## 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 SAHNEWAL – PILKHANI SECTION (APPROXIMATELY 175 ROUTE KM OF SINGLE LINE) OF EASTERN DEDICATED FREIGHT CORRIDOR

## **SYSTEMS WORKS CONTRACT PACKAGE 304**

## RESPONSES TO PRE-BID QUERIES OF THE BIDDERS (SN-723 to 772)

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
	5.1.7 Part 2, Section VI, Volume 2, Page 480 of 1309		Refer to Addendum No. 10 Sr. no. 95.
	5.1.7 First failure conditions (N-1) performance requirement – Under Failure of One TSS, the power will be extended from the adjacent TSS, Traction power supply system shall be capable of meeting the projected demand of the services with each TSS designed to deal with exigencies from one adjacent TSS going out of service to facilitate.		
	<ol> <li>Full design headway train service shall be maintained without any loss of performance.</li> </ol>	It is pertinent to point out that Sirhind TSS	
723.	The contractor shall identify and describe the conditions of all Single point Failure at TSS, SSP, and SP and assess & quantify the impact with requirement of Power rerouting and the energy requirement in KWH and MVA peak load.	being located at the farthest end of Eastern Corridor w.r.t feeding requirement, outage of this TSS under circumstances attracts the criteria of N-2.	
	<ol> <li>All the equipment shall be sized considering the single point failure at the location and one TSS failure with required safety margins (in rating) to meet the application duty requirement of the most stringent power requirement without affecting the power quality.</li> <li>One TSS outage may persist continuously for a number of days until the defective equipment is replaced. The single point Failure and TSS outage shall not use the overloading capacity of the equipment as prescribed by standards.</li> <li>The Traction transformer / Transformers shall be rated for full capacity to meet the power requirement of the extended feed scenario.</li> </ol>	It is therefore requested to modify the clauses suitably.	
724.	5.1.8 Part-2, Section VI, Volume 2, Page 480 of 1309  Second failure conditions (N-2) performance requirement – Under second failure conditions, the Contractor shall carry out Simulation study,	Considering the fact the there are only two TSS catering the requirements of Feeding in this section failure of both them will not only affect the train services with increased	Refer to Addendum No. 10, Sr. no. 95.

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(1)	(2)	(3)	(4)
	considering failure of two consecutive Traction Substations (TSSs) highlighting that the train services will still be operational with increased headway / reduced speed of trains in the affected section.  The N-2 conditions will not cause to overload the traction equipment; The Outcome of this study shall validate the rating and sizes of the Traction Power Supply System of CP-304.	headway / reduced speed of trains in the affected section but also leaves in a situation that there will be no power to OHE beyond Sirhind TSS location. Kindly modify the requirements suitably.	
725.	Particular Conditions – Appendix to Tender / Right of Access to the Site / 2.1  Possession of the site will be handed over to the Contractor as per the Work Plan approved by the Engineer for the execution of work of CP- 304 or as per the Access Schedule for "Formation and Track of CP-301" appended in Part-4 Reference Documents, whichever is later.	The Access schedule for "Formation and Track of CP-301" is not available in Part-4 Reference Documents. From the referred clause, we understand that the section shall be available to CP - 304 contractor only in portions based on the completion status of the other package contractor. We request DFCCIL to provide the section wise Key access dates showing interface with other package contractors in order to plan & program the activities suitably.	Refer to Addendum No. 08, Sr. no. 70 and attached access schedule in the "Attachment_to_Adde ndum_No. 8"
726.	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.  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.	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.	Bidder's understanding is correct
727.	Part -2 / Section VI / Volume 2 / Particular Specification / Clause 7.1.5  Table 7.1.1: List of Proposed Traction Substations (TSS)	Scope of works included the construction of 220/132 kV Receiving Substation cum 132/54 kV Traction Substation at Jagadhari.  Proposed plot size provided is 160X120 sq. m. Reference drawing as provided in the	The extra land at Jagadhari TSS location can be allocated after approval of the detailed design and

