement, there is no need of separate location boxes, please suggest.	Bidder has not referred to correct Para, which in this case is 3.2.5(3)(c) instead of 3.2.6 (3) (c )  Provisions of Bidding Documents are sufficiently clear and shall prevail.
424.	Part-2, Section-VI, Signaling Works	Please confirm type of turnout to be used in EDFC	Bidder has not referred to correct

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>3.2.7(7)</p> <p>On the EDFC system, modern turnouts and derailing switches are programmed to be used. The turnouts shall be on 60 Kg rail, with thick web switches and weldable CMS crossings suitable for 25 tonne axle load and Speed potential of 100 Kmph on Main lines</p>	<p>line. Is it to be operated with single or double point machine which depends on length of stock rail?</p> <p>Please confirm scope of supply of back drive arrangement if required.</p>	<p>Para, which in this case is 3.2.6 (1)(a) instead of 3.2.7(7)</p> <p>Provisions of Bidding Documents are sufficiently clear.</p> <p>The supply of back drive is not in the scope of work of present contract.</p> <p>Also, please refer to Addendum No. 7, S. No. 27.</p>
425.	<p>Part-2, Section-VI, Signaling Works 3.2.8(1)</p> <p>Where the points form a crossover, independent detection shall be provided for the points at each end of the crossover. The two independent detections can however, be proved together and read into EI as a single input.</p>	<p>There will be independent detections up to SER. Both the contacts (A &amp; B end) shall be proved in series to input card of OC.</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.6 (2)(d) instead of 3.2.8(1)</p> <p>Provisions of Bidding Documents are sufficiently clear.</p>
426.	<p>Part-2, Section-VI, Signaling Works 3.2.8(4)</p> <p>No point machines shall be installed in between the main line tracks</p>	<p>If other side having any fouling in that case point machine may require installing mainline side.</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.6 (3)(c) instead of 3.2.8(4).</p> <p>Provisions of Bidding Documents are sufficiently clear.</p>
427.	<p>Part-2, Section-VI, Signaling Works 3.2.8(6)</p> <p>All relays shall have minimum 10% of working contacts as spare subject to a minimum of one front and one back contact</p>	<p>Does it require main and repeater relays of the same function? (ex : ECR ) Please confirm.</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.7 (7) instead of 3.2.8(6).</p> <p>Provisions of bidding documents are sufficiently clear and shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
428.	<p>Part-2, Section-VI, Signaling Works 3.2.8(10)</p> <p>The Contractor shall be responsible for providing the power supply for all the Signalling and Telecommunication equipment provided under the contract</p>	<p>Power supply shall be provided for signalling equipment's. (stations)</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.8(1) instead of 3.2.8(10)</p> <p>Provisions of Bidding Documents are sufficiently clear.</p>
429.	<p>Part-2, Section-VI, Signaling Works 3.2.8(11)</p> <p>The Contractor of CP 104 will also provide a UPS as per specification at Appendix 1 for Signalling and Telecommunication Equipment provided in OCC under CP 104. The responsibility for providing Power supply for additional equipment being provided under the Contract in OCC, lies with the Contractor. The Contractor can meet its contractual obligation by either providing new power supply or by suitable addition/augmentation of the Power supply provided under CP 104. The Contractor shall coordinate with the Contractor of CP - 104 for the same.</p>	<p>CP-104 shall provide the power supply details. Based on that Suitable modifications shall carried out by CP-105 please confirm.</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.8(4) instead of 3.2.8(11)</p> <p>Provisions of Bidding Documents are sufficiently clear. Bidder may please refer to provisions of Para 11.3 of PS (Signalling) in this regard.</p>
430.	<p>Part-2, Section-VI, Signaling Works &amp;</p> <p>The Power Supply for Signalling system shall be drawn from Main AC Distribution Panels/Boxes and terminated on Signalling AC Distribution Panel/Box from where it shall be distributed to all Signalling Equipment/Signalling Power Supply Equipment operating at 230 V AC.</p>	<p>From IPS power supply is distributed to relay racks/CT rack for further distribution to different signalling functions instead of separate distribution panel/box.</p>	<p>Bidder has not provided reference, which in this case is Para 3.2.8(6).</p> <p>However, it is clarified that this Para refers to 230 volt AC input supply to IPS.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
431.	<p>Part-2, Section-VI, Signaling Works Appendix – 1</p> <p>The battery backup shall be provided with VRLA maintenance free cells as per specification IRS: S 93/96(A) of suitable capacity and procured as per Para 5.2 of this Particular Specifications for Signalling Works. Battery bank shall have adequate capacity to provide a backup time of minimum 4 hours with maximum depth of discharge of the battery as 70%. The batteries shall be installed on battery racks</p>	<p>For Batteries up to 500 AH RDSO specifications IRS93/96(A) is referred and for batteries above 500AH TEC specifications No.GR/TX/BAT-001/04.JUNE 2011 is referred.</p>	<p>Bidder has not provided reference, which in this case is Para 3.2.8(10).</p> <p>Please refer to Addendum No. 7, S. No. 28.</p>
432.	<p>Part-2, Section-VI, Signaling Works 5 (9)</p> <p>Four numbers of 2V Cells and a spare Cell charger for charging up to 6 cells at 10% of battery AH capacity shall be provided as spare at each power supply location with the main supply</p>	<p>As per RDSO specifications, Five no. of 2V cells and spare cell charger of 2-12V, 5A 2no.s will be provided.</p> <p>Spare cells shall be provided in stations.</p>	<p>Bidder has not provided reference, which in this case is Para 3.2.8(11).</p> <p>Please refer to Addendum No. 7, S. No. 29.</p>
433.	<p>Part-2, Section-VI, Signaling Works 3.2.8(17)</p> <p>All feeding voltages shall be monitored continuously by voltage sensors. In addition all non-earthed output supplies shall be monitored by earth leakage detectors. The said monitoring shall be possible from Service &amp; Diagnostic (S&amp;D) terminal at the station and OCC for which necessary sensors and interfaces shall be provided.</p>	<p>Voltages will be monitor through data logger analogue channels. And outgoing supplies will be connected to ELD.</p>	<p>Being a design &amp; build contract, the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
434.	<p>Part-2, Section-VI, Signaling Works 3.2.9(3)(a)</p> <p>In processor-based equipment like Axle Counters, Electronic Interlocking etc., the data logger shall collect the diagnostic data through a port from the equipment in soft form. Scanning interval for digital inputs to data logger shall be less than 20 sec and analogue input not more than 1 sec.</p>	<p>Axle counter will share the information to EI and EI will share the information to Data logger.</p>	<p>Being a design &amp; build contract, the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.</p>
435.	<p>Part-2, Section-VI, Signaling Works 3.2.9(4)(b)</p> <p>The S&amp;D terminals shall be provided in the field, as required, to monitor health of all the signalling equipment provided under the contract at locations such as Signal Maintainer at New Boraki station, Signal Maintainer's location in IR's Dadri (ICD)-Dadri area, Signal Maintainer's location in WDFC, Signal Supervisor(s) room in the IMSD. An S&amp;D terminal has been provided with the Signal Fault Controller in the OCC under the contract, CP 104 to monitor health of the Signalling equipment provided under CP 104 contract. The Contractor shall make suitable modifications/additions as required in the OCC S&amp;D system hardware/software provided under CP 104, to enable him use the same S&amp;D terminal as provided in CP 104 to monitor health of complete Signalling</p>	<p>Providing S&amp;D terminal at signal fault controller in the OCC will be under CP-104. Please confirm the scope in OCC.</p>	<p>Provisions of bidding documents are sufficiently clear.</p> <p>However, it is confirmed that S&amp;D terminal at OCC shall be provided by the CP 104 contractor.</p>



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	system of CP 104 & CP 105 from the OCC		
436.	<p>Part-2, Section-VI, Signaling Works 3.2.9(d)</p> <p>The Data processing and analysing system at OCC for Bhaupur-Khurja section is being provided under CP 104 as per Para 3.2.9 (3) above. The contractor shall use the same system to process and analyse data of health monitoring system of Dadri-Khurja section provided under the contract. The Contractor shall undertake suitable modifications/additions to the system provided under CP 104 to achieve an integrated S&amp;D system for Bhaupur-Khurja-Dadri section.</p>	<p>CP-014 shall provide the S&amp;D interface designs, using that CP-105 shall proceed for required modifications. There is no requirement of new S&amp;D equipment's in OCC.</p>	<p>Bidder has not referred to correct Para, which in this case is 3.2.9(4)(d) instead of 3.2.9(d)</p> <p>Provisions of Bidding Documents are sufficiently clear.</p> <p>Please also refer response to query at S. No. 435.</p>
437.	<p>Part-2, Section-VI, Signaling Works 4.5.3</p> <p>The Signalling System shall be fault tolerant such that if failure of any sub-system is likely to adversely affect the train operation, redundancy shall be provided in the system.</p>	<p>Kindly clarify applicability of this clause specific to cables provision for signalling equipment. E.g.-No redundancy will be provided for signal feeding, point operation and detection, CH control, etc functionality.</p>	<p>Please refer response to query at S No. 408.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
438.	<p>Part-2, Section-VI, Signaling Works 4.5.7</p> <p>The MTBF/MTBSAF of Interlocking, Track vacancy detection system, Power supply and other Signalling sub-systems shall be at least, as specified in the relevant RDSO specifications. Wherever failure of any sub-system/equipment is likely to adversely affect the train operation and Availability, redundancy shall be provided in the system.</p>	Please confirm Redundancy required for cables also?	Please refer response to query at S No. 408.
439.	<p>Part-2, Section-VI, Signaling Works 4.6.2</p> <p>The Contractor shall submit calculations with reliability block diagrams for each subsystem till LRU level to demonstrate the compliance with specified availability figures. The availability calculation shall take all possible failure modes (barring Non relevant failures, as per Para 4.4.3 above) into consideration that cause gap in service operation of system, subsystem, equipment or part thereof. The calculation shall be based on the Contractor's submitted equipment MTBSAF and MTTR data and the configuration of each sub-system</p>	MTTR will be calculated for electronic equipment's and there are no calculations for cables.	Provisions of Bidding Documents are sufficiently clear.
440.	<p>Part-2, Section-VI, Signaling Works 4.6.4</p> <p>Signalling System shall have Availability better than the targets specified here below:</p>	The mentioned availability doesn't include the cables (outdoor). Please confirm.	Provisions of bidding documents are sufficiently clear.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response												
(1)	(2)	(3)	(4)												
	<table border="1"> <thead> <tr> <th>System/Sub-System</th> <th>Availability</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>Electronic interlocking System (including power supply, wiring, etc.)</td> <td>99.98%</td> <td>Availability per system</td> </tr> <tr> <td>Track Vacancy Detection System (MSDAC/SSDAC, Power supply, etc.)</td> <td>99.99%</td> <td>Availability per system</td> </tr> <tr> <td>Train Management System</td> <td>99.98%</td> <td>Availability per system</td> </tr> </tbody> </table>	System/Sub-System	Availability	Remarks	Electronic interlocking System (including power supply, wiring, etc.)	99.98%	Availability per system	Track Vacancy Detection System (MSDAC/SSDAC, Power supply, etc.)	99.99%	Availability per system	Train Management System	99.98%	Availability per system		
System/Sub-System	Availability	Remarks													
Electronic interlocking System (including power supply, wiring, etc.)	99.98%	Availability per system													
Track Vacancy Detection System (MSDAC/SSDAC, Power supply, etc.)	99.99%	Availability per system													
Train Management System	99.98%	Availability per system													
441.	<p>Part-2, Section-VI, Signaling Works 4.8.2</p> <p>The system shall be designed such that the MTTR shall be less than one hour.</p>	MTTR shall not include the cable failure. Please confirm.	Provisions of Bidding Documents are sufficiently clear.												
442.	<p>Part-2, Section-VI, Signaling Works 4.8.7</p> <p>Redundancy shall be used to enable any necessary preventative maintenance to be carried out on off-line systems during Traffic Hours.</p>	Please elaborate and confirm applicability to which particular system/sub-system	Provisions of Bidding Documents are sufficiently clear.												
443.	<p>Part-2, Section-VI, Signaling Works 6.3.2(5)</p> <p>A separate cable shall be used for operation of each point/crossover.</p>	Please confirm acceptable voltage levels for point machine at field. As per RDSO specification point motor can work up to +/-25%.	<p>Query not clear. However, it is clarified that the design shall be based on the rated voltage.</p> <p>Also, please refer to Addendum No. 7, S. No. 33.</p>												
444.	Part-2, Section-VI, Signaling Works 6.3.2(7)	Please confirm in station section how many DP's	Provisions of Bidding Documents are sufficiently clear.												

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>UP and DN track vacancy detection systems shall be in different cables. Cables for Main and Supervisory Track vacancy detection systems shall be separate. In Block section, if both DPs of a track section are controlled from same ALH, the information between the 2 DPs of the track section and the Evaluator shall be carried in same quad cable. In Station area, the quad cable core allocation among the DPs, to the extent possible, shall be so distributed so as to cause minimum failure of track sections, thereby causing least dislocation to traffic during failure/disconnection of cables for maintenance purpose</p>	<p>can combine in single quad cable.</p>	<p>Being a design &amp; build contract, the design shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.</p>
445.	<p>Part-2, Section-VI, Signaling Works 6.3.2.(9)</p> <p>The Safety Critical Signalling systems such as EI, MSDAC etc. using OFC system for communication shall use dark fibres exclusively for Signalling use.</p>	<p>Providing dark fibre will be under PS-Telecommunications works. Vol.4, Part 2.</p>	<p>Bidder's understanding is correct.</p>
446.	<p>Part-2, Section-VI, Signaling Works 6.3.2.(10)</p> <p>Separate cable shall be used for location lighting. The Location lighting cable shall not carry any other signalling function</p>	<p>There will be one cable for UP side location boxes &amp; One cable for DN side location boxes.</p>	<p>Provisions of Bidding Documents are sufficiently clear and shall prevail.</p>
447.	<p>Part-2, Section-VI, Signaling Works 6.3.2(11)</p> <p>Spare 12c and 4 quad cables shall be</p>	<p>The cables will be provided in Block section only.</p>	<p>Provisions of Bidding Documents are sufficiently clear and shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	laid and terminated between Location boxes of UP and DN systems at regular intervals of approximately 1 Km, to facilitate use of spare cores of Up system for DN and vice-versa, for restoration during failure.		
448.	Part-2, Section-VI, Signaling Works 6.3.22(6)  Location boxes shall be rugged and free from ingress of rodents, insects, dust, moisture and water.	Please confirm specification for location boxes.	Being a design & build contract, the specification shall be proposed by the Contractor and approved by the Engineer at design stage after award of contract.
449.	Part-2, Section-VI, Signaling Works 6.3.25(3)  ELD provided should cover all the Signalling cables and power cables	Please confirm ELD channels needs to be provided. Is it required to monitor the Indoor supplies also?	Provisions of Bidding Documents are sufficiently clear.
450.	Part-2, Section-VI, Signaling Works 6.4.1(4)  The Earthing and Bonding system shall meet or exceed the requirements of IEEE 1100, NFPA 780, IEC 62561-7 and IEC 62305	Earthing arrangement fulfilling RDSO specification RDSO/SPN/197/2008 will be provided.	Provisions of Bidding Documents are sufficiently clear.
451.	Part-2, Section-VI, Signaling Works 6.4.3  All the Outdoor Signalling equipment viz. Signals, Location boxes, Lifting barriers, track devices etc. shall be provided with suitable Earthing arrangement	Convectional Earthing will be provided for outdoor equipment's, signals, location boxes, lifting barriers by following OEM specifications.	Provisions of Bidding Documents are sufficiently clear.
452.	Part-2, Section-VI, Signaling Works 6.4.3(5)	Please confirm Maximum distance from Earth pit to signalling gear.	Provisions of Bidding Documents are sufficiently clear.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	Where the equipment to be earthed are in close vicinity they should be connected to a common earth in star configuration.		
453.	Part-2, Section-VI, Signaling Works 8.2.2(6)  esign Templates for Signal Interlocking Plan, Route Control Table, Detailed Design sheets etc.	Please confirm only template of A3/A4/A2/A1 to be provided or actual typical design to be submitted	Provisions of Bidding Documents are sufficiently clear. These petty details can be finalized with the Engineer after award of contract.
454.	Part-2, Section-VI, Signaling Works 8.2.2 (9),(10) and (11)  Equipment proposal for Station & ALH, Equipment sizing for Station & ALH and Equipment layout Plan for Station & ALH.	Kindly clarify what is difference between the three. Same information can be provided in Room layout plans.	Provisions of Bidding Documents are sufficiently clear.
455.	Part-2, Section-VI, Signaling Works 8.2.2 (14)  Preliminary Power supply load calculation for Junction Station and Auto Location hut	There is only one Junction station. Please confirm preliminary load calculations will be based on typical layout not as per the actual layout.	Provisions of Bidding Documents are sufficiently clear. This can be decided with the Engineer after award of contract.
456.	Part-2, Section-VI, Signaling Works 11.2.1 S.No (2)  Shall decide the size & location and construct any additional Signaling structures in Station area in coordination with the CST contractor.	If any additional signalling structure required, CP-105 will propose the design (chainage), based on that CP-302 shall carry the survey and availability for construction of structure.	Provisions of Bidding Documents are sufficiently clear.
457.	Part-2, Section-VI, Signaling Works 11.2.1 S.No (3)  Shall decide the space (Site Plans &	Based on the proposed designs (chainage), CP-302 shall carry the survey and availability for construction of SER/Power supply rooms.	Provisions of Bidding Documents are sufficiently clear.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Construct SER and Power Supply Equipment Rooms in coordination with the CST Contractor)		
458.	Part-2, Section-VI, Signaling Works 11.2.1 S.No (6)  Shall draw out sketches and provide to CST Contractor for requirement of cable laying on bridges/Culverts	CP-302 shall provide the space to lay the GI pipes on bridges. Cable ducts shall provide on culverts. Same details shall provide to CP-104 for further use.	Please refer to Addendum No. 7, S. No. 36.
459.	Part-2, Section-VI, Signaling Works 11.3 S.No (1) (2)  Shall identify and collect all information on TMS of EDFC 1, as required to commission TMS of CP 105, as per provisions of the contract. Shall identify and collect all information on S&D system of EDFC 1, as required to commission S&D system of CP 105, as per provisions of the contract.	CP-104 shall provide the required TMS & S&D information to CP-105.	Provisions of Bidding Documents are sufficiently clear. Also, please refer to specification of TMS to be provided by CP 104 Contractor in Appendix 7, especially provisions under Para 3(32) – Interface with other TMS.
460.	Part-2, Section-VI, Signaling Works 11.3 S.No(3)  Shall collect all information about the Power supply system – LT Panel, UPS etc. provided in EDFC 1, as required for augmentation of same to meet the requirements of CP 105	CP-104 shall provide the power supply distribution diagrams to CP-105.	Provisions of Bidding Documents are sufficiently clear.
461.	Part-2, Section-VI, Signaling Works 11.3 S.No(4)  Shall identify and collect the S&T design documents of Khurja station as required	Alterations in Khurja station shall be carried out by CP-014. Please confirm.	Provisions of Bidding Documents are sufficiently clear. Also, refer to Addendum No. 7, S. No. 19.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	to commission Khurja – New Boraki automatic section.		
462.	Part-2, Section-VI, Signaling Works 11.4  The Contractor shall liaison with designated authorities in Indian Railway to design Signalling and Telecom Arrangement for/at boundaries with Indian Railways. The design so finalised shall be submitted to Engineer for review. The contractor shall execute the so reviewed Signalling & Telecommunication arrangement for/at boundaries with Indian Railways.	Design changes and required cable laying shall be carried out by Indian Railways in there boundary. Please confirm the scope of work at Boundary.	Provisions of Bidding Documents are sufficiently clear. Please refer to provisions of Para 1.4.1(4) of the Bidding document.
463.	Part-2, Section-VI, Signaling Works 11.5  The Contractor shall interface with the CTP 14 contractor of WDFC, for seamless integration of Signalling and Telecommunication system provided on the twin single lines connection to WDFC	Design changes and required cable laying shall be carried out by CP-14 contractor. Please confirm the scope of work at boundary	Provisions of Bidding Documents are sufficiently clear. Please refer to provisions of Para 1.4.1(3) of the Bidding document.
464.	Part-2, Section-VI, Signaling Works Appendix 1 1.(3)  Provision of suitable earth leakage detection and alarms shall be made individually at each location (Auto Location/station etc.)	Earth Leakage detector shall be provided in ALH/Stations. Can you please confirm where and all required.	Provisions of Bidding Documents are sufficiently clear. ELD shall be provided in all SER locations at the stations and in the auto block sections.
465.	ENGINEERING SCALE PLAN OF NEW BORAKI WITH EDFC CONNECTION TO DADRI & WDFC(KM 1408/931)	Please elaborate the scope of CP-105.  EI up gradation and Power supply up gradation	Provisions of Bidding Documents are sufficiently clear.  Please refer to provisions of Para 1.4.1(4) of the Bidding document.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	As per the received input (ESP) one line is connecting from NEW BORAKI station common loop line to DN Loop line of DADRI station.	scopes. Etc.  (In DADRI yard signalling gears under control of DADRI EI)	
466.	ENGINEERING SCALE PLAN OF NEW BORAKI WITH EDFC CONNECTION TO DADRI & WDFC(KM 1408/931)  As per the received input (ESP) two lines are coming from WDFC to DADRI ICD Yard.	Please confirm this is whose scope.  Including Block Interface.	Provisions of Bidding Documents are sufficiently clear. Please refer to provisions of Para 1.4.1(3) and (4) of the Bidding document.
467.	PHASE wise work details.	Please provide the in detail about Phase wise work. . Please confirm Phase-II is not under CP-105.	Works shown in Phase II are not in the scope of this contract package.
468.	Dadri ICD yard connectivity.	Please provide the following details. 1. Type of Interlocking? 3. Space availability in SER & equipment rooms. 4. Operational details? 5. Please confirm cabling and controlling of points which are located IR side. (after Home signal)  6. Power feeding for those points and signalling & power supply up gradation.  7. EI up gradation?  8. Please provide the ICD yard SIP.  9. Type of track circuits & scope.	Please refer to provisions of Para 11.4 of PS (Signalling) – Interface with Indian Railways. Also, Bidder's attention is invited to Clause 7.2 of ITB, Part 1,Section I

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		10. Please confirm the boundary chainage.	
469.	<p>ENGINEERING SCALE PLAN OF NEW BORAKI WITH EDFC CONNECTION TO DADRI &amp; WDFC(KM 1408/931)</p> <p>As per the received input (ESP) Bidirectional line is connection to IR _ Dadri yard.</p>	<p>Please confirm the scope.</p> <ol style="list-style-type: none"> <li>1. Controlling of this point and signals.</li> <li>2. installation and Testing &amp; commission scope</li> <li>3. material scope</li> <li>4. Scope of IR existing yard modifications?</li> <li>5. Scope of slot/block working?</li> <li>6. Please elaborate the de-commissioning scope in Phase-II?</li> </ol>	<p>Provisions of Bidding Documents are sufficiently clear. Please refer to provisions of Para 1.4.1(3) and 1.4.1(4) of PS (Signalling) for scope of work.</p>
470.	Part 2, Section VI	Being DB contract, Bidder should have liberty to design as per EN Guidelines and RDSO requirements should not be insisted.	Please refer sub-clause 4.4.2, Vol.2, Part-2 of the bidding document.
471.	<p>Part 2, Section VI, Volume 1 General Specifications 3.3.2</p> <p>The Mobilization Plan shall include but not be limited to Setting up of Design Office, Site office, mobilization of Contractor's Key and support personnel, Procurement of facilities, Information required by the Contractor and deliverables to be submitted.</p>	Please confirm that Land can be provided by DFCCIL in RoW for Storage cum site Office, which will be handed over to DFCC on completion of work.	Please refer sub-clause 1.2.4, Appendix-5, Vol.1, Part-2 of the bidding document.
472.	General Query	Can the surplus material on adjacent ongoing DFCC contract be allowed to use.	No, this is not permitted.
473.	<p>Part 2, Section VI, Volume 2 General Specifications 3.18.6.b</p> <p>The procurement of materials and ensuring they comply with the requirements of the Specification, including purchasing documentation and</p>	Equipment/ Material already approved in Previous DFCC Project can be used, subject to technical compliance? Please Confirm.	Request not accepted.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	specific Verification arrangements for Contractor/Employer's Personnel / the Engineer inspection of material or manufactured product prior to release for use/installation;		
474.	<p>Part 3 Section VIII Particular Conditions – Appendix to Tender</p> <p>1.1.3.3 Time for Complétion</p> <p>The Contractor shall complete the whole of the Works within 640 (Six Hundred Forty) days from the Commencement Date. and each of the Milestones shall be achieved as per Sub-clause 8.2 of the Particular Conditions of Contract.</p>	<p>What is the complete Integration readiness of aside this Project namely CP-104, WDFC, CP-305, as the delay in adjacent Project will hamper the integration of This Project.</p> <p>The Project Progress depends on Continuous readiness (even as shared if necessary) of Embankment &amp; Track access fit for this Project works. The delay in adjacent/other project/ EOT awarded to other associated Section, automatically call for EOT of this project, as its goes without saying.</p>	<p>The interfaces required for successful integration have been highlighted in Chapter 18 of Vol – 2 , Part – 2 of the Bidding Document for Electrical portion of the work and in Chapter – 17 of Vol – 4, Part – 2 for Telecom portion of the work and in Chapter – 10 of Vol – 3, Part – 2 for Signalling portion of the work.</p> <p>Further, extension of time if any, will be decided by the Engineer as per the merit of the case considering the issues in question.</p>
475.	<p>Part 2, Section VI, Volume 2, Page 11 of 334 SrNo.3.2</p> <p>DESIGN BY COMPUTER SIMULATION</p>	<p>Details on Simulation (ex: 12000 HP Loco details, Utilities details) inputs, Approved ESP, Master Plan shall be to be issued, as this is the basis of offer. If not, the same should be issued not later than one week from NTP issuance.</p>	<p>Please refer Part-4 reference document for Rolling Stock Characteristics and ESP.</p>
476.	<p>Part 2, Section VI, Volume 1 General Specifications, Page 15 of 250 Approvals / Clearance And Certification</p>	<p>The time line for Comments / Approval on Design documents and submission shall be once only and the Time includes review of PMC, DFCC &amp; Indian railways as necessary.</p> <p>Any delay in approval cycle will have impact on Project &amp; cost.</p> <p>Please confirm</p>	<p>Please refer sub-clause 6.19, Vol.1, Part-2 of the bidding document.</p>
477.		System Integration to be led by CW & Track	The Contractor's responsibility for

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		contractor & PMC. Bidder will extend the required compliance as per tender.	interface management and coordination with Other contractors has been well laid down in the bidding documents. The Contractor shall follow the same for proper completion and testing of their part of work and Integrated testing thereafter of the complete system, including completed works of all the contractors.
478.	General Query	<p>Confirm clearly the boundary of work of adjacent contract.</p> <ol style="list-style-type: none"> <li>1. OCS</li> <li>2. Link of Communication from TSS at boundary.</li> <li>3. Boundary/Scope allocation / Boundary at OCC</li> <li>4. Signal works &amp; associated Cables.</li> <li>5. IR works at merging location</li> <li>6. Termination of Transmission line to TSS Gantry will be TL contractor scope.</li> <li>7. HFL information of CW be shared in Bid for TSS-SP-SSP location.</li> </ol>	The provisions of the Bidding Document are self-explanatory and shall prevail.
479.	General Query	Confirm that this project does not have any work under Power block.	Please refer clause Item no.1, Table – 18.4.3, Chapter – 18, Vol-2, Part-2 of the Bidding Document.
480.	General Query	Please clarify the requirements & Contents of Inception Report.	Please refer sub-clause 3.3.3(3)(a)(i), Vol.1, Part-2 of the bidding document.
481.	General Query	Please share the P6 Base line schedule of CW/Track contractor, as that will be the basis of Planning for CP 105.	Please refer Addendum No. 7, S. No. 61.
482.	General Query	Please share the soft CAD copy of Alignment, Curve, Gradient, Permanent Structure details.	Request not accepted.
483.	Part 2, Section VI, Volume 1	Please clarify the Scope of PMIS in this contract.	Please refer Appendix-7, Chapter-15,

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	General Specifications, Sr No 2.9  PROJECT MANAGEMENT INFORMATION SYSTEM (PMIS)		Vol.1, Part-2 of the bidding document.
484.	Part 2, Section VI, Volume 1 General Specifications Sr.No 1.5.5  Approvals / Clearance And Certification	Please Confirm that all correspondence, submissions, approvals are to be done and dealt with PMC only.	Provisions of Bidding document are clear. Please refer to sub-clause 6.19, Vol.1, Part-2 of the bidding document.
485.		Please clarify the list of documents required for Vendor & Subcontractor approval, as this activity often delayed due to approval process.	Provisions of the Bidding Document are self-explanatory and shall prevail.
486.	Part 3 Section VIII Particular Conditions Sub-Clause 14.7 Payments  Payment of the amount due in each currency shall be made in to the bank account of the Contractor (Sole/JV/JVA) or its individually authorised member(s), nominated by the Contractor in the payment country (for this currency) Specified in the Contract. However, in respect of foreign currency payments copies of supporting documents evidencing the import of goods /services shall be submitted by the Contractor.”	Please confirm Offshore and onshore entities of consortium can directly bill in INR+ USD, Euro, and GBP.	No, the Offshore and onshore entities of consortium cannot directly bill in INR+ USD, Euro, and GBP.
487.	Part 1 Section II BDS ITB 30.1  The currency(ies) of the bid and the payment currency (ies) shall be as described below: ----- ----- The rates of exchange as mentioned	Please Announce the currency exchange rates officially (28 days before submission) before Stage-2, so that bidders will have clarity.	Request not Accepted. The Bidder is required to ascertain the currency exchange rates.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	above shall apply for all payments under the Contract so that no exchange risk will be borne by the successful bidder.		
488.		LD to be sole & exclusive remedy. Clarify.	The Bidder is requested to refer to the General Conditions of Contract as included in the FIDIC Yellow Book 1999 Edition which describes in detail the damages which the Employer would be entitled to in the event of Breach of Contract by the Contractor.
489.	<p>Part 3 Section VIII Particular Conditions Sub-clause 4.4 Subcontractors</p> <p>The Contractor shall not subcontract Works of value more than 30% of the Accepted Contract Amount in addition to the Works for which Specialized Subcontractor(s) are named in the Contract.”</p> <p>Add the following at the end of the Sub-Clause: “The Employer at his discretion may permit the replacement of Specialized Subcontractors, named in the Contract, provided new Specialized Subcontractor(s) have required qualification.”</p>	Subcontract Limit shall be enhanced to 40% of Contract Price. This is in line with APL-1/CP-104. Contractor cannot share any PO, which is a confidential document.	Request not accepted. The Provisions of the Bidding Document shall prevail.
490.	<p>Part 1 Section II BDS ITB 54.1</p> <p>Part 3 Section VIII Particular Conditions Sub-Clause</p>	<p>Please clarify what will be the scope covered in this ESHS performance security.</p> <p>Please provide the clear EHS performance requirements which will require completion to get</p>	The ESHS Performance Security would cover all the Environmental issues stipulated in Appendix – 6 of Volume – I (General Specifications), Part – 2 of the Bidding Document. It

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>1.1.6.6</p> <p>The Performance Security and Environmental, Social, Health and Safety Performance Security shall be in the form of unconditional guarantee issued by a Scheduled Bank in India (included in the second schedule to Reserve Bank of India Act 1934) or the corresponding financial institution of foreign bank located in India. Bond is not acceptable as Security. The amount required to be paid by the successful Bidder for each of the securities shall be as identified in Appendix to Tender, Part – 3 of the Bid Document of CP - 304.</p> <p>Performance Security" means the security as identified under Sub-Clause 4.2. "ESHS Performance Security" means the security for Environment, Social, Health and Security (ESHS) as identified under Sub-Clause 4.2."</p>	<p>this ESHS performance security released.</p>	<p>will also cover any other requirement for protection of Environment, Safety, and Health &amp; Security as required in the Employer's Requirements.</p>
491.	<p>Part 1 Section IV Bidding Forms Price Schedule 2.0</p>	<p>The % allocation made in Tender for different price schedules inside Price Schedule 2.1, 2.2 and 2.3 cannot justifies the value of the material/Service for that particular part of price schedule. This will unnecessarily hamper the cash flow of the project. Bidder should be allowed to vary the % allocation keeping the major group within 100% allocation.</p>	<p>Request not accepted. The Provisions of the Bidding Document shall prevail.</p>
492.	<p>Part 3 Section VIII Particular Conditions – Appendix to Tender</p> <p>Advance Payment 14.2</p>	<p>Please elaborate the meaning of Mobilization process in case of advance payment."</p> <p>What are the key activities included in this mobilization process which will require completion</p>	<p>The Engineer shall determine the commencement of mobilization process, based on review of activities generally covered in Para 3.3 of General Specifications, Part 2,</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Mobilization Advance The Employer shall pay, on written request from the Contractor, an interest free Mobilization Advance up to (Ten) 10per cent of the Contract Price. The Mobilization Advance shall be released in two instalments as under: (a) Up to (Five) 5 per cent: On Submission of Performance Security and commencement of <u>mobilization process</u>; and</p>	<p>enabling contractor to get the 5 % advance payment.</p>	<p>Section VI, Vol. 1.</p>
493.		<p>All expenses pertaining to the Project Mobilization will be considered for Stage-2 ADP. This is often disputed.</p>	<p>Inclusion or otherwise of an expenditure towards mobilization will only be decided by the Engineer at the material time during execution of the Project.</p>
494.		<p>Per TKM prorata payable Milestone to be derived from Total Executed/Total BOQ required for Project TKM. This work done need not be continuous 1 TKM only payable.</p>	<p>The provisions of Bidding document are sufficiently clear.</p>
495.		<p>Please clarify the modality of handing over the work completed Section, when some of the section/Land is inaccessible to Contractor, for reasons beyond his control.</p>	<p>The Taking Over of Works will be in accordance with Clause 10.1 of Conditions of Contract. The Bidder may also note that there will be no Taking Over of Part of the Works.</p>
496.	General	<p>Please clarify that what will be the responsibility of the CP 105 Contractor if CP 105 work is completed but adjacent section of EDFC are not completed and Integration work is pending.</p>	<p>The provisions of the Bidding Document are sufficiently clear. The matter will be dealt in accordance with clause 10.3, 8.3 and other relevant clauses of Conditions of Contract.</p>
497.	General	<p>Please specify who will be in charge to handle the disputes during interface works of CP 105?</p>	<p>The Engineer will be in charge for handling such disputes.</p>