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
		Tender has been proposed for the Scott Connected transformer only.  Since, the contract allows for the V-connection also, it requires to install 3 Nos. V-connected transformer (considering 1 No. as Spare). It is not possible to allocate the RSS cum TSS with V connected transformer within the plot size as proposed in the tender.	layout of TSS by Engineer without any extra cost for development of land, fencing etc.
		Minimum plot size requirement is 160X170 sq. m. We request you to allocate the extra land requirement to construct the RSS cum TSS at Jagadhari.	
728.	Part-2, Vol-4, 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-	We understand that the availability of bandwidth between Pilkhani POP of RCIL and Khurja POP of RCIL will be 100%.	The provisions of the Bidding Document are sufficiently clear and shall prevail.
	track ensuring route diversity, from Sahnewal 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.	Kindly Confirm	Also please refer Clause no. 5.1.3 of PS Telecom Vol-4.
729.	Part-2, Vol-4, 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.	Kindly confirm that the Optical Fibers can be used for SCADA or any other intra-Telecom usage?	The provisions of the Bidding Document are sufficiently clear and shall prevail. Also please refer Clause no. 5.3.4.3 of PS Telecom Vol-4.
730.	Part-2, Vol-4, 5.3.3.5	We understand that fibers except the spare portion (i.e. 25%) can be used for intra- Telecom usage.	The provisions of the Bidding Document are sufficiently clear and shall prevail.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
	At least 25% of fibres within each cable shall be reserved as spares for future use.	Kindly Confirm.	
731.	Part-2, Vol-4, 5.3.4.3	Is VSS data to be carried over SDH?	Provisions of Bidding Document are
	The Second Network shall carry all Voice (including Emergency Communication) and Data (including Traction Power SCADA and Video Surveillance System) Communication between all Stations and LC Gates, Interfacing IR Stations, GSM-R Locations, TSSs, SPs, SSPs, IMD, IMSDs, Staff Quarters& etc. Second Network shall also carry all Signal Control Information, Track Vacancy Detection Information and other Vital & Safety Related Information between all Stations, Auto Section Locations, LC Gates and Interfacing IR Stations,. All Vital & Safety Related System using OFC System shall be implemented as per EN-50159.	Is it necessary that Traction Power SCADA data is carried over SDH?	sufficiently clear.
732.	Part-2, Vol-4, 6.3.3	From the PS of DNS, it is not clear how CP-	Provisions of Bidding Document are
	Layer-3 Switches at OCC shall be integrated with Layer-3 Switches at OCC being provided under contract Packages CP-104, CP-105 and CP-203 using 10GigE Fibre Ports with 1+1 Protection.	304 DNS WAN ring, comprising of Stations, Depots and TSS, will be extended to OCC.	sufficiently clear.
		As per PS-Clause 5.3.3.2, Employer shall hire from M/S RCIL required STM-16 Bandwidth for the section between Pilkhani POP of RCIL and Khurja POP of RCIL. But no such provision is mentioned in PS for DNS WAN. Kindly Clarify	
733.	Part-2, Vol-4, 7.5.4.11	These specifications pertain to Analog	Provisions of Bidding Document are
	The VRS shall comply with the following specifications:	type of Recorders, especially those based on Tape. Herein, the VRS system is	sufficiently clear.
	1. wow and flutter: < 0.8% peak	required to be a Digital system (PS	
	2. Frequency response: frequency response	Clause 7.5.4.1). Hence, these requirements are not applicable and shall	
	3. Signal to noise ratio: >42 dB;	be removed or suitably modified for a digital recording system.	
	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		