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
498.	General	Please Confirm that CW/Track contractor owns the responsibility of developing CIIP/TRIP.	The Contractor shall liaise with the other contractors in the preparation of CIIP.
499.	Part 1 Section III Evaluation & Qualification Criteria 2.3 Personnel Minimum Education Qualification B.E. (Electrical / Electronics) or Equivalent B.E. (Electrical / Electronics / Telecommunication) or Equivalent -----	Please specify if Diploma with sufficient relevant work experience can also be considered for these positions. In general Diploma Holder with 7-10 Years relevant should be equivalent to BE Engg. Please confirm	Request not accepted. The Provisions of the Bidding Document shall prevail.
500.	Part 1 Section III Evaluation & Qualification Criteria 2.3 Personnel Minimum Education Qualification B.E / B.Tech or equivalent Sr. No 1 to S r. No 20	As per our understanding Government/UPSC and other govt. organizations considers AMIE equivalent to Degree in engineering. Please confirm that our understanding is correct. This is as per Law of Land also.	AMIE in the relevant field will be considered equivalent to engineering graduate degree.
501.	Part 1 Section III Evaluation & Qualification Criteria 2.3 Personnel Total Work Experience Minimum 15/20 years mentioned	Please confirm that it is possible to submit a CV with marginal lesser year of work experience but having expertise in similar works as required in this project. Years of General /Specific Experience shall be relaxed and that will not be Rigid criteria.	Request not accepted. The Provisions of the Bidding Document shall prevail.
502.	Part 1 Section III Evaluation & Qualification Criteria 2.3 Personnel Minimum Education Qualification Degree documents	Please confirm the documents required to be submitted regarding Qualification of Key personnel that will be required for approval purpose by PMC only at project stage. And please confirm that there is no extra validation required by specific authority.	This will be decided by the Engineer and cannot be spelled out at this stage.
503.	Part 1 Section III Evaluation &	Please confirm that CV's of shortlisted candidates	It is permissible to share the CV's of

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Qualification Criteria 2.3 Personnel Key Position CV	can be shared for this tender; On declaration of Successful preferred bidder, the candidates will be placed in Role. This is because we are at bid stage only.	the Key Personnel at bidding stage among the bidders. Please also refer to Addendum No. 7 S. No. 2 in this regard.
504.	Part 1 Section III Evaluation & Qualification Criteria 2.3 Personnel Total Work Experience  Sr. No 1,2,3,,5,6,7, and 12  International Experience	We insist that there may be resources with required technical expertise and experience of Electrification and Signaling projects in India without required international experience, as many projects of International nature & Competitive Bidding projects (like DFCC, DMRC, Other Metros) are executed in INDIA by Indian experts. In our view International experience should not be a mandatory requirement for these positions. Please confirm that it is possible to submit CV with experience in International Competitive bidding Projects of INDIA.	Request not accepted. The Provisions of the Bidding Document shall prevail.
505.	Part 1 Section III Evaluation & Qualification Criteria 2.3 Personnel  Minimum Education Qualification  For Sr. No. 2 to Sr. No. 6 Minimum Education Qualification :  B.E. (Electrical / Electronics) or Equivalent B.E. (Electrical / Electronics / Telecommunication) or Equivalent B.E. (Electrical / Mechanical) or Equivalent----- -----  B.E. (Electrical / Electronics) or Equivalent	You have only allowed B. E. for these 5 positions related to Design. However BE and B-TECH are similar qualifications and allowed for all other positions.  Please clarify.	B. E. and B. Tech, both are acceptable.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
506.	<p>Part 2, Section VI, Volume 1 General Specifications Particular Specifications</p> <p>3.17.6</p> <p>4.3.6</p> <p>There are many clauses in Tender document where minimum requirement has been mentioned without any upper limit. Due to which this requirement can be open ended. There are few clause mentioned below for example</p> <p>The FAT Plan shall include details of inspection, testing and witnessing of the Contractor's and subcontractor's procurement and manufacturing activities at OEM's Factory. <b>As a minimum</b>, it shall include:</p> <ul style="list-style-type: none"> <li>a. First Article Inspection;</li> <li>b. Quality Hold Points;</li> <li>c. Type Tests; and</li> <li>d. Routine tests.</li> </ul> <p>The Works Program shall include activities for all the phases and stages of the Works, clearly showing all logical interdependencies and stages in the development of the Contractors design, procurement, installation, commissioning and setting to work. <b>As a minimum</b>, it shall include</p>	<p>We request you to be clear in terms of requirements whether it is related to quantity or measurement or number of documents to avoid the ambiguity at project stage.</p>	<p>The provisions of the Bidding Document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	----- Many more clauses		
507.	General  Third Party Involvement: Inspection	Third party involvement in the inspection process should be clearly stated in Bidding document and should not be based on the industry practices.  Please clarify.	Please refer Addendum No. 7, S .No. 4.
508.	Part 3 General Conditions /Particular Conditions  13.7 Adjustments for Changes in Legislation  The Contract Price shall be adjusted to take account of any increase or decrease in Cost after the Base Date resulting from: a. a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws); or b. in the judicial or official governmental interpretation of such Laws, or c. the commencement of any Indian law which has not entered into effect until the Base Date; or d. any change in the rates of any of the Taxes or royalties on Materials and Services that have a direct effect on the Project which affect the Contractor in the performance of its obligations under the Contract.	EOT and Cost due to shortage of material caused by the authority / Government Resolution / Judicial Judgements should be allowed under change in the law / delay caused by authority.	Request not accepted. The provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p><b>Insert at the end of the Sub-Clause:</b>            If as a result of change in law, interpretation, or rates of taxes or royalties, the Contractor benefits from any reduction in costs for the execution of this Contract, save and except as expressly provided for in this Sub-Clause or in accordance</p>		
509.	<p>Part 3 General Conditions / Sub-Clause 10.2</p> <p>Particular Conditions            Sub-Clause 10.2            Taking Over of Parts of the Works</p> <p>10.2 Taking Over of Parts of the Works            The Engineer may, at the sole discretion of the Employer, issue a Taking-Over Certificate for any part of the Permanent Works.</p> <p>Delete the Sub-Clause 10.2 in its entirety.</p>	<p>As progress of CP 105 will depend on many external factors like Civil /Track access , Local authorities , Govt. institutions responses time we request you to have a provision to take over the permanent works in parts .</p> <p>Customer (PMC/DFCCIL) shall issue the Taking over certificate for the parts which have been completed by CP 105 contractor. The sections which are completed by CP 105 contractor</p>	Request not accepted. The provisions of the Bidding Document shall prevail.
510.	<p>Part 3 General Conditions /            16.2 Termination by Contractor (d)</p> <p>Sub-Clause 16.2            Particular Conditions</p> <p>The Contractor shall be entitled to terminate the Contract if:</p> <p>(d) the Employer substantially fails to perform his obligations under the</p>	<p>In our view it is just and fair for a CP 105 contractor to have right to terminate the contract in case Employer fails to perform his obligation for CP 105 project.</p> <p>We request you to amend the Sub-Clause 16.2 Particular Conditions accordingly.</p>	Request not accepted. The provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Contract,</p> <p>Delete the Sub-Clause 16.2 (d) Delete the following words from 16.2 (e) “ or Sub-clause 1.7 [Assignment]”</p>		
511.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no. 3.2.3,S.no.1</p> <p>Auxiliary Sub-station (ASS) at stations and depot adjacent or subsidiary to the main buildings as required for Auxiliary Power supply including HT/LT equipment room, additional DG room ( in addition to the combined DG cum solar Room provided by CST contractor CP-302 at the station).An indicative plan of ASS is shown in drawing No.-GC/DFCC/ASS/506 included in the part-4</p>	<ol style="list-style-type: none"> <li>1. Please specify the chainage of ASS, as in the Station and Depot building plan, no space for ASS shown as per the ASS indicative drawing no. GC/DFCC/ASS/506.</li> <li>2. Purpose of DG cum solar and additional DG is not clear. As per the Attachment 20.7 indicative scheme for auxiliary transformer supply system showing One DG with AMF. Hence, relevant clauses are not matching with Supply system Scheme. Please clarify</li> <li>3. We understand that DG room as per indicative drawing GC/DFCC/ASS/506 included fuel Storage also.</li> </ol>	Please refer Addendum No. 7, S. No. 54.
512.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no. 3.2.4</p> <p>The general requirement for construction of the control room building and ancillary building/rooms under the scope of the contractor (CP-105) has been described in chapter-17: Civil work of this PS. The contractor shall judiciously consider the location of Auxiliary sub-stations as per requirement of stations, Depots and</p>	Request to provide the Chainage details for ASS, Stations, Quarters and other ancillary buildings so as to specify the location of respective buildings.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	other Buildings etc not exceeding the voltage drop 3%.		
513.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no. 4.2.2 Project Data parameters/Performance requirement S.no. (d) &amp; (q)</p> <p>(d) The incoming Supply to the Sub-station load shall be double circuit, at 11KV for the station, Depot and staff quarters and associated buildings in DFC are through (dual) Feeder</p> <p>(q) An indicative scheme for auxiliary power supply system is enclosed at attachment -20.7</p>	<p>We understand as per Clause 4.2.2 (d), there would be dual incomer feeder of 11KV for the station, Depot and staff quarters and associated buildings. However, referring to the attachment 20.7 which indicates only single 11KV incoming feeder.</p> <p>Please clarify the ambiguity.</p>	<p>The provisions of the Bidding Document are self – explanatory and shall prevail.</p>
514.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no. 4.2.8 Provision of all Electric luminaires and gadgets/Equipment</p> <p>The Contractor shall provide all electric luminaires and gadgets/ Equipment viz. ceiling, fans, cold water dispenser, window/Split air-conditions, exhaust fans etc as indicated in these requirements. Reference may also be made to Attachment 20.1 to Attachment 20.5 for these requirements. All outdoor luminaires shall be of minimum IP65 class and Indoor shall be of IP65.</p>	<p>Kindly note there will be hardly available fixtures which compliant IP54 rating for indoor commercial application and all indoor commercial fixtures are widely available in range come with standard IP20 rating.</p> <p>Hence, we proposed to change the IP rating from IP54 to IP20 for indoor lighting.</p>	<p>Please refer Addendum no. 7, S No. 53 and 55.</p>
515.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no. 6.1.2 S.no. (2)</p>	<p>As per the Attachment 20.7 indicative scheme for auxiliary transformer supply system showing only 3 HT Breaker Scheme (2 I/C &amp; 1 B/C). However, as per the clause 4.2.2 S.no. (d) There would be</p>	<p>The provisions of the Bidding Document are self – explanatory and shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	(2)The HV panel board shall be designed with at least 15% or at least one spare feeder in such a manner that the switchgear, instruments, relays ,bus bars, small wiring etc. are arranged & mounted with due consideration for the following ....	two incoming 11KV feeder, hence considering the same and keeping the Clause 6.12 s.no. (2) in view, there should have 6 HT breaker panel board ( 2 I/C ,2 O/G, 1 B/C & 1 Spare). Hence Scheme and relevant clauses are not matching  Please clarify the same.	
516.	Vol-5 Particular Specifications E&M and Associated Works, Chapter-6  HT/LT Switchgears and their Enclosures	Please clarify the below Queries pertaining to panel Control Supply: a. Control Supply for HT/LT panel shall be provided by the inbuilt Battery or through UPS. b. Voltage level of Control Supply	The Bidder query is not clear. Since the reference clause has not been mentioned.  However, being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.
517.	Vol-5 Particular Specifications E&M and Associated Works, Clause no. 9.6 S.no. ( 6)  (6) power circuit shall be designed for only one outlet per circuit	Considering the 16Amp Power Socket outlet per circuit will increase the DB size unnecessary. Hence, We proposed to follow the CPWD/NBC in which two nos. 16A outlets per circuit can be considered.	Provisions of the Bidding Document are self-explanatory and shall prevail.
518.	Vol-5 Particular Specifications E&M and Associated Works, Clause no. 4.2.2  Project Data parameters/Performance requirement	Please specify the Diversity factor for each E&M system to be considered while deciding the rating of 11KV/433V power Transformer.  Hence, request to mention Diversity factor for Lighting, Small Power socket, AC load, Water pump, S&T load, etc. and overall diversity of buildings like Station, IMD, IMSD ,Staff Quarters ,Guest house etc.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.
519.	Vol-5 Particular Specifications E&M and Associated Works, Clause no. 9.6 S.no. ( 5)	It may be suggested that While designing DBs, efforts shall be made in such a way that each circuit shall have not more than 800 Watts	The provisions of the Bidding Document are self – explanatory and shall prevail.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	(5) Not more than 800W connected load or more than 10 points on any single circuit shall be provided	connected load. However, In case of LED Points where load per point may be less, number of points may be suitably increased.	
520.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause , clause no. 89.6 (12) under the heading "Internal Wiring of service buildings, Staff Quarters, Club/Institute and other Ancillary Buildings"</p> <p>(13) Every room shall have power outlet for AC/Desert Cooler along with its controlling MCB.</p>	<p>Please provide more clarity on that, as per the Chapter-20, Attachment 20.1, there is no provision of such points indicated.</p> <p>There are some room indicated in the Junction/Crossing building where there is no requirement of AC/Desert cooler and size of the room itself is so small such as Record room (1450 X 2485).Requesting to Specify the room type in which this particular clause would be applicable such as offices, Rest rooms, Maintenance room etc.</p>	Provisions of the Bidding Document are self-explanatory and shall prevail.
521.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause , clause no. 9.1.1, Illumination level, S.No.3</p> <p>(3) All indoor fittings shall be as per IP-54 Compliant. All outdoor fittings shall be done as IP 65 Compliant seal safe or equivalent</p>	<p>Kindly note there will be hardly available fixtures which compliant IP54 rating for indoor commercial application and all indoor commercial fixtures are widely available in range come with standard IP20 rating.</p> <p>Hence, we proposed to change the IP rating from IP54 to IP20 for indoor lighting.</p>	Please refer Addendum No. 7, S. No. 53 & 55.
522.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause, clause no. 9.2, System Description, S. No. 2 &amp; 3</p> <p><b>(2) Essential Lighting ( DG Power)</b> The Lighting and Small power load is fed from DG/MLDB whose incoming power supply is hooked up by a DG power supply during main failure defined in terms of essential load. Min. 30% of lighting fixtures in all areas shall be</p>	<p>Specify the type (whether 6Amp socket or 16 Amp Socket) &amp; percentage of Small power load on DG or 30% lighting fixtures includes 6Amp Socket only. Please confirm.</p> <p>We understood that Critical area would be pertaining to Signalling &amp; Telecom System and exit routes.</p>	Provisions of the Bidding Document are self-explanatory and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>essential light fixtures with minimum of one number in any enclosed room/Compartment.</p> <p><b>(3) Emergency Lighting ( UPS Power)</b> The Critical lighting and small power socket for computer is fed from UPS during main and DG failure defined in terms of Emergency load. Minimum 20% of lighting fixtures in all areas shall be very critical light fixtures with minimum of one number in any enclosed room/compartment. Critical light fixtures shall be provided at all exit routes powered on UPS backed power Supply.</p>		
523.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause, clause no. 9.11.3 S.no. 2 Socket outlet (g)</p> <p>(g) Power Outlets shall be used for rail maintenance workshop areas, shall be surface mounted, weather proof, complete with plug and shall comply with IEC 60309-2. Weather proof outlets shall be rated IP65 as a minimum. The power outlets shall be as below lists : 63A, 3P+N+G, 415 V AC, Completed with Plug, Surface Mounted 16A, SP+N+G 230Vac completed with 2 edge Plugs, cord 3m , surface mounted.</p>	<p>As per the Matrix of requirements at various location indicated in attachments 20.1 (Schedule of electrical fixtures), requirement of three phase 63Amp socket is not mentioned. Hence, request to confirm the purpose and location of three phase 63Amp socket in the building.</p>	<p>Please refer the note under the Attachment 20.1, Chapter 20, Vol-5, Part 2 of the Bidding Document.</p> <p>The Provisions of the Bidding Document are self-explanatory and shall prevail.</p>
524.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause, clause no. 10.3.4, requirement of Auxiliary installations for Auxiliary SCADA</p>	<p>As per S.no. 3 of 10.3.4 table, we understand that Supply availability of Main Distribution panel means checking the availability of supply at incomers not on Outgoing feeders. Hence, only incomer breaker controls would be considered.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response																		
(1)	(2)	(3)	(4)																		
	<table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Functional Unit</th> <th>Minimum Status (Indicative)</th> <th>Minimum Control Parameters</th> <th>Station</th> <th>IMD and IMSD</th> <th>Tel. Equip. room in Block Section</th> <th>LC Unit</th> <th>Control Room TSS/SP/SSP</th> </tr> </thead> <tbody> <tr> <td>3.</td> <td>Main Distribution Panel</td> <td>Supply Availability, Electrical Parameters, Voltage, Current, Power Factor, Energy, etc. and other parameters as per specifications.</td> <td>Breaker Control</td> <td>YES</td> <td>YES</td> <td>NA</td> <td>NA</td> <td>NA</td> </tr> </tbody> </table>	Sr. No.	Functional Unit	Minimum Status (Indicative)	Minimum Control Parameters	Station	IMD and IMSD	Tel. Equip. room in Block Section	LC Unit	Control Room TSS/SP/SSP	3.	Main Distribution Panel	Supply Availability, Electrical Parameters, Voltage, Current, Power Factor, Energy, etc. and other parameters as per specifications.	Breaker Control	YES	YES	NA	NA	NA	Similarly for Sub-Distribution Board, in which supply availability will be checked at Incomers only not on outgoing feeders.	The provisions of the Bidding Document shall prevail.
Sr. No.	Functional Unit	Minimum Status (Indicative)	Minimum Control Parameters	Station	IMD and IMSD	Tel. Equip. room in Block Section	LC Unit	Control Room TSS/SP/SSP													
3.	Main Distribution Panel	Supply Availability, Electrical Parameters, Voltage, Current, Power Factor, Energy, etc. and other parameters as per specifications.	Breaker Control	YES	YES	NA	NA	NA													
525.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, Clause no. 11.1 S.no. ( 2)</p> <p>(2) The DG set shall be working as single unit for catering to mixed load comprising electrical power and for charging battery (Average Power factor of load being 0.8 lagging).The contractor shall properly calculate the backup power requirement at each place of installation and obtain approval from the engineer. The noise should be within the approved limits as specified by the pollution control board and meet the noise levels specified therein. The contractor shall provide DG sets of same rating for all stations.</p>	Please clarify; Can we consider separate DG for each location in case respective buildings are far away from the DG Supply location??	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.																		
526.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no. 12.2.1, Fire Alarm &amp; Control Panel (FACP) S.no. (a)</p> <p>(a) The Fire Panel &amp; control panel shall function as fully stand-alone panel as well as providing a communication interfaces to the central station. FACP shall have its own microprocessor, software and memory and</p>	For small buildings such as IMSD, Telecom Equipment room in block section etc. provision of FACP capable of accepting up to 2-8 loops seems to be at much higher side. Hence, requesting to purpose Min. 2loop panel for small buildings. One loop can cater up to 99 Detectors & 99 devices .Hence 2 loops also more than sufficient for such small buildings.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.																		

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	should be listed as under UL. The FACP shall be capable of accepting up to 2-8 loops as required.		
527.	Vol-5 Particular Specifications E&M and Associated Works, Chapter-15  Air Conditioning & Ventilation System	We understand that there is no AC requirement in IMSD	Please refer Addendum No. 7, S. No. 58.
528.	Vol-5 Particular Specifications E&M and Associated Works, Chapter 15-  Air Conditioning & Ventilation System	Please confirm type of AC requirement whether High wall Split AC or Window AC.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.
529.	Vol-5 Particular Specifications E&M and Associated Works, Chapter 20 ATTACHMENTS,  Attachment 20.1 : Schedule of Electrical Fixtures-Junction Station Schedule of Electrical Fixtures-IMSD Attachment 20.5 Scale of Fittings for Staff Quarters	As there is no furniture layout, so we understand that the general purpose Switched socket outlet shall be provided as per the Attachment 20.1 & 20.5. Beyond that additional variation shall be considered. Please confirm  And if same is to be provided as per furniture layout, then please share the furniture layout of respective buildings.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.
530.	Vol-5 Particular Specifications E&M and Associated Works, Attachment 20.3 & 20.7 Attachment 20.3 : Power Supply Arrangement  Attachment 20.7: Indicative Scheme for Auxiliary Power Supply System	1. As per Attachment 20.3, showing junction Station shall have UP & DN Aux Supply but the same is not shown in the indicative scheme for auxiliary power supply system (Attachment 20.7).Please clarify  2. Aux. Transformer with ASTS is not shown in indicative Scheme for Aux. power Supply system , hence not able to identify the source from where Aux. Transformer with ASTS	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		supply would be coming because as per indicative scheme there is DG,UPS, Normal Supply ( from Local utility) has been shown. No Supply from Aux. transformer with ASTS shown. Please clarify	
531.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause, clause 17.12.3</p> <p>The lighting at substations switching Yards shall be through Lighting cum Lightning Mast system maintaining adequate uniform illumination level of minimum of average 50 lux (at 1 m above ground level) as well as Electrical Clearance from the conductors, Bus system, Equipment and live parts. The clearance shall not be less than 3.5 meters from the live conductors as per IE rules.</p>	We understand that Conventional lighting mast is required at sub-stations not motorised. If Motorised high mast required please provide the technical specification of same.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.
532.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause , clause no. 11.2,</p> <p><i>The DG Set shall be able to start automatically in all climatic conditions and shall take full load within 10 seconds of failure of the normal supply through an automatic change over switch.</i> On resumption of the supply, the change over to the normal supply shall initiate automatic shutdown. DG set shall also include acoustic enclosure, LT XLPE insulated unarmoured single core</p>	<i>"DG Set shall be able to start automatically in all climatic conditions and shall take full load within 10 seconds of failure of the normal supply"</i> This clause is difficult to comply.	Please refer Addendum No. 7, S. No. 56.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	aluminum conductor cable of approved size and all other accessories including foundation & supply of High Speed Diesel oil, lube oil etc. as required for testing & commissioning at Site are indicated in scope.		
533.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, Clause 4.9 ,Anciliary Buildings Construction</p> <p><b>List of Drawings</b> (Included in part-4 Reference Documents)</p>	<p>Station Building Plan (Junction Station Drawing No. GC/DFCC/JS/101 Rev-1) Showing DG Set room and ASS Drawing no GC/DFCC/ASS/506 also Showing DG Set room.</p> <p>The purpose of DG in ASS and in Station is not clear. If the Essential Supply to Station Building is provided by the Station DG only and then role of DG in ASS is not clear.</p> <p>Kindly Clarify the same.</p>	Please refer our reply at Sr.No.511 above.
534.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, Clause 17.20 Doors And Windows S.no. (1)</p> <p><b>(1) Windows to each room shall be of an area, about 20% of the room floor area.</b> Windows must be so arranged that they can be opened and closed without any personnel coming dangerously close to any live parts. All windows of the ground floor building shall be fitted with burglar bars firmly attached to the structure of the building.</p>	<ol style="list-style-type: none"> <li>1. 20% of floor area for Windows in each room is on excessive and will be source of dust affecting performance of equipment.</li> <li>2. For service buildings like TSS/SP/SSP Control Rooms, ASS and Signal and Telecom Equipment Rooms the windows should be provided as per the system requirements.</li> <li>3. Signalling Equipment Rooms and Telecom Equipment Rooms in mid-sections – in between the stations will be unmanned and to make them Dust Proof – windows were eliminated in other DFCC project.</li> </ol>	The Provisions of the Bidding Document shall prevail.