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
734.	Part-2, Vol-4, 11.5.2.1.1  9: Shutter Speed: 1 to 1/1,00,000	As per our previous experience we understand that shutter speed of 1/100,000 is not possible. We request you to update the shutter speed to 1/10,000 (100 uSec).	Only applicable technical specifications shall be used while designing the Telecom System.
735.	Part-2, Vol-4, 11.5.2.2.3  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 Clarify.	Only applicable technical specifications shall be used while designing the Telecom System. Please refer to Addendum no. 08 (S No. 60 & 61)
736.	Part-2, Vol-4, 13.3.1  Telecommunication Equipment Room at Stations, IMD, IMSDs, Residential Colonies, Club/Institute and Guest House will be constructed by CST Contractor to install the Telecommunication Equipment.	If the requirement of telephone at Residential colonies, Club/Institute and Guest House are being fulfilled through PIJF cable from nearest station, is there still a requirement to construction / setup a TER at these location	The provisions of the Bidding Document are sufficiently clear and shall prevail
737.	Part-2, Vol-4, 17.1.8  Contractor shall liaison with designated authorities in Indian Railway to design Telecom Arrangement for/at boundaries with Indian Railways. The contractor shall execute the so approved Telecom Arrangement for/at boundaries with Indian Railways.	We understand that any extension of Telecom to IR shall end at the boundary of DFCCIL / IR boundary and further extension will be carried out by IR, especially any excavation near the IR tracks / IR yard outside the DFCCIL boundary. Please confirm.	The provisions of the Bidding Document shall prevail.
738.	Part 2, Section VI, Volume 2 PS 10.4  (u) Interface management plan includes interfaces with other subsystem/Contractor/ other sections of EDFC.	Kindly confirm that the Interfacing with high end APL's information's is also required or not.	The Provisions of the Bidding Document shall prevail.
739.	Part 2, Section VI, Volume 2 PS 10.6	Kindly confirm that the monitoring of both Video surveillance system and CCTV are required or not?	Refer to Addendum No. 10, Sr. no. 98.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
	Indicative list of equipment's to be monitored and controlled at Remote location (Video surveillance system), (Doors and gate contacts), (Intruder alarm), (Access control system), (Fire alarm system), (CCTV),		
740.	Part 2, Section VI, Volume 2 PS, 10.7.10 In 10.7.10 The SCADA system at OCC shall support data acquisition from RTU or the other IED over Ethernet based IEC 60870-5-104	The Clauses are contradictory. Kindly Clarify	As per tender requirement data transfer between RTU & OCC is envisaged
	In 10.9.2 (b) The Traction substation shall be provided with RTU capable of communicating with Bay controller units (BCU) or Intelligent Electronic		using IEC 60870-5-104 protocol.
	Device (IED) over IEC61850 protocols.		The Provisions of the Bidding Document are self-explanatory and shall prevail.
741.	Part 2, Section VI, Volume 2 PS 10.12.10. Redundancy	Kindly clarify is redundancy required at all the levels like in IO cards?	Please refer Sub clause 10.3.1 (a), Vol-2, Part-2 of the Bidding Document for adequate redundancy in system.
			Please refer Sub clause 10.3.1(j), 10.8.1(a), 10.9.1(4 to 6) also.
742.	Part 2 volume 2, Clause No 10.13 Network Management System	Network Management system which is the newly added in the contract CP 304 & CP 105. Same is not shown in the GENERAL ARRANGEMENT BLOCK DIAGRAM FOR TRACTION SCADA CONTROL of CP 304 & CP 105. But it is the part of the network architecture diagram. Kindly confirm NMS for SCADA is required or not?	The Provisions of the Bidding Document shall prevail.
743.	Part-2, Vol-4, 5.3.3.3	Should the OFC be terminated at Staff Quarters even if there is no requirement?	The provisions of the Bidding Document are

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
	The Second Network shall be formed by two optical fibre cables 24F (min), preferably one laid along the upside-track and the other laid along the downside-track ensuring route diversity, from Sahnewal to Pilkhani and terminated on ODFs in TERs at Stations, Interfacing IR Stations, GSM-R Locations, TSSs, SPs, SSPs, IMDs, IMSDs, LC Gates, Staff Quarters and any other location as required. Locations of termination of optical fibre cables of Second Network can be clubbed based upon design of other Systems/Sub-systems under this Contract while meeting overall Telecommunication Requirements.	Is it necessary that all Second Network locations where OFC is terminated must also be equipped with SDH?	sufficiently clear and shall prevail
744.	Part 2 volume 2, PS clause no 10.7.4  The SCADA system shall be able to initiate a change of state at the output of an RTU within <1 second of initiation by the control room operator. If this change has not occurred in the field for any reason, the operator shall be notified that the command was unsuccessful. The Contractor shall demonstrate the past performance of similar system provided elsewhere by them with client's Certificate while proposing for implementation on DFCC as per the Scope of work.	For Railway application the change of state at the output of an RTU can be 3 second instead of < 1 sec.  Kindly Confirm	Request not accepted. The Provisions of the Bidding Document shall prevail.
745.	General SCADA	Kindly confirm that the approval of equipment/suppliers received in earlier DFCC packages shall be applicable for this project also.	Request not accepted. The Provisions of the Bidding Document shall prevail.
746.	General query SCADA - RTU	Kindly confirm that the approval of equipment/suppliers received in earlier DFCC packages shall be applicable for this project also.	Request not accepted. The Provisions of the Bidding Document shall prevail.
747.	Part-2, Vol-3, 2.2.3(3)(b)(ii)  While the TPWS is not required to be installed by the Contractor but the Contractor should provide a socket/ termination board at all  Signal posts. He should also demonstrate the ability of the system to permit the upgradation for incorporating TPWS at a later date. For this the Contractor would be called upon to conduct the trials as identified in Annexure "C" of Appendix 3.	Alstom TPWS and interlocking are already type tested equipment's and in service in other countries, so only document will be submitted for demonstration.  Kindly Confirm	Please refer to Addendum no. 08 (S No. 28 and 32)