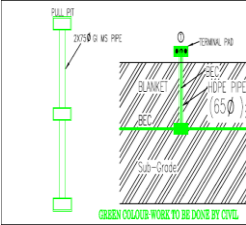
Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p><b>All opening windows shall be fitted with locks.</b> Internal doors shall be 2 hours fire rated and shall be fitted with door closers, lever latches, <b>mortise lock and keys.</b></p>		
535.	<p>Part 2, Section VI, Volume 1, General specifications/Clause 3.8.5</p> <p>It is anticipated that System Work Contractor shall be in place within one year after the Commencement Date of CST Works. Contractor shall plan his interfacing requirements accordingly.</p>	<p>The Civil Contractor may have developed the alignment as well as performed soil investigation. It is requested to share these details as 'reference documents' with Bidders. Availability of these details will result in better understanding of current situation and hence optimized bids.</p>	<p>The relevant details required for bidding have already been provided in Part 4 - Reference documents.</p> <p>Please also refer Para 2.14 of General Specification, Vol. 1, Part 2 of the bidding document.</p>
536.	Part 4	It is requested to provide CAD version of all alignment and schematic drawings.	Request not accepted.
537.	Part 4, 7. Specification for 12000hp locomotive	At part 2, section VI, Volume 2, PS- Elec works, Para 5.2.2, it is mentioned that trains in the Initial period will be generally hauled by WAG-5, WAG-7 and WAG-9 and 9000 HP locos of Indian Railways. It is requested to provide pantograph dynamic characteristics and locomotive characteristics for WAG-5, WAG-7 and WAG-9 and 9000 HP locos of Indian Railways.	Please refer Sub Clause 5.2.2, Chapter 5, Vol-2, Part-2 of the Bidding Document.
538.	Part 4 Yard plans	Kindly share the detail of OCS layout plan & drawings at merging with IR locations.	This is an interface issue. Please refer table 18.4.3 Vol.2 Part.2 of the bidding document. Please also refer Part-4 reference document.
539.	Part 4	Please provide the details of ROB, FOB, transmission lines and cross feeders of Indian railways with spanning over DFC line and angle of crossing, height etc. to estimate design work effectively.	Please refer Part-4 reference document.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
540.	<p>Part 2, section VI Volume 2, clause 8.18.2 para 1</p> <p>The Section Insulator (SI) is a device installed in the contact – catenary wires system for electrical separation of two elementary electrical fields while allowing for the passage of a vehicle pantograph, such as in a cross over between two adjacent tracks.</p>	Electrical field is electrical section. Please confirm.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
541.	<p>Part 2, section VI Volume 2, clause 8.20.3</p> <p>The contractor shall demonstrate the potential rise in all possible OHE/Power fault case scenarios remains lower than the permissible limit at any point as per relevant standards including step and touch potential while on going discontinuity in Rails unnoticed like hair cracks etc. and discontinuity of AEW due to failure/theft if any in two independent systems.</p>	Failure can be simulated. Theft cannot be simulated.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
542.	<p>Part 2, section VI Volume 2, clause 8.20.5 (4)</p> <p>The earthing connections shall be through fasteners for exposed connections or shall use exothermic welding procedure.</p>	CST interface does not exist at present. Drilling of holes in running rails is allowed. Please confirm.	Please refer table 18.4.1, Vol.2, Part-2 of the bidding document.
543.	<p>Part 2, section VI Volume 2, clause 8.1.1 (2)</p> <p>Overhead contact line shall also be designed, constructed and <b>maintained</b></p>	<p>Maintenance is in our scope. Please confirm.</p> <p>Environmental conditions shall be as given at para 4.2 of Part 2, section VI Volume 2, PS – Elec works. En 50119 does not specify environmental</p>	Provisions of the Bidding Document are self-explanatory and shall prevail.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	in such a way that due regard is given to safety of the public, durability, robustness, maintainability and <b>environmental considerations</b> as per EN 50119.	conditions. Please confirm.	
544.	Part 2, section VI Volume 2, clause 8.1.1 (3) (g)  25 kV OHE system for yard lines at the stations and for the connecting chords of IR.	As the locomotive is not expected to draw heavy currents as compared on the running single main line. IR type 65 sqmm catenary and 107 sqmm contact wire in loop lines in yards can be used. Please confirm.	The Provisions of the Bidding Document shall prevail.
545.	Part 2, section VI Volume 2, clause 8.1.1 (3) (g)  25 kV OHE system for yard lines at the stations and for the connecting chords of IR.	The linking track between EDFC and IR will be with OCS of 65 sqmm catenary and 107 sqmm contact wire. Please confirm.	The Provisions of the Bidding Document shall prevail.
546.	Part 2, section VI Volume 2, clause 4.2  Basic wind pressure *  For long bridges (more than 150m) and within 100m from their abutments on either side and on banks, where the height of the catenary above surrounding mean retarding surface is more than 30 meters, the specified 25% reduction in wind pressure shall not be reckoned for purposes of design.	The latest available version i.e. IS: 875 - Part 3: 2015 allows for 25% reduction in wind pressure where the height of catenary above surrounding mean retarding surface is more than 30 meters except for long bridges (more than 150m) and within 100m from their abutments on either side and on banks. Please confirm.	Provisions of the Bidding Document shall prevail.
547.		NTP+30 days, track of 10-20 kms will be made available for construction works to systems contractor. Please confirm.	Provisions of the Bidding Document shall prevail.
548.		Please share the milestones of Civil work and track work. This is needed for our purpose of planning and prioritising design delivery among	Please refer Addendum No. 7, S. No. 61.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		the sections where track will be made available first	
549.	<p>Vol 2 , Sub clause 18.4.1/1(d) / Interface With Civil, Building &amp; Track Contractor (CST)</p> <p>Vol 2 , Sub clause 18.4 / Table.18.4.1/ 2 Indicative Interfacing Matrix with Civil, Buildings and Track Works Contractors (CP 302 and 303) Sr No 2</p> <p>Vol 2 , Sub clause 18.4 / Table.18.4.1/ 2 Indicative Interfacing Matrix with Civil, Buildings and Track Works Contractors (CP 302 and 303) Sr No 4</p> <p>The System Contractor may please note that no movement of men and material will be permitted on the embankment after the blanket layer up to the designed thickness is finished.</p> <p>Shall Coordinate with the CST contractor and shall maintain a coordinator to continuous liaison with them, conduct meetings and seek information and keep the Engineer informed regarding completion of Blanket layer, Track fit for movement of Tower Wagon, Mechanized wiring Train and Material Train, stabling lines and Plan for Construction activities as per the delivery schedule.</p> <p>Shall take the access to the Blanket layer,</p>	<p>Vol 2 , Sub clause 18.4.1/1(d) / Interface With Civil, Building &amp; Track Contractor (CST)</p> <p>Vol 2 , Sub clause 18.4 / Table.18.4.1/ 2 Indicative Interfacing Matrix with Civil, Buildings and Track Works Contractors (CP 302 and 303) Sr No 2</p> <p>Vol 2 , Sub clause 18.4 / Table.18.4.1/ 2 Indicative Interfacing Matrix with Civil, Buildings and Track Works Contractors (CP 302 and 303) Sr No 4</p>	Please refer Addendum No. 7, S. No. 17.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Rail track and stabling siding for execution Of the work.</p> <p>Shall complete all the activities i.e. Blanket layer and Track laying etc. in coordination with the construction activities of System Contractor (CP-105) to meet the timeline.</p>		
550.	<p>Vol 2 , Sub clause 18.4 / Table.18.4.1/ 7 Indicative Interfacing Matrix with Civil, Buildings and Track Works Contractors (CP 302 and 303) Sr No 4</p> <p>Shall supply and install (continuous) Buried</p> <p>Earth Conductor (BEC) as required all along the alignment buried in soil within formation including crossing under the Track (wherever required) and bring out Connections with terminals above ground.</p> <p>Shall provide connections/extensions through welded lap joints/ exothermic joints as approved by The Engineer.</p> <p>Shall provide schematic drawings and designs showing profile/ size &amp; Material Specifications of BEC as required, Typical</p>	<p>As per Drawing ( Refer extract below) GC/DFCC/OHE/EMBKT/TYP/501-1, it shows BEC work will be carried out by CST Contractor which is in contradictory and with the clause referred here</p> 	Please refer Addendum No. 7, S. No. 64.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>laying arrangement longitudinal to the alignment, brought out Connections above</p> <p>ground with terminals, crossing under the</p> <p>track including earthing &amp; bonding Joints,</p> <p>Connection with Rails.</p> <p>Shall coordinate with the Civil contractor so that the BEC is installed while the formation work is in the progress by the Civil Contractor and formation is not required to be excavated for laying of BEC.</p>		
551.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.3.4</p> <p>In addition to SDH Network, optical fibres shall also be used for Data Networking System (as stipulated in Chapter-6) and Signalling Systems, as required.</p>	<p>It is not clear how should the SCADA traffic be carried over Optical Fibre Cables. Is the bidder free to propose a design to carry SCADA traffic over DNS or SDH or Dark Fibre from Second Network OFC?</p>	<p>Being a design &amp; build contract, the Contractor has to propose his own design and equipment based on specifications provided for in the Bidding Document.</p>
552.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.3.9.1</p> <p>At the OCC, a Network Management System (NMS) shall be provided to carry out Realtime centralised and remote monitoring and measurement of network status and performance, and the ability to take prompt action to control the flow</p>	<p>Requirement of the clause "the ability to take prompt action to control the flow of traffic when necessary" is not clear, Kindly elaborate the expected functionality</p>	<p>The provisions in the Bidding Document are self-explanatory. Also, please refer clause 5.3.9.10 and Para 5.4 of PS Telecommunication Works.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	of traffic when necessary.		
553	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 5.5.3.5 (1)</p> <p>Optical fibre cables shall be supplied as per RDSO specification no. IRS: TC 55-2006 with Latest Amendments from RDSO approved sources.</p>	<p>The RDSO standard only covers 24 core fibre cables. Kindly provide the standard to be followed for 48 core fibre cable, to be deployed from New-Boraki towards New Dadri?</p>	<p>Please refer Addendum No. 7, S. No. 38.</p>
554.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 6.3.1</p> <p>.... WAN shall connect OCC, New Boraki Station, TSS and IMSD using Optic Fibre Cable. ....</p>	<p>It is not practical to connect the New Boraki Station to OCC using Optical Fiber Cable. Please clarify if it is permitted to handover the DNS traffic to DNS of CP-104 at New Khurja and DNS of CTP-14 at New-Dadri for carrying to EDFC-OCC and WDFC respectively.</p>	<p>WAN shall be created using the Data Networking System being provided by CP-104 and CP-203. Also refer clause no. 6.3.2 &amp; 6.3.4 of PS/Telecommunication Works</p>
555.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 6.3.1</p> <p>.... WAN shall connect OCC, New Boraki Station, TSS and IMSD using Optic Fibre Cable. ....</p>	<p>It is possible to extend the WAN to TSS and IMSD by means of Layer-2 Switches placed at these locations and connect them to Layer-3 Switch at New Boraki Station by means of Second Network Optical Fiber Cable. Please confirm if it is mandatory to provide Layer-3 switches at TSS and IMSD.</p>	<p>Provisions of Bidding Document are sufficiently clear and shall prevail.</p>
556.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 6.6.1</p> <p>Access Control Mechanisms shall be employed via Authentication, Authorization, and Cryptographic Key Validation, in accordance .....</p>	<p>Please confirm if the existing Access Control Mechanism (AAA, DNS, DHCP) being provided by CP-104 and/or CP-203 can be used for this purpose instead of providing a separate Access Control Mechanism (AAA, DNS, DHCP).</p>	<p>Please refer Addendum No. 7, S. No. 42.</p>
557.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 6.6.3</p>	<p>Please confirm if the existing Firewall being provided by CP-104 and/or CP-203 can be used, for this purpose instead of providing a separate Firewall only for CP-105.</p>	<p>Please refer Addendum No. 7, S. No. 43.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Network Perimeter Firewall shall be provided to protect WAN against above Malicious Activities/Events from outside the WAN.		
558.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.5.13</p> <p>The Administrative Telephone Network shall have the capacity of ringing up to minimum of three telephone sets connected in parallel.</p>	Digital Telephones cannot be connected in parallel. Hence, please confirm if this requirement will only apply to Analog Telephones of the Administrative Telephone Network.	Please refer Addendum No. 7, S. No. 45.
559.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.4 and 7.3.7.7</p> <p>7.3.4: The PBXs shall have connection to the Public Switched Telephone Network (PSTN). This shall allow pre-selected extensions to access the PSTN or vice versa.</p> <p>7.3.7.7: Public Switch Telephone Network (PSTN) Lines shall also be integrated with Direct Line Communication System ...</p>	We understand that the bidder shall ensure the provision to support connection from PSTN to the PBXs. However, kindly confirm who shall provide the PSTN connection and also who shall bear the initial and recurring cost pertaining to these connections.	Only PSTN connection shall be provided by the Employer.
560.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.7.6</p> <p>Indian Railway Telephone Network shall be integrated with Direct Line Communication System, so that one touch dialling can be done from Direct</p>	Please clarify where and how will this integration take place.	<p>Provisions of Bidding Document are sufficiently clear.</p> <p>Also refer Chapter 17 of PS/ Telecommunication Works.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Line Console to important Operation Locations of Indian Railway as decided by the Engineer.		
561.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.8.2</p> <p>After integration, Administrative Telephone Networks shall provide following feature transparency across all the PBXs/EPABXs provided under this Contract as well as under Contract Packages CP-104, CP-203, STP-5, STP-17 and CTP-14</p>	<p>Please note that Integration and interoperability depends on both sides supporting the feature in a standard manner, wherein the standard shall ideally be an International standard such as ITU, Indian Standard or an establish industry standard. Therefore, please confirm that the integration responsibility and feature transparency requirement shall be a joint responsibility.</p>	<p>Provisions of Bidding Document are sufficiently clear.</p> <p>Also refer Chapter 17 of PS/Telecommunication Works.</p>
562.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.8.3</p> <p>After integration, functionality as mentioned in Clause 7.3.3 of this Particular Specification shall be available across Administrative Telephones provided under this Contract as well as under Contract Packages CP-104 and CP-203.</p>	<p>Reference to Clause 7.3.3 appears incorrect since the said clause does not indicate any functionality related to integration. Kindly confirm.</p>	<p>Provisions of Bidding Document are correct and are sufficiently clear.</p>
563.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.3.12.1</p> <p>Emergency Control Communication which is an omnibus communication channel terminating at OCC with the Traction Power Controller shall be provided. This Emergency Control Communication shall not have selective</p>	<p>We understand that the Portable Telephones to be carried by the crew is in scope of supply of Emergency Control Communication equipment. Kindly Clarify.</p>	<p>Supply of Portable Telephones to be carried by the crew is not in the scope of CP-105.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	calling facility. Emergency Control Communication shall have Emergency Sockets as per IR Standards for RE Areas at all the Automatic Signals to which this omnibus communication channel is terminated. <b><i>The Portable Telephone of IR Standard for RE Areas, which will be carried by the crew, can be plugged in case of emergency.</i></b>		
564.	Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.4.2.2  The Contractor shall furnish for the following sub-systems/equipment, the reliability figures, MTBF Hours from the OEMs. (11) Control Communication Equipment; and (12) Emergency Control Communication Equipment.	There are only single RDSO approved sources for Control Communication Equipment and Emergency Control Communication Equipment. While, MTBF values are not available with the OEMs for these systems, OEMs have been awarded Part-1 supplier status by RDSO only after due diligence and ensuring high quality and durability in the actual field conditions. Hence, this requirement may be removed.	Provisions of Bidding Document shall prevail.
565.	Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.5.1.3  PBXs to be supplied, installed and commissioned for Administrative Telephone Network at stations shall be equipped to, as a minimum and not limited to, the following: .....	Please confirm that this clause is applicable for OCC only if a new PBX is being provided at OCC. If the existing PBX at OCC is being augmented, then the Clause 7.5.1.4 will be applicable.	Bidder's understanding is correct.
566.	Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.5.1.9	Please note that this specification is applicable only to Analog Interface. Therefore, the clause may be modified as "The <b>Analog</b> extension line	Please refer Addendum No. 7 S. No. 48.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>The extension line interface in the exchange equipment shall match the extension equipment as required and fulfil the following requirements:</p> <p>(1) Loop resistance of subscriber connected on physical cable pairs shall be limited to 1200Ohm. The minimum value of the leakage resistance of the line shall be 20 K Ohms; ....</p>	<p>interface in the exchange equipment shall match ....”.</p>	
567.	<p>Part 2, Employer's Requirements Section VI, Volume 4 Telecommunication Works / 7.5.4.11</p> <p>The VRS shall comply with the following specifications:</p> <p>1 wow and flutter : &lt; 0.8% peak 2 frequency response : 300 to 3400 Hz within + 3 dB; 3 Signal to noise ratio : &gt; 42 dB; 4 Cross talk immunity : &gt; 60 dB at 1 KHz; 5 Distortion : &lt; 3% 6 Automatic gain control level : +3 dB in recording level for all input</p>	<p>These specifications pertain to Analog type of Recorders, especially those based on Tape. Herein, the VRS system is required to be a Digital system (PS Clause 7.5.4.1). Hence, these requirements are not applicable and shall be removed or suitably modified for a digital recording system.</p>	<p>Provisions of Bidding document shall prevail.</p>
568.	<p>General Query</p>	<p>Contractor understands that there is NO RDSO inspection involved in the contract. Kindly confirm</p>	<p>Please refer to Clause 14.3.8 of PS/Telecommunication Works and Clause 7.1.2 and amended clause 7.3 of PS/Signalling Works.</p> <p>Also, please refer Addendum No. 7, S. No.4 and S. No. 34.</p>
569.	<p>Part II Vol 1 Section VI General Specifications 11.12</p>	<p>Please confirm the version / year for the applicable / referred standard EN 50128</p>	<p>The latest version/year may be followed.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	SOFTWARE QUALITY ASSURANCE PROGRAM (SQAP) Table 1 Software Quality Assurance Plan Requirements		
570.	Part II Vol 1 Section VI General Specifications 2.8.3  <b>Specifications:</b> When the Specifications have received a 'Notice of No Objection' from the Engineer, these shall become the Technical Specifications	Use of Existing RDSO or equivalent IR Specs wherever applicable shall be allowed without 'Notice of NO Objection'	The Provisions of the Bidding Documents are sufficiently clear and shall prevail.
571.	Part II Vol 1 Section VI General Specifications 2.15.1  <b>ALIGNMENT &amp; YARD PLANS ETC</b> The alignment plans, yard plans, building plans and power supply schemes and SCADA layouts listed in Bid Document Part 4 - Reference Documents are for reference purpose only.	Kindly provide the timeline for the approved & finalized plans & schemes to be used for design purpose.	The bidder shall interface with respective agency(s)/other contractor(s) for getting the approved & finalized plans & schemes.  Please also refer chapter 10 of General Specifications, Volume 1, Part 2 of the bidding document.
572.	Part II Vol 1 Section VI General Specifications 6.12 ( c )  <b>Preliminary Design</b> The Contractor shall submit with each submission a compliance matrix identifying the Cross-references of SRS and submit a Design Verification Table (DVT)	Kindly confirm whether the required DVT shall be system wise or a single document.	Provisions of the Bidding Document are self-explanatory and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
573.	Part II Vol 1 Section VI General Specifications 8.16.2  All material, components, sub-assemblies, unit assemblies (including software, cables and wiring) shall be subjected to test and certification.	Kindly confirm which all software's (if any) to be subjected for FAT.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  Provisions of the Bidding Document are self-explanatory and shall prevail.
574.	Part II Vol 1 Section VI General Specifications 12.9.1 ( 8 )  Non chargeable failures in the RAM Demonstration (b) A failure occurrence in equipment of another subsystem, due to the primary failure	Kindly define primary failure	For every failure, there will be a primary sub-system to which the failure will be charged/attributed. If this failure results in failure of other sub-systems, then for those sub-systems it will be a non-chargeable failure.
575.	Part II Vol 1 Section VI General Specifications 2.6.3  <b>Codes &amp; Standards</b> The Contractor shall supply to the Engineer, two authorized and original full editions of the publications (such as, but not limited to, Technical Standards and Codes of Practice)	Kindly confirm whether web downloaded copies of Standards / Specifications can be submitted as part of this requirement	Provisions of the Bidding Document are self-explanatory and shall prevail.
576.	Part II Vol 1 Section VI General Specifications 3.13.2(7)  <b>FAT Plan</b> Type Tests, Routine Tests, First Article Inspections and any other tests	Type Tests shall be done only for specific parts with prior agreement between DFCCIL & contractor. Please confirm	Provisions of the Bidding Document are self-explanatory and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	constituting the Factory Acceptance Tests.		
577.	<p>Part II Vol 1 Section VI General Specifications 8.15.1</p> <p>Type tests shall be carried out on specific items to ensure that they perform their intended functions when subjected to all permutations and combinations of external environment and other factors. These items shall be subjected to prototype testing as per relevant Specifications.</p>	Please confirm that the type tests are not applicable for RDSO approved list of materials.	Provisions of the Bidding Document are self-explanatory and shall prevail.
578.	<p>Part II Vol 1 Section VI General Specifications 4.16.4</p> <p>The Minutes of the Meeting (MOM) signed &amp; issued by the Engineer shall constitute an official record of matters discussed. However, such MOM shall not replace or dilute any of the Employer's requirement specified in the Contract. The Contractor shall take specific approvals, instructions or decisions in writing from the Engineer for all documentations and submissions as specified. Such meetings may be attended by representatives of all Interfacing Parties and other stakeholders as deemed fit by the</p>	<p>We understand that during meetings decisions deviating from contract requirements can't be implemented; hence contractor will not be forced to deviate from the contract requirements citing the minutes of meetings.</p> <p>Please confirm.</p>	Provisions of the Bidding Document are self-explanatory and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Engineer.		
579.	GENERAL Query	As per signalling design process, it is expected that the submitted documents will be reviewed in full and comments shall be offered entirely for the submitted document. In normal case, fresh comments will not be offered on the re-submitted documents until and unless the earlier offered comment is not addressed. This shall ensure timely completion of design activities as planned	Being design & build contract; the contractor shall submit the design documents to the satisfaction of Engineer.
580.	GENERAL Query	Can North Central Railway zonal practice can be applied as standard practice for this project.	IR practices as per IRSEM shall be followed.
581.	GENERAL Query	Contractor requests waiver of MQAP/FAT process for delivery/use of materials like terminals, fuses, nut/bolts, CT Rack, Relay rack, Location Boxes, conventional earthing materials, electronic route markers, warning tape etc. against the production of quality certificate from manufacturer or contractor whenever required. Kindly confirm?	Provisions of Bidding Document are self-explanatory and shall prevail.
582.	GENERAL Query	Kindly confirm, If RDSO Inspection is required for any specific items then the charges for RDSO Inspection shall be borne by DFFCIL as there is no RDSO inspection stipulated in the RFP. For all such items where RDSO Inspection is required there shall not be any requirement of MQAP/FAT Procedure Kindly Confirm?	Please refer Addendum No. 7, S. No. 4.
583.	GENERAL Query	Kindly provide the status of new station Code/s generation for DFCCIL APL-3 stations.	The information will be provided at the design stage after award of the contract.
584.	Part II Vol 3 Section VI Particular Specifications – Signaling Works 1.1.4	Contractor will not be required to interlock any LC gate either at design or installation phase. Accordingly the gates will be closed in time. Kindly confirm.	Bidder's understanding is correct.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>There are at present 13 level crossing gates in this section which are planned to be replaced with RUBs by DFCCIL/IR.</p>		
585.	<p>Part II Vol 3 Section VI Particular Specifications – Signaling Works 11.4</p> <p><b>INTERFACE WITH INDIAN RAILWAYS</b> The Contractor shall liaison with designated authorities in Indian Railway to design Signalling and Telecom Arrangement for/at boundaries with Indian Railways. The design so finalised shall be submitted to Engineer for review. The contractor shall execute the so reviewed Signalling &amp; Telecommunication arrangement for/at boundaries with Indian Railways</p>	<p>Contractor will liaise with IR however collection &amp; approval of formal/ authenticated documents from IR will be assisted by the Employer/ Engineer. Please confirm</p>	<p>Provisions of Bidding documents are self-explanatory and shall prevail.</p>
586.	<p>Part II Vol 3 Section VI Particular Specifications – Signaling Works 3.2.8(10)</p> <p>The battery backup shall be provided with VRLA maintenance free cells as per specification IRS: S 93/96(A) of suitable capacity and procured as per Para 5.2 of this Particular Specifications for Signalling Works. Battery bank shall</p>	<p>Kindly confirm that the battery type will be retained as VRLA throughout.</p>	<p>Provisions of Bidding documents are self-explanatory and shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>have adequate capacity to provide a backup time of minimum 4 hours with maximum depth of discharge of the battery as 70%. The batteries shall be installed on battery racks.</p>		
587.	<p>Part II Vol 3 Section VI Particular Specifications – Signaling Works 11.1.1</p> <p><b>INTERFACE REQUIREMENTS-General</b></p> <p>The Contractor shall coordinate with other contractors working in the section viz. CST Contractor(s) for Buildings &amp; Structures and Track and any other contractor engaged by Employer for Dadri-Khurja section. The Contractor shall also coordinate with other contractors working in the adjoining sections of EDFC &amp; WDFC as well as with Indian Railways officials, government departments etc., as required, for timely completion of the Work.</p>	<p>DFCCIL to publish the escalation matrix to follow &amp; seek support actions in case of interface/ co-ordination issues.</p>	<p>Provisions of Bidding documents are self-explanatory and shall prevail.</p>
588.	<p>PS Vol2 Electrification 3.2.4 (5)</p> <p>Voltage imbalance and THD imposed at PCC with IR's transmission line network at normal rated capacity as well as</p>	<p>PCC means sending end Substation end (i.e. IR line end) or our TSS. Please confirm. Please confirm the existing short circuit level of feeding sending substation and approximate distance between sending end substation and TSS &amp; conductor details. This Input is very much</p>	<p>Please refer table 18.4.4, Vol.2, Part-2 of the bidding document.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	extended feed scenario in full load conditions and mitigation measures thereof, including sizing of mitigation equipment	essential. Please provide the table of Information.	
589.	PS Vol 2 Electrification 6.7.1  For connectivity to the grid substation of power supply authorities, following power quality limits have been laid at the point of common coupling (PCC)		
590.	PS Vol2 Electrification 5.2.  Rolling Stock Characteristics and Train Operation Data	Rolling Stock Harmonic Spectrum Data to be followed for Simulation study is a key information and need to be provided by Client.	Please refer Part-4 reference document.
591.	PS Vol2 Electrification 6.3 (4)  In all traction power supply posts, MS Rods, GI Flats and pipes allowing adequate margin against corrosion shall be used as per EN 50522/IS 3043	Corrosion factor should considered as per IS or RSDO. Please confirm to clear / avoid Ambiguity.	Provisions of the Bidding Document shall prevail.
592.	PS Vol2 Electrification 6.5 PS Vol2 Electrification 6.5  Table 6.5.1 Design short circuit levels for 132kV Table 6.5.1 Design short circuit levels for 132kV	Based on MVA levels provided, Calculated fault level for 132 kV is 43.74 kA. Generally for 132kV equipment's it would be 31.5kA & 40kA for 1 sec short circuit capability. Please confirm the short circuit level of the equipment in kA rating?  This Vital Information may please be confirmed.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
		Rail potential will be calculated in simulation study based on system fault level considered from power simulation results.	Please refer Clause 6.5, Chapter-6, Vol-2, Part-2 of the bidding Document.
		Please confirm.	The Provisions of the Bidding Document are self-explanatory and



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
			shall prevail.
593.	PS Vol2 Electrification 6.9.8 (a)  132kV Loop in Loop out Transmission Line Protection as required-	Distance Protection is missing in the list of 132kV incoming feeder protections. If Distance protection needs to be provided by bidder then how many distance protection relays per feeder to be implemented? PLCC is available or not in incoming lines. If yes, We presume that it is not in bidder's scope.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  As per the clause no. 3.3.4, the transmission line is not in the scope of the contractor. As such PLCC is not in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
594.	PS Vol2 Electrification 7.8.3	Height of Cable Trench bottom from the HFL to finalise the FGL is missing. Please clarify the heights of FGL, FFL from HFL and NGL for every TSS/SSP/SP	The Provisions of the Bidding Document are self-explanatory and shall prevail.
595.	PS Vol2 Electrification 6.1.3 (2) (b)  Incoming Metering Bays with Check meters, Metering CT, PT and the associated insulation, protection and monitoring arrangement as per IR/PGCIL specifications with required communication ports on the 132kV incoming side in a separate cubicle at the TSS which should have communication with OCC through SCADA	Please confirm the location of Main Metering.?  We presume main metering and associated CT, PT for incoming lines including main metering room at TSS is not in scope of bidder. Please confirm.	Please refer item no.4 under table 18.4.4, Vol.2, Part-2 of the bidding document.
596.	PS Vol2 Electrification 3.2  Design By Computer Simulation	We will not consider IR network data in EMC & E&B simulation studies. Simulation will be conducted for DFCCIL part only.	Please refer sub-clause 4.6.1 (1) (e), Vol.2, Part-2 of the bidding document.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
		Please confirm.	
597.	PS Vol2 Electrification 2.3  The civil structure and Track work has been planned to be assigned to other contractor through Contract CP 302	Please provide electrical details of Track (like resistance etc.) to be laid. So that these details are required for simulation studies.	This is an interface item. Please refer clause no 18.4.1 and table no. 18.4.1.
598.	PS Vol2 Electrification 4.6.2 (5) b(v)  Architectural Control Room layout of TSS & SSP	We presume that all the metering panels will be provided along with 132kV CRP panels in the same Control room building. Please confirm.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor. The Provisions of the Bidding Document shall prevail.
599.	PS Vol2 Electrification 6.1.3 (2) u  Fault Locator	Fault location is a built-in feature of impedance based distance protection relay. In such case no separate Fault Locator is envisaged. Please confirm.	The Provisions of the Bidding Document shall prevail.
600.	PS Vol2 Electrification 6.1.4 (11)  Fault Locator	Fault location is a built-in feature of impedance based distance protection relay. In such case no separate Fault Locator is envisaged. Please confirm.	The Provisions of the Bidding Document shall prevail.
601.	PS Vol2 Electrification 10.5  Table 10.5.1: Indicative List of Equipment to be monitored and controlled at Remote locations. Lightning arrester	Lightning arrestors with potential free contacts will be provided. With the potential free contacts, number of surges that are being discharged to ground can be counted & monitored through SCADA algorithm. Please confirm	Please refer reply at Sr. no. 346.
602.	PS Vol2 Electrification 7.1.5  Table 7.1.1: Plot Size : 140x85	To accommodate more number of 132kV incoming bays, We presume that land orientation will be as follows: 1. Parallel to Track side = 140 meters 2. Perpendicular to Track side = 85 meters. This will be the orientation that will be followed. Please confirm.	Please refer Sub Clause 7.1.5(1), Chapter-7, Vol-2, Part-2of the Bidding Document.
603.	PS Vol2 Electrification 6.3 (2) c	As per clause no. 7.1.1, there are no Sectioning	Please refer Addendum No. 7, S. No.

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	Earth Mat System in Sectioning and Paralleling Posts	posts (SP) in CP 105. Please confirm.	11.
604.	PS Vol2 Electrification 3.3.1 (1)v(a)  The provision at the TSS shall include the gantry for termination of 132kV LILO (Loop in loop out) feeders of IR and PGCIL.	We presume the following: 1. 132kV DADRI-DANKUR is IR Feeder 2. 132kV Incoming D/C ABDULLAPUR Feed is also IR Feeder. Please clarify for which feeder, interfacing with PGCIL is required in CP 105.	Please refer Table 18.4.4, Chapter-18, Vol-2, Part-2 of the Bidding Document.
605.	PS Vol2 Electrification 3.1.1 (9)  Interfaces with IR (Indian Railways) and PGCIL (Power Grid Corporation of India ltd.) for the 132kV input supply for the TSS from the transmission line network of IR	Please clarify / Elaborate with details for better understanding	The Provisions of the Bidding Document are self-explanatory and shall prevail.
606.	PS Vol2 Electrification 3.3.1 (1) v (c)  Auto-Transformers shall be provided at the TSS (as required as per design) and at SSP's	Based on simulation results if Auto Transformers requirement is not required then bidder need not provide them. But Payment % will be added with Main Trafo supply in TSS. Please clarify.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
607.	PS Vol2 Electrification 6.9.8 (a)  132kV Loop in loop out Transmission Line Protection as required: - Differential Protection a special protection for compensation for phase difference between primary & Secondary line current	Generally Transmission line is protected by impedance based distance protection. Please elaborate this protection.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
608.	PS Vol2 Electrification 6.9.8 (h)  - Special distance protection for regeneration operations	Please elaborate this protection requirement for clarity.	The Provisions of the Bidding Document shall prevail.
609.	2. Schematic Diagram of 2x27kV	In the outgoing catenary and negative feeders,	Being a design & build contract

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Sub-Sectioning and paralleling posts(SSP)	Interruptioners are provided. Please elaborate How protection scheme to be implemented in outgoing of SSP and elaborate the protection required.	General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
610.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.1.1.  Point (8) RAMS requirements of the Systems have been identified, apportioned to various subsystems and elements of the works and the associated designs for these have been demonstrated to be capable of meeting their allocated performance targets.	The bidder will consider the Systems RAMS requirements and their performance target; as detailed in their particular specifications (PS) i.e. <ul style="list-style-type: none"> <li>• Vol 2 for Traction Electrification,</li> <li>• Vol 3 for Signaling and</li> <li>• Vol 4 for Telecom</li> </ul> to demonstrate the System performance as per PS. Please confirm the Definition of SYSTEM RAMS, whether is it at Rail System Level OR Rail Sub System Level as specified in the above reference clauses in Volume 2, 3 & 4.	The Bidder/Contractor shall demonstrate fulfillment of RAMS requirement and their Performance target, for the system/sub-systems as specified in the respective PS.
611.	Part 2/ Section VI  [1]- Vol 1/ GS/ CH12/ 12.18- System Assurance Submissions [2]- Vol 2/ PS- Electrification/ CH14/ 14.5.13- System Assurance Submissions	With Reference to the clause [2], please confirm the System Level Submissions expected to be submitted during project execution phase as referred in Clause 14.5.3 which is superseded by the submission asked in clause [1]. This is to ensure no duplication of the submissions between the mentioned clauses.	There is no duplication between the clause 12.18 of Vol. 1 and sub clause 14.5.3 of Vol. 2. Please also refer sub-clause 3.1.4 of Vol. 1 related to submission of various Plans and sub clause 12.8.2 of Vol. 1 reveals details of System Safety Plan.  The Provisions of the Bidding Document shall prevail.
612.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.2.4	Please Elaborate the difference between point 2 & 3 i.e. Detail Design and Final Design. Our understanding is both are same. Please confirm.	The Provisions of the Bidding Document are self-explanatory and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>This System Assurance Plan will describe the RAM and Safety Assurance activities throughout the project lifecycle, comprising:</p> <p>(1) Preliminary Design  (2) Detailed Design  (3) Final Design  (4) Manufacturing and Production  (5) Testing and Commissioning  (6) Operation</p>		
613.	<p>Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.3 &amp; 12.4</p> <p>COMPLIANCE MANAGEMENT &amp; VERIFICATION &amp; VALIDATION</p>	<p>Please elaborate, how Compliance Management is different than the Verification and Validation?? Our assumption is both are same. Please confirm.</p>	<p>The Provisions of the Bidding Document are self-explanatory and shall prevail.</p>
614.	<p>Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.7.1</p> <p><b>(2) Construction and Installation Phase - The RAM activities shall include:</b></p> <p>c. Preparation of Reliability, Maintainability and Availability Demonstration Plans</p>	<p>The mentioned point is contradicting about the preparations of RAM Demo Plan, with Clause 12.9.1/ point (3). Please confirm the correct phrase to produce the RAM Demo Plan.</p>	<p>The RAMS Demonstration Plan shall be prepared and submitted at the Design stage. In Construction/Installation phase, it need to be seen that the site works conform to RAMS Plans and procedures. .</p>
615.	<p>Part 2/ Section VI</p> <p>[1]- Vol 2/ PS- Electrification/ CH14/ 14.5.13- System Assurance Submissions</p>	<p>The list of deliverables mentioned with Reference to the clause [1]; are the only deliverables which will be submitted during project execution phase? Or some other documentation will be added as published in Chapter 14 of PS ? Please clarify</p>	<p>The Provisions of the Bidding Document shall prevail.</p>
616.	<p>Part 2/ Section VI/ Vol 2/ PS- Electrification/ CH10/ 10.7.2</p>	<p>With Reference to the clause, please elaborate, What are the sub-systems of SCADA shall be considered under Traction Power Decision</p>	<p>The Provisions of the Bidding Document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Availability Requirement: Point (b):-The availability figures for Traction Power functionality and the Traction power decision support system shall be 99.97%.	Support System? Please clarify.	
617.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.9.1  Point- 7: A chargeable failure in the RAM Demonstration is defined as any relevant failure that requires repair or replacement of any subsystem or vehicle component. Chargeable failures also include intermittent failures, unverified failures, and software failures.	As per the Tender requirement RAM demonstration shall be done for the RAM targets, which is in terms MTBSAF( Mean Time Between Service Affecting Failures) As per Part 2/ Section VI/ Volume-2/ PS/ CH 14/ 14.2 / Point (4), Service Failure has been define.  Thus, bidder requested to confirm, that the chargeable failure can be defined as a Service Failure as per the definition and tender requirement. Mentioned Point 7 is contradicting with the above mentioned tender clauses. Please clarify	The Provisions of the Bidding Document are self-explanatory and shall prevail.
618.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.9.1  Point -8: Non chargeable failures in the RAM Demonstration are: (b) A failure occurrence in equipment of another subsystem, due to the <b>primary failure</b> .	Please define the "primary failure" as referred in the mentioned clause.	Please refer response to query at S. No. 574.
619.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.9.2  Point(2): In the event that the availability target is not achieved, the determination of availability achievement in the preceding six month period shall be continued at monthly intervals until the	Pease elaborate the clause. "Preceding Six month period "from which KEY date? If it achieved then, will it required to demonstrate further?	The provision of Bidding documents are sufficiently clear. Every Availability demonstration shall include 6 months preceding the time (month) when it is being performed.  The demonstration shall be continued till the end of DNP.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	target is achieved.		
620.	<p>Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.11</p> <p><b>ON-SITE TESTING AND INTEGRATED SYSTEM TESTING</b></p> <p>General Requirement</p> <p>The On-site Testing and Integrated System Testing shall demonstrate <b>as a minimum</b> the following requirements:</p> <p>.....below 10 point to accomplish....</p>	<p>Refer to the mentioned clause, please provide the complete list of requirement covering General, Main or Conclusive etc...etc... So that, the project execution will be on time as per the Contractual Requirements.</p> <p>Please clarify.</p>	<p>The Provisions of the Bidding Document are self-explanatory and shall prevail.</p>
621.	<p>Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.11</p> <p>Point (2) :</p> <p>The testing procedures shall ensure that all the critical failure modes as identified during the FMECA / FMEA activity <b>are addressed through proper test cases</b> inclusion. A traceability matrix shall be developed such that these critical failure modes are traced back to the corresponding test cases. All failure modes shall be considered as critical failure modes unless the Contractor demonstrates by a sensitive analysis or other means that the impact of a failure mode on reliability and maintainability will be insignificant.</p>	<ul style="list-style-type: none"> <li>• Please elaborate the expectation from the procedures to address failure mode through the test cases?</li> <li>• What are these test cases?</li> <li>• What are the "Sensitive Analysis" and "other means", Please elaborate and explain?</li> </ul>	<p>The Provisions of the Bidding Document are self-explanatory and shall prevail.</p>
622.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.14	As per our understanding the Operational Safety Case is considered as a "Proof of safety ".	Bidder's understanding is correct. The 'Operational Safety Case' will

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	12.14 "Proof of Safety"	Please confirm our understanding.	form the basis of 'Proof of Safety'.
623.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.15  <b>SYSTEM ASSURANCE DURING TRIAL RUNNING</b>	System Assurance during Trial Run is Subject to the availability and performance of all the sub-system including Employers' input; other than CP-105. Please Confirm.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
624.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.15  <b>Point (3)</b> Evaluation of the effectiveness of system fault reporting, fall back systems, operating procedures and maintenance responses in the event of a number of system failures and degraded operating scenarios by simulating such scenarios during simulated revenue service.	Stimulated Revenue Service is Subject to the availability and performance of all the sub-system including Employers' input; other than CP-105. Please confirm.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
625.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.15  <b>SYSTEM ASSURANCE DURING TRIAL RUNNING</b> The period of Trial Running shall <b>include as a minimum</b> the following activities:	Refer to the mentioned clause, please provide the complete list of requirement covering General, Main or Conclusive etc...etc... So that, the project execution will be on time as per the Contractual Requirements.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
626.	Part 2/ Section VI/ Volume-1/ GS/ CH 12  <b>12.16 SYSTEM ASSURANCE DURING REVENUE SERVICE RUNNING</b> <b>"The Contractor shall continue to implement system assurance</b>	As per GC, Contract shall provide the warranty support during the DNP period. Thus, Contractor shall comply for the system assurance during the DNP. The GC requirement is contradicting with the mentioned Clause 12.16 of GS which is an open	The Provisions of the Bidding Document are self-explanatory and shall prevail. Please also refer to Clause 12.17 of General Specifications, Vo. 1, Part 2 of the Bidding document.



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response																										
(1)	(2)	(3)	(4)																										
	activities during and after the transition to revenue service including, but not limited to, the following requirements”.	ended requirement. Please clarify / Amend and confirm.																											
627.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.10.4  Point (7) Classification of the incident (relevant independent failure or <b>dependent failure</b> );	Please define / elaborate further the “dependent failure” as referred in the mentioned clause.	The Provisions of the Bidding Document are self-explanatory and shall prevail.																										
628.	Part 2/ Section VI/ Volume-1/ GS/ CH 12/ 12.13.3  Point s: (3) System Operating Safety Plan; (4) System Operating Plan;	Please elaborate the difference between and Customer expectation from the mentioned two plans. We assume both are same. Please clarify.	The Provisions of the Bidding Document are self-explanatory and shall prevail.																										
629.	Part 2/ Section VI/ Volume-2/ PS/ CH 14/ 14.5.13  Point 13: Operation Safety Case <table border="1"> <thead> <tr> <th rowspan="3">S No</th> <th rowspan="3">Document Description</th> <th colspan="5">Plan Development Stage</th> <th rowspan="3">Remarks</th> </tr> <tr> <th colspan="2">Design Stage</th> <th>Manufacture/ Construction</th> <th>Testing/ Trial Run</th> <th>Warranty</th> </tr> <tr> <th>PRELIM</th> <th>FINAL</th> <th>/Installation</th> <th>Stage</th> <th>Stage</th> </tr> </thead> <tbody> <tr> <td>13</td> <td>Operational Safety Case</td> <td>p</td> <td></td> <td></td> <td>p</td> <td></td> <td>Second report shall be submitted within 7 days after the completion of safety validation test.</td> </tr> </tbody> </table>	S No	Document Description	Plan Development Stage					Remarks	Design Stage		Manufacture/ Construction	Testing/ Trial Run	Warranty	PRELIM	FINAL	/Installation	Stage	Stage	13	Operational Safety Case	p			p		Second report shall be submitted within 7 days after the completion of safety validation test.	Why the Operating Safety Case has been asked to produce twice? As per International practice, usually the Operating Safety case shall be produce after final Trial Run or before the start of revenue service. Please confirm our understanding.	Provisions of the Bidding Document shall prevail.
S No	Document Description			Plan Development Stage						Remarks																			
				Design Stage		Manufacture/ Construction	Testing/ Trial Run	Warranty																					
		PRELIM	FINAL	/Installation	Stage	Stage																							
13	Operational Safety Case	p			p		Second report shall be submitted within 7 days after the completion of safety validation test.																						
630.	Part 2/ Section VI/ Volume-2/ PS/ CH 14  14.2 <u>Reliability Requirements</u> Point (4) Redundant	Referred both the clauses are contradicting, Please confirm which shall need to refer for designing.  Please Amend and confirm.	Provisions of the Bidding Document shall prevail.																										