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
748.	Part-2, Vol-3, 2.2.10(1)(i)(x) Following Typical alarms (but not limited to) shall be generated by the system: Colour light LED Signal	Only main CLS LED units will be monitored using HMU.  Please confirm, subsidiary signals can be excluded from monitoring.	Provisions of Bidding Document are sufficiently clear.
749.	Part-2, Vol-3, 2.2.6(1)(h)  The gateman shall be provided with audio visual 'Train Approach Warning' indication from a suitable distance (approximately 8 km) on DFCCIL lines, as per approved GWR by IR depending on the gate position.  When the train reaches at the approach warning track section in rear of the gate, Audio visual warning indication and buzzer should start sounding in the gate-hut intimating the gateman of the approach of a train. The gateman will close the gate and clear the gate signal provided the relevant track sections ahead are clear. When the lowering of the booms takes place, hooter shall sound to warn the road users of an approaching train. Also, the road signals shall start displaying a flashing red light towards the road users, which shall turn to steady red when the booms are fully lowered and positive boom locking is proved.	In absolute block sections gates are dead approach locked as per existing normal practice, please confirm it is necessary to provide approach locking with track sections as this will impact the Bill of quantities significantly.	The provisions of the Bidding Document are sufficiently clear shall prevail.
750.	Part-2, Vol-3, 6.2.1  Type tests are performed on sample of Equipment prior to full production. Type tests are used to confirm that the proposed equipment is fit for purpose in the environmental conditions specified and meets the requirements of the specification including the EMC	Some of the Equipment used in DFCC are already Type tested     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 for on-going contracts are valid for this contract as well.	The provisions of the Bidding Document shall prevail.
751.	Part-2, Vol-3, 6.2.3  Type tests may be performed on Equipment procured as per Para 5.2.4 and 5.2.5 of this specification.	Type tests shall not be applicable on RDSO approved products or products bought from RDSO approved suppliers.	Bidder understanding is correct.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
	However, the Type tests may be exempted if the Contractor is able to produce the Environmental and EMC test results earlier conducted on the Equipment and RDSO/DFCCIL are satisfied that the Equipment meets the required specification		
752.	Part-2, Vol-3 - Yard Plans for Crossing & Junction Stations.	1. Chainages indicated for the following stations are not clear. Request DFCC to provide clear plans.	May collect clear copies of yard plans from DFCCIL office.
		- New Jagadhari Workshop,	
		- New Dukheri,	
		- New Sirhind Yard,	
		- New Mandi Govindgarh,	
		- New Khanna,	
		- New Chawapail	
		2. In the Yard Plan for Sarai Banjara marking for New work is not visible. Request you to provide the yard plan duly marking the new works.	
		3. In Sarai Banjara Yard plan, there is no isolation provided for connection to IR line. Kindly Clarify.	
753.	Part 2, Section VI, Volume 1, General Specifications  The Contractor shall provide all tools, equipment, manuals and training necessary for the Employer/Engineer to maintain, re-configure and to make proper use of all the software provided under the Contract. This shall include supply of any specified development tools required for maintenance of the software, including but limited to editors, compliers and linkers.	The contractor's liability will be limited to the supply of the software outputs generated which can be modified. ALSTOM shall provide access to configuration tools & proprietary compilers, linkers, editors etc through an ESCROW account with mutually acceptable terms. The same process has been followed across major projects in India. Please confirm.	The provisions of the Bidding Document are amply clear and shall prevail.
754.	Part 2, Section VI, Volume 1, General Specifications	The contractor's liability will be limited to the supply of the software outputs generated	The provisions of the Bidding Document are