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>equipment/module/component shall change seamlessly when active part fails. If changeover has a finite time, contractor shall show that its system shall not obstruct the train operation.</p> <p>14.3 AVAILABILITY Point (10) Switchover between redundant equipment, or between redundant routings, shall occur automatically and immediately upon failure and shall be transparent to the users. Toggling in switchovers shall be prevented.</p>		
631.	<p>Part 2/ Section VI/ Volume-2/ PS/ CH 14</p> <p>14.3 AVAILABILITY Point (14) Degraded performance or loss of any software or hardware dependent function of any end equipment shall be taken as unavailability.</p>	<p>Please Elaborate the referred clause as it contradicting the Point 7 of the same Clause 14.3 as well as the concept of redundancy. Please confirm.</p>	<p>Provisions of the Bidding Document are self-explanatory and shall prevail.</p>
632.	<p>Part 2/ Section VI/ Volume-2/ PS/ CH 14</p> <p>14.3 AVAILABILITY Point (19)/ iii The availability shall be worked out on the basis of the formula given during the preceding six months.....</p>	<p>Please Elaborate the preceding six months of ??</p>	<p>Provisions of the Bidding Document are self-explanatory and shall prevail.</p>
633.	<p>Part 2/ Section VI/ Volume-2/ PS/ CH 14</p> <p>14.4 MAINTAINABILITY Point (4): Quantitative Maintainability assessments to all significant functional</p>	<p>Please confirm, the Reference of Return of Experiences of the contractor against the allocation of Maintainability.</p>	<p>The Query quoted by the Bidder is not Clear.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	levels of the system, subsystems or equipment shall be allocated. Maintainability analyses during engineering, development and testing shall be used to evaluate the degree of achievement of the maintainability requirements. The Contractor shall identify the standards by which these allocations are made.		
634.	Part 2/ Section VI/ Volume-2/ PS/ CH 14  14.4 MAINTAINABILITY Point (16) <b>Maintainability Demonstration</b> iv. The maintenance actions shall be distributed among the equipment of <b>each test group</b> in proportion to their expected failure occurrence and in accordance with the MTBF.	Please Elaborate the type of Test groups as mentioned in the referred clause.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
635.	Part 2/ Section VI/ Volume-2/ PS/ CH 14. 14.5.12  RAM Demonstration (iii) The requirements relating to Reliability and Availability shall be demonstrated throughout Trial Running Period	Reliability & Availability demonstration through Trial Run is subject to the availability and performance of all the sub-system including Employers' input; other than CP-105. Please Confirm.	Provisions of the Bidding Document are self-explanatory and shall prevail.
636.	Part 2/ Section VI/ Volume-2/ PS/ CH 14. 14.5.13  Deliverable Documents Point 4- Safety Policy	Safety Policy can be a part of Safety Plan. Need be a separate document.  Please confirm.	Provisions of the Bidding Document are sufficiently clear and shall prevail.
637.	Vol-5 Particular Specifications E&M and	We understand that <b>only</b> foundation shall be designed for one storey more than the present	Provisions of the Bidding Document are sufficiently clear and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Associated Works, clause no.4.5</p> <p>GENERAL DESIGN CRITERIA FOR ANCILLARY BUILDINGS AND OTHER STRUCTURES</p> <p>(3) The foundations of buildings shall be designed for at least one storey more than the present day requirement.</p>	<p>day requirement as indicated in building plans given in the bid documents.</p> <p>Please confirm our understanding.</p>	
638.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no.4.5</p> <p>(5) The Plinth level of Control room buildings like TSS, SSP in proximity of Railway alignment shall be 900mm above natural ground level or 600mm above Highest Flood Level (HFL) whichever is higher.</p>	<p>We understand that only these two criteria shall be applicable for finalizing Plinth Level of Control room buildings.</p> <p>Please confirm our understanding.</p>	<p>The Provisions of the Bidding Document shall prevail.</p>
639.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no.4.5</p> <p>(6) The enclosed area between the boundary walls / fencing for the buildings constructed by the Contractor shall then be filled with earth and well compacted by suitable method as decided by the Engineer.</p> <p>(7) Chain link fencing shall be provided around TSS, SSP, Distribution</p>	<p>Chain Link fencing as Drg. No. DFCC/CHAIN LINK FENCING/TYP-001 shall enclose the building constructed and shall be filled with design slope.</p> <p>Please confirm</p>	<p>Provisions of the Bidding Document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Transformer and S&T Service Buildings in block section (Auto Location Huts) consisting of Signalling Equipment Rooms, Telecom Equipment Rooms, Signal & Telecom Power Supply Equipment Rooms, GSM-R equipment rooms; any additional Service buildings for S&T works in Station and Block section as per Drg No.GC/DFCC/CHAIN LINK FENCING/TYP-001. The distance of Chain Link Fencing from walls of SER, TER and S&T Power Supply Equipment Rooms shall generally be 1.5 meter or as decided by the Engineer during design stage.		
640.	Vol-5 Particular Specifications E&M and Associated Works, clause no.4.5  (8) The ceiling height of service buildings shall be minimum 4.2 m (including clear head room below beams if any) above floor level.	We understand that ceiling height above the floor shall be 4.2 m below the beams. The Plans given GC/DFCC/SP-SSP-504 needs to be corrected that indicated 5.5 m floor to floor height with shed. There will be No Shed but RCC roof slab.. Please confirm	The Provisions of the Bidding Document shall prevail.
641.	Vol-5 Particular Specifications E&M and Associated Works, clause no.17.4.3  The density of filled materials shall be compacted as per relevant IS: 2720 (latest version) and as per direction of the Engineer. Backfilled earth shall be compacted at Optimum Moisture	We understand that Backfilled earth shall be compacted at Optimum Moisture Content ("OMC"). The sub-grade for the roads and embankment filling shall also be compacted at OMC. Unless compaction at OCM is not feasible chemical treatment will not be resorted to. Please confirm.	The Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	Content ("OMC"). The sub-grade for the roads and embankment filling shall also be compacted at OMC.		
642.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no.17.5.4</p> <p>Adequate provision shall be made for road drainage. Protection of cut and embankment slopes of roads as per slope stability requirement shall be made. All the culverts and allied structures (required for road/rail, drain trench crossings etc.) shall be designed for class A loading as per IRC standard / IS code and should be checked for loading.</p>	We understand that scope of road drainage shall be limited within ROW of DFCC/IR.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
643.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, clause no.17.17.2</p> <p>The S &amp; T Equipment Rooms at the station and in the block section are required to be so designed so that there is proper ventilation and the temperature inside the rooms does not raised much above the ambient temperature. These Rooms should also be dust resistant so that the performance of the equipment does not degrade during its rated life cycle.</p>	We understand that TER & Telecom Control Power Supply Equipment Rooms are required to be designed so that there is proper ventilation and temperature inside the rooms does not raise much above the ambient temperature and there is no specific or conditional requirement of Air Conditioning. Please confirm.	Provisions of the Bidding Document are sufficiently clear. Please refer to Chapter 15 of PS (E&M and Associated Works) for Buildings to be air-conditioned.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
644.	Part 2/ Section VI/ Volume-2/ PS/ CH 14 /14.2  Reliability Requirement Point (5): The system design shall ensure that the subsystems providing redundancy for failures are truly independent to minimize the risk of common mode faults.	As per our understanding, Traction transformer and Auto transformer will have truly independent through redundancy for failures. However, for other components' redundancy will be achieved through sub-system (TPS) redundancy i.e. n-1 scenario. Please confirm our understanding.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
645.	Part 2/ Section VI/ Volume-2/ PS/ CH 14  14.4: Maintainability Point (6): Built-in self-diagnostics, power-up self-test and sufficient test points shall be provided in the System to minimize the time required to locate a fault.	As per our understanding, Relays are having the built-in self-diagnostics as per its functionality. Other components don't have such facility as per their functionality. Please confirm our understanding.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.
646.	Part 2/ Section VI/ Volume-2/ PS/ CH 14  14.4: Maintainability Point (7) All components, material, software and supports required for repair and servicing of the System shall be available during the entire lifetime of the System.	For the respective mentioned Clause, Client needs to develop service contract for entire lifetime of the system. Thus the requirement mentioned in the clause doesn't respect the Tender baseline. As per our understanding, for CP 105 Contractor shall be obliged to the requirement till the DNP as per contract condition. Please confirm our understanding.	Provisions of the Bidding Document shall prevail.
647.	Part 2/ Section VI/ Volume-1/ PS/ CH 12/ 12.16  Point (1) Revenue Service shall not commence until the "Proof of Safety" has received the approval of the Employer.	As per our understanding, Delay in the Approval of the document shall not be attributed to the contractor. It is Employer's internal process. Approval Timeline includes all reviewers. Please confirm.	Provisions of the Bidding Document shall prevail.
648.	Vol-5 Particular Specifications E&M and	As per the clause no. 11.1 s.no. (1), DG rating	The Provisions of the Bidding

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>Associated Works, Clause no. 4.2.6 Essential Power for Calculating Rating of DG set S.no. 2</p> <p>( 2) Lighting including Security Light, critical Signage, Fire Detection and Alarm system /Fire Suppression system, Access Control System, Ventilation, Computers, Printers etc. at Station and Depot as applicable and all other installation included in the concept plan for <b>Auxiliary power distribution system shall be connected to essential Power considering at least 30% of the total power load of the installation.</b></p>	<p>shall be based on the listed below utilities:</p> <ol style="list-style-type: none"> <li>1. Signalling and Telecom equipment</li> <li>2. Lighting load : critical load ( 30% of normal light),fans including security light and signages</li> <li>3. Fire Detection and alarm system/Fire Suppression System</li> <li>4. Water supply &amp; Drainage Pump</li> <li>5. Computers, printers</li> <li>6. SCADA system</li> <li>7. Access Control System</li> <li>8. Other Controls &amp; Battery backup requirement</li> </ol> <p>a. <b>As per clause 4.2.6 (2) it seems DG load shall be at least 30% of the total power ,however, exact utilities load is given in Clause no. 11.1 .Hence, Request to clarify which clause to be considered while sizing DG rating.</b></p> <p>b. <b>We understand that there is no future provision to be considered in DG</b></p>	<p>Document are self-explanatory and shall prevail.</p>
649.	<p>Vol-5 Particular Specifications E&amp;M and Associated Works, Chapter -15 clause no. 15.1</p> <p>(1) The contractor shall assess the Air-conditioning &amp; Ventilation requirement to maintain the requisite working temperature range and provide Air-conditioning system for the following installations:</p> <p>(i) Station Manager / SM Room, Signalling and Telecom Equipment rooms at Stations;</p> <p>(ii) Officer Rest room and Inspector Rest Room at Stations;</p>	<p>We understand that the AC provisions/points shall be considered as per this clause only. AC provision other than this shall be considered as variation.</p> <p>As per the clause No. 9.6 S.no. 12 of Internal wiring of service buildings, Quarters and Ancillary Buildings stating that Every room shall have power outlet for AC/Desert cooler along with its controlling MCB.</p> <p>a.<b>We request to clarify which clause to be followed for the AC provisions in the contract.</b></p> <p>b. <b>please specify the rooms in which AC points required as there are functional rooms where desert cooler not required at all.</b></p>	<p>The Provisions of the Bidding Document are self-explanatory and shall prevail.</p>



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	(iii) Telecom Equipment Room in block section at Auto location huts, GSMR locations, Interfacing IR and at the TSS		
650.		Please confirm whether Water Supply requirement of Station, IMD, IMSD, Quarters ,Guest House, TSS, TWS and other ancillary Buildings shall be through Bore well or through Municipal corporation	Please refer sub-clause 3.2.1(5), Vol.5, Part-2 of the bidding document.
651.		Please specify the Estimated population of Each buildings ( Crossing Station ,IMSD and other Associated Buildings)	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.
652.	Part 2 volume 2 Clause No <b>10.10.2 (56)</b>  Functional Details of Master Station Software , <b>Network Management System (at OCC)</b>	Network Management system which is the newly added in the contract CP 304 & CP 105. Same is not shown in the <b>GENERAL ARRANGEMENT BLOCK DIAGRAM FOR TRACTION SCADA CONTROL</b> of CP 304 & CP 105. But it is the part of the network architecture diagram. This needs Clarity please.	The Provisions of the Bidding Document shall prevail.
653.	Part 2 volume 2 Clause No <b>10.10.2 (56)</b> Functional Details of Master Station Software , <b>Network Management System (at OCC)</b>	NMS system is used for complete LAN network but they are indicate in both contract. Is it use for contract wise or full network. This non-clarity to be confirmed please.	The Provisions of the Bidding Document shall prevail.
	Part 2 volume 2  Drg. No.GC/DFCC/TR/SCADA/701	In the GENERAL ARRANGEMENT BLOCK DIAGRAM FOR TRACTION SCADA CONTROL is showing same LAN network for all the contracts. But DATA interchangeability is not clearly mentioned. Please clarify.	Please refer Addendum No. 7, S. No. 66.
654.	Part 2 volume 2	Purpose of Fault factor and Modem is not clearly	The Provisions of the Bidding

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	Drg. No.GC/DFCC/TR/SCADA/701	mention in the document. It is showing in the Drawing only. It is also newly added in the contract. Please elaborate for clarity.	Document are self-explanatory and shall prevail. Also refer Addendum No. 7, S. No. 66.
655.	General Query	Confirm SCADA & RTU vendors already approved by DFCCIL in other ongoing projects are applicable for CP 304 & CP 105.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
656.	PS Vol2 Electrification 3.2.4 (5)  Voltage imbalance and THD imposed at PCC with IR's transmission line network at normal rated capacity as well as extended feed scenario in full load conditions and mitigation measures thereof, including sizing of mitigation equipment	PCC means sending end Substation end (i.e. IR line end) or our TSS. Please confirm. Please confirm the existing short circuit level of feeding sending substation and approximate distance between sending end substation and TSS & conductor details. This Input is very much essential. Please provide the table of Information.	Please refer reply at Sr. no. 588.
657.	General Query	Items approved already BY DFCC (EDFC/WDFC) are deemed approved and will not undergo any process requirement further. Please confirm.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
658.	General Query	Please confirm the Type Test/FAT need not be repeated on the Items / Equipment, which are already subjected to Type Test in EDFC/WDFC.	Provisions of the Bidding Document shall prevail.
659.	Part 2, Employer's Requirements Section VI, Volume 3, Particular Specifications -Signalling Work  All costs associated with Testing shall be borne by the Contractor. This shall include the Testing/Inspection charges to be paid to	Please confirm all (Initial/First) material Inspection witness charges at works by DFC & PMC for Electrical, SIG, COM, SCADA (Like all Travels, Stay) will be borne by Employer/PMC	Please refer Addendum No. 7 at S. No. 4 and 34.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>RDSO/RITES/Test Laboratories. The Contractor shall bear any expense incurred due to resetting/retesting caused by defects of material or failure of equipment to meet the requirements of contract in first instance. The costs incurred by Engineer and/or Employer's Personnel against hotel and travel expenses for witnessing of testing shall not be borne by the Contractor.</p>		
660.	General Query	<p>Please confirm all the concreting Materials Like Aggregate, Sand, Cement, Sub contractors which are already approved by DFC in earlier projects and to CW/TW Contractor shall be deemed as Vendor approved. This will facilitate to mobilize the works faster, being the schedule tight. Contractor will take ref and will submit a formal letter for a GO from PMC.</p>	Request not accepted. Provisions of the Bidding Document shall prevail.
661.	General Query	<p>Please provide Stations Master Plan for Location of various Civil building (Chainage – IR/DFCC both). And please provide the distance from centre line of Track) also.</p>	Please refer Part-4, Reference document.
662.	<p>Part 2, Employer's Requirements Section VI, Volume 1 General Specifications 8.3.2.4.</p> <p>The Contractor shall make its own arrangement of space for storage facility. <i>However, if the spare land is available with the Employer, the same will be handed over to the Contractor</i></p>	<p>We request you to make it certain that spare land available with the Employer will be handed over to the Contractor free of cost, for the purpose of establishing temporary construction depot(s). Having Construction depots in Right of Way (ROW) area will improve project progress and coordination among different stakeholders of project. Confirmation from your side will also enable us to</p>	Provisions of Bidding document are sufficiently clear and shall prevail. Please also refer to Appendix-5, Vol.1, Part-2 of the bidding document.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	free of cost, for the purpose of establishing temporary construction depot(s) with the condition that whenever the Employer requires this portion of land back, the same shall be handed over by the contractor at a month's notice at no extra cost/compensation to the Contractor.	plan accordingly for technical stage and further submission.  Please confirm.	
663.	<p>Part – 1, ITB 29.8 / Page no 44/1231</p> <p>The bidders may note that this DFCC project being funded by the World Bank qualifies for exemption from payment of customs duty and excise duty on goods supplied /intended to be supplied to the project in terms of Govt. of India notification no 84/97 customs dated 11.11.1997 and Central Excise notification no 108/95 C E dated 28.8.95 ( read with all subsequent amendment including amendment dated 1.3.2008 )</p> <p>Service Tax Dept vide their notification no 25/2012 Service Tax dated 20.6.2012 has exempted services by way of construction, erection, commissioning or installation of original works pertaining to railways.</p>	<p>While customs duty exemption is applicable after implementation of GST w.e.f July 1,2017 ,all taxes Excise Duty/VAT/CST/Entry tax/Service Tax have subsumed into GST and hence GST will be charged on all our invoices</p> <p>Please confirm whether GST will be reimbursed on all the invoices submitted to DFC.</p> <p>Since this is World Bank funded project, we would like to go for advance license. Hence we need Project Authority certificate (PAC) for availing customs duty exemption. Further, we would like to know whether the names of our sub vendors supplying for this project would be included in PAC. Please confirm</p> <p>Further we need payment certificate to close advance license. Please confirm whether payment certificate will be issued.</p>	<p>Since the contract price is inclusive of duties, taxes and other levies payable by the Contractor under the contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the total Bid Price submitted by the Bidder as per ITB 29.8 of Bid Data Sheet. With introduction of GST from 1st July, 2017, the contract price will include GST.</p> <p>The total bid price covers all the Contractor's obligations mentioned in or to be reasonably inferred from the bidding document in respect of the design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation and completion of the Works as per ITB 29.1.</p>
664.	Part – 3, Particular Conditions	With the implementation of GST w.e.f. July	Advance would be part of the total