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
	The Contractor shall provide to the Employer and the Engineer one (1) copy each of the software packages with the same software products as those that the Contractor intends to use for the project, inclusive but not limited to programs for business administration, project management, design development etc. The Contractor shall utilize a shared electronic document management system with the Engineer and the Employer which shall be web / internet based	which can be modified. ALSTOM shall provide access to configuration tools & proprietary compilers, linkers, editors etc through an ESCROW account with mutually acceptable terms. The same process has been followed across major projects in India. Please confirm.	amply clear and shall prevail.
755.	PS Vol2 Electrification, Clause 6.9.8 (h)  Restricted Earth Fault Protection for 25kV Outgoings feeders	For 25kV outgoing feeders Distance Protection will be implemented. We presume that REF protection will be for transformers. If our assumption is wrong please elaborate REF protection for 25kV outgoing feeders.	Please refer Addendum no. 10 SN- 93.
756.	PS Vol2, Electrification Clause 7.3.1 Rating of 220/132kV Power Transformer	We can establish the traction transformer (i.e. 132/2x25kV and 220/2x25kV) sizing as we know the loading details. As we don't have the IR Transmission lines loading, we presume that 220/132kV Transformer rating is fixed as 75/105/150 MVA. Please confirm.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
757.	PS Vol2 ,Electrification ,clause 7.3.1 220/132kV Power Transformer	We presume that bidder can quote either with 220/132kV Two Winding Transformer or with 220/132kV Auto Transformer. Please confirm.	The Provisions of the Bidding Document are self-explanatory and shall prevail.
758.	PS Vol2, Electrification, clause 6.9.8 (f)  Restricted Earth Fault Protection for 25kV Outgoings feeders	For 25kV outgoing feeders Distance Protection will be implemented. We understand that REF protection will be for transformers. If our understanding is wrong please elaborate REF protection for 25kV outgoing feeders.	Please refer response at query Sr. no. 755.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
759.	Alignment Drawing, Page 34 Dismantling of existing IR TSS.	We presume that Dismantling of any Existing buildings, stations in DFCC ROW is not in the scope of bidder.	The query is not relevant to CP-304.
	Snap Shot is shown below:	Please Confirm.	
	C OF ANKAUR STN. KM: 1397/1121.46  DISMANTLING & SHIFTING ELECTRICAL WORKS OF THIS TSS IS NOT IN THE SCOPE OF CST CONTRACT  CC-ROW DECC-ROW DECC-ROW		
760.	Alignment Drawing Page 18 SSP shown at chainage 1380.440 Snap Shot is shown below:	As per RFP we have two sectioning and paralleling posts (SSP) in the Dadri-Khurja Section i.e. at 1375.750 and 1400.00 chainages respectively. We presume that SSP's mentioned in RFP are correct with their chainages and the SSP shown at 1380.440 chainage in alignment drawing is shown by mistake.  Please confirm.	The query is not relevant to CP-304.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
761.	Part 1 Section IV Bidding forms, Form MOU Clause 16 Part 1 Section I, ITB, Clause 4 This MOU shall be construed under the laws of the Bidder's actual or intended country of Registration.	As per clause 4 of ITB we understand that Bidder can be an unincorporated joint venture having one authorized representative  While clause 16 of Form MOU states about Bidder's actual or intended country of Registration.	Unincorporated JV is allowed for this Bid.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
	Bidder can be 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.  All partners of Joint venture 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 and all the partners of the JVA during the bidding process and, in the event the JVA is awarded the Contract, during contract execution.	Both of these statements seem contradictory hence require clarification whether Unincorporated JV is allowed for this bid or JV needs to be incorporated Please clarify.	
762.	PS Elec Vol2, Clause 5.2.2, Table 5.2.2	We understand that Train Simulation is	The Provisions of the Bidding Document
	3. A mix of Single Train and Double Train in the ratio of 15:85 percent shall be considered for both UP and DN directions		shall prevail.
		While the equipment's concerned to Down Track will be installed in the future. (i.e. 25kV catenary outgoings at TSS/SP/SSP & 25kV coupling equipment's at TSS) sufficient space will be provided for the same. Please Confirm Our understanding.	
763.	PS Elec Vol2, Clause 3.2 Design By Computer Simulation	For executing Tender simulation i.e. for finalizing the ratings of Traction Transformer & Auto Transformer we require the following data for simulation:  1. Alignment Drawings including Detour area.	The available details have been given in Part-4, Reference documents. For simulation purpose Low speed and tunnel may be taken as Nil.
		<ol> <li>Gradient Data / Topography</li> <li>Curvature Data.</li> <li>Low Speed Sections. (If any)</li> <li>Tunnel Data. (If any)</li> </ol>	Bidder's attention is also invited to provisions of Chapter 10, Interface Management of General

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
		6. Time Table (Considering the Train configurations) 7. Traction effort and Braking effort characteristics 8. Traction current and braking current characteristics 9. Conductor details	Specifications, Part – 2 which specifies responsibility of the Contractor for coordination with 'Other contractors' for all his interface requirements.
		10. Cross sectional diagram