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	Sub- Clause 14.4 –Mobilization advance. Pg 1212/1231  As per this clause mobilization advance is made.	1,2017, as per clause 279A (83),whenever an advance is paid , the law authorizes imposition of GST on advance paid , which will be adjusted at the time of invoicing  Please confirm whether GST amount will be paid along with advance amount by DFC.	contract price and will be inclusive of GST and Duties.
665.	Part – 3, Particular Conditions  Clause 13.3 Variation Procedure  For varied works of items of due to variations as per sub-clause 1.1.6.9.	Please confirm whether GST will be paid on price variation.	For determining the price to be paid for variation in terms of the procedure as at clause 13.3 of PCC, all applicable taxes to be paid by the contractor shall be taken into consideration.
666.	There will be interstate supplies to this projects , which will require road permits	Since DFCC will be placing purchase orders of some items of interstate nature thereby causing entry into state, road permits to be issued by DFCC.  Please confirm whether road permits will be issued by DFCC	Permits will not be issued by DFCCIL.
667.	For Civil works , Erection & Installation works we will be charging applicable GST rate	Please confirm whether TDS will be deducted or not	Yes, TDS (Income tax) will be deducted. GST TDS will also be deducted, if DFCCIL is liable to deduct.
668.	BOCW cess on services (Civil & Erection & Installation)	Please confirm whether BOCW cess is applicable on services (both civil, erection works & installation). If so, please confirm applicable rate of deduction.	The applicable rates of BOCW cess as applicable will be as per the state govt. rules & regulations.
669.	Section VIII, Particular Conditions, Page 9 of 52 Clause 4.2  Performance Security	Please clarify whether the performance security for ESHS will also be linked to the other contractual non-performance of the Contractor and can be encashed for the same.	The ESHS Performance Security would cover all the Environmental issues stipulated in Appendix – 6 of Volume – 1 (General Specifications), Part – 2 of the Bidding Document. It will also cover any other requirement for protection of Environment, Safety,

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response															
(1)	(2)	(3)	(4)															
			<p>and Health &amp; Security as required in the Employer's Requirements.</p> <p>However, in the event of termination as per sub – clause 15.2, both the securities shall be forfeited.</p>															
670.	<p>Section VIII, Particular Conditions, Page 17 of 52 Clause 8.7</p> <p>Delay Damages</p>	<p>Please clarify that the LD shall be the only remedy in case of delay by the contractor and the contractor can exercise its other rights under the contract once this remedy is exhausted.</p>	<p>The clause in question is for Delay Damages and not for Liquidated Damages. The Delay Damages are not the only damages which the Employer is entitled to resort to. The Bidder is requested to refer to Conditions of Contract in this regard.</p>															
671.	<p>Part 1 Section IV Bidding Forms From MOU Clause 4</p> <table border="1"> <tr> <td colspan="3">The Parties have resolved that the distribution of responsibilities and their proportionate share in the Joint Venture is as under:</td> </tr> <tr> <td>Joint Venture Member(s)</td> <td>Financial Share (%)</td> <td>Responsibilities</td> </tr> <tr> <td>(i)</td> <td></td> <td></td> </tr> <tr> <td>(ii)</td> <td></td> <td></td> </tr> <tr> <td>(iii)</td> <td></td> <td></td> </tr> </table>	The Parties have resolved that the distribution of responsibilities and their proportionate share in the Joint Venture is as under:			Joint Venture Member(s)	Financial Share (%)	Responsibilities	(i)			(ii)			(iii)			<p>As this is just a Technical Submission stage, It will be very difficult to calculate Financial % Share for the JV Members for the Contract Package CP 105.</p> <p>We request you to modify the format of Memorandum of Understanding by deleting requirement of Financial share at this stage.</p>	<p>Request not accepted. The provisions of the Bidding Document shall prevail.</p>
The Parties have resolved that the distribution of responsibilities and their proportionate share in the Joint Venture is as under:																		
Joint Venture Member(s)	Financial Share (%)	Responsibilities																
(i)																		
(ii)																		
(iii)																		
672.	<p>PS Vol2 Electrification 3.3.1 (3) i</p> <p>240V AC Single Phase, Low voltage (LV), Auxiliary Power Supply shall be drawn from 25kV Traction circuit through 10kVA Auxiliary Transformers including all power supply control posts i.e. TSS and SSPs. However, TSS shall be provided with additional 100kVA Auxiliary Transformers including all</p>	<p>Single line diagram shows one no of 100kVA and one no of 10 kVA Auxiliary transformer connection. Please elaborate the connection of additional 100kVA auxiliary transformer is TSS.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p>															

<b>Sr. No.</b>	<b>Reference to Bid Documents</b>	<b>Clarification Sought by the Bidders</b>	<b>DFCC's Response</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
	terminations and cabling.		
673.	PS Vol2 Electrification 4.4.2 (4.b) Items which has been adopted in Indian Railways	Please confirm if the items are approved in Metro line, it will be accepted in CP 105 in similar line as followed for RDSO equipment (By providing the respective documents for credential approval).	The Provisions of the Bidding Document shall prevail.
674.	PS Vol2 Electrification 6.12 Outdoor Switchyard for TSS	We understand that the layout shall be designed based on RDSO guidelines/CBIP guidelines/Any other state utility guidelines. Please confirm.	Please refer Addendum No. 7, S. No. 12.
675.	PS Vol2 Electrification 7.2.2  The point of Interface between the Indian Railways owned 132kV, double circuit transmission line and the contractor will be at the incomer gantry of the TSS. The gantry will be provided by the contractor as per the Transmission line termination requirement of IR as well as the TSS. Indian Railways will terminate the transmission line at the gantry. All the metering bay structures, foundations and equipment after the point of interface towards the TSS, Shall be provided by the contractor.	Please provide the details up to which point is bidder's scope. Please represent in diagrammatic view in all the single line diagrams. And which are the equipment's in scope of work for metering.	The Provisions of the Bidding Document are self-explanatory and shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
676.	PS Vol2 Electrification 7.3.2  Table 7.3.1: Connection Type	Bidder's scheme will be Two single phase transformers connected in "V-connection". One transformer will be feeding left hand side and the other will be feeding right hand side. The middle transformer will be feeding left or right when the respective transformer is under maintenance/outage. The scheme is in line with CP-104. Please confirm the acceptability.	The Provisions of the Bidding Document shall prevail.
677.	PS Vol2 Electrification 3.3.1 (1) v (c)  Auto-Transformers shall be provided at the TSS (as required as per design) and at SSP's	If a bidder demonstrates with Simulation that in V-Connected Traction transformer scheme, Auto transformer is not required at Traction Substation, requirement of Auto Transformer at Traction Substation shall be relaxed. Please confirm our understanding.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
678.	PS Vol2 Electrification 3.3.1 (6)  Earthing & Bonding Plans shall be prepared and implemented as required for Dadri – Khurja section and adjacent Indian Railway tracks or any other utilities or metallic structures in proximity belonging to other independent authorities to provide protective provisions against EMI from 25kV traction currents and to limit touch potentials as a result of simulation study	We understand that bidder's scope is limited to Dadri-Khurja DFCCIL section only. Please confirm.	The Provisions of the Bidding Document shall prevail. Also refer Addendum No. 7, S.No. 7, 8 and 9.
679.	Part 2, Employer's Requirements, Section VI, Volume 4	We understand that EDFC is planning to procure its own NSS (Core Equipment) in CP-304 which	The provisions of the Bidding Document are sufficiently clear and



Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
	<p>8.2.3: It is envisaged that Network Sub-system (NSS) of MTRC System of Indian Railway used for Ghaziabad-Mughalsarai section shall also be used for MTRC System of Dadri- Khurja section of EDFC. Details of NSS of MTRC System of IR are given in Appendix-II. This NSS shall be upgraded under Contract Packages CP-104 and CP-203, if required, to meet the requirements of EDFC Phase-1 and Phase-2. This NSS of MTRC System of IR shall be further upgraded, if required, by the Contractor to meet the requirements of Dadri- Khurja section of EDFC</p>	<p>will be installed at OCC in Allahabad.</p> <p>Installation of NSS (Core Equipment) in CP-304 at OCC in Allahabad will create an efficient network architecture. The integration of BSS with NSS of CP-304 which shall also be installed at OCC in Allahabad shall eliminate transmission cost for carrying all type of calls between Allahabad and Kolkata leading to substantial cost savings with superior efficiency and latest technology for EDFC.</p> <p>Kindly confirm if NSS proposed in CP-304 is to be used for MTRC System of Dadri- Khurja section of EDFC</p>	<p>shall prevail. Please also refer Addendum No. 7, S. No. 50.</p>
680.	<p>Part 2, Employer's Requirements, Section VI, Volume 4</p> <p>Clause 8.2.4; 8.2.6; 8.2.7.1 (1), (2), (3), (5); 8.3.17; 8.3.18.2; 8.3.19.1; 8.5.1.1 (1), (2), (3), (4), (5); 8.5.1.2.</p>	<p>The above point shall have implication on the all of the clauses mentioned here, which may be suitably reviewed.</p>	<p>The provisions of the Bidding Document are sufficiently clear and shall prevail.</p>
681.	<p>PS Vol2 Electrification 5.1.4 (1.a)</p> <p>Both the incomers are available. 132kV Bus coupler circuit breaker (CB) in open condition. Only one of the 132kV Incomer bay is taken on load. Both the 132kV incomers are independently rated to take full load of the TSS.</p>	<p>Please clarify this point <b>"132kV Bus coupler circuit breaker (CB) in open condition. Only one of the 132kV incomer bay is taken on load"</b>.</p> <p>With the V-connected traction transformer scheme, both the incomers are required. Left side transformer will be feeding left hand side of the track and right side transformer will be feeding right hand side of the track. This scheme is in line with CP104.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p> <p>The Provisions of the Bidding Document shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		<p>And if only one incomer will be in service then the supply for the other transformer should be provided by closing the 132kV Bus coupler breaker or both the incomers should be in service.</p> <p>Please clarify.</p>	
682.	<p>PS Vol2 Electrification 6.1.4 (1)</p> <p>Circuit breakers for 2x25kV AT system with protection relays as required to automatically isolate faulty section/equipment, control relay panel and CT's, PT's as per application duty of Max. 60kV or Max. 30kV rated voltage, and suitable BIL in conformance to EN 50124-1.</p>	<ol style="list-style-type: none"> <li>1. All the 25kV equipment's will be as per RDSO and from RDSO approved vendor, which means, all the RDSO equipment's Max. Voltage and BIL will be either on 27.5kV or 55kV.</li> <li>2. RDSO Standards are with Max Voltage stds with 27.5kv / 55 kv only.</li> <li>3. Please provide clarification on this whether bidder can comply this clause with the RDSO approved equipment, which will have the Make in INDIA Edge.</li> </ol> <p>Confirm amendment the Max Voltage Limits of 60KV &amp; 30KV to 55kv &amp; 27.5kv.</p>	<p>Being a design &amp; build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.</p>
683.	<p>PS Vol2 Electrification 4.4.2 (5.d.ii)</p> <p>Considering the environmental conditions as specified in this PS</p>	<ol style="list-style-type: none"> <li>1. Equipment procured from vendor outside INDIA, complies Type Test to the Environment specified in IEC and applicable standards.</li> <li>2. Some of the Equipment used in DFCC are already Type tested and witnessed by Engineer of DFCC &amp; DFCC.</li> <li>3. We presume that Equipment's which are procured type tested as per applicable standards or by RDSO or from RDSO approved vendor or from the vendor whose Type Tests are already accepted by DFC are valid for this contract as well.</li> </ol>	<p>The Provisions of the Bidding Document are self-explanatory and shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		Please confirm our understanding for all the above.	
684.	Elec PS 4.4.2 (5) (f)  Cross Acceptance Criteria – New India Vendor 50% supply from INDIA and balance from OEM	In order to motivate and more Localise as a MAKE IN INDIA Policy, the 2x25kv Transformer Manufacturing under Cross acceptance Criteria, we request to accept 85% Qty be permitted for manufacturing in INDIA unit.  Minimum one qty shall be accepted as enough to bring it from OEM outside INDIA. Such relaxation only can motivate to localise the critical Equipment, especially POS & OCS eqpt...etc.,  PI Confirm.	The Provisions of the Bidding Document shall prevail.
685.	Schematic Diagram WAIR TSS	As per Tender single line diagram, there is no current transformer in 132kV bus coupling section. Please clarify how protections need to be implemented.	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.
686.	PS Vol2 Electrification 6.5  Table 6.5.1 Design short circuit levels for 132kV	Based on MVA levels provided, Calculated fault level for 132 kV is 43.74 kA.  Generally for - 132kV RDSO approved equipment's short circuit capacity would be either 31.5kA for 1 sec or 40kA for 1 sec.  Please amend the short circuit levels of: - 132kV equipment's as 31.5 kA (i.e. 7201MVA) or 40kA (i.e. 9145MVA)  So that bidder can procure RDSO approved	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
		equipment's and adhere to "MAKE IN INDIA" policy.	
687.	<p>Part 2/ Section VI/ Volume-1/ GS/ CH 14 /14.4</p> <p><b>14.4 EXTENSION OF DEFECT NOTIFICATION PERIOD</b></p> <p>In case of failure of the Contractor to achieve the RAMS Targets specified in the Employer Requirement:</p> <p>The Defects Notification Period shall stand extended for a further period corresponding to period of failure.</p>	<p>As per our understanding, DLP will not be extended if System RAMS targets as specified in Particular Specification will be achieved; irrespective of component predicted rates.</p> <p>Please confirm.</p>	<p>The Provisions of the Bidding Document are self-explanatory and shall prevail.</p>
688.	<p>Part 2/ Section VI/ Volume-1/ GS/ CH 12 /12.17</p> <p>12.17</p> <p>The Defect Liability /Notification shall be of minimum 24 Months from the date of Commercial operations and shall be monitored For RAMS compliance. The Failures and Performance shall be monitored on monthly basis and the result should meet the acceptable criterions. If the results of 6 months average do not meet RAM specifications than the DNP Period shall be extended with full DNP obligations of the Contractors. The same may be extended with /without penalty for further period similarly.</p>	<p>If the initial six month average meets the RAMS compliance then will the extension of DLP will be applicable or not? Please confirm.</p> <p>As per our understanding, here the 6 month period is applicable from 19<sup>th</sup> to 24<sup>th</sup> month of DLP. Please confirm.</p>	<p>The Provisions of the Bidding Document are self-explanatory and shall prevail.</p>

Sr. No.	Reference to Bid Documents	Clarification Sought by the Bidders	DFCC's Response
(1)	(2)	(3)	(4)
689.	Part 2/ Section VI/ Volume-2/ PS/ CH 14 /14.2  Reliability Modelling:  Failure Definition of Pattern failure	Please elaborate the definition of Pattern failure: will it be 3 or more succeeding repeated occurrences? What is time gap in between these failures?	Being a design & build contract General/Functional/ Performance requirements have been specified. The detailed design is in the scope of the contractor.  The Provisions of the Bidding Document shall prevail.
690.	Part-2/Section VI/Volume 5/ Particular Specification /Clause No. 4.2.2/1(e)/Page no. 23 of 132	As per the referred clause, We would like to mention that the auxiliary Transformers for two different locations may or may not be the same as loads will vary from station to station. Sizing of the transformers shall be done in accordance with the actual load schedule as calculated for each location. As a transformer possesses maximum efficiency at a particular load and if the same transformer is operated at extreme small loads, the efficiency & life expectancy of the transformer deteriorates drastically. Hence we request you to kindly amend the clause accordingly.	Provisions of the Bidding Document are self-explanatory and shall prevail.
691.	Part -2 / Section VI / Volume 5 / Particular Specification / Clause No. 6.2.15 / 2 (a) / Page No. 49 of 132	As per the referred clause, We would like to mention that IP-42 distribution board would suffice for the indoor application and is easily available in market. Moreover, IP-54 Distribution boards are expensive. Hence we request you to kindly amend the clause accordingly.	Provisions of the Bidding Document shall prevail.
692.	Part -2 / Section VI / Volume 5 / Particular Specification / Clause No. 16.1 / Page No. 90 of 132	As per the referred clause, We would like to specify that 5KW & 1KW solar photovoltaic system need not to be a grid connected system. As a part of general practice, 5KW & 1KW solar photovoltaic system are used for captive power generation (standalone) rather than grid connected solar photovoltaic system. Hence we request you to kindly amend the clause accordingly.	Provisions of the Bidding Document shall prevail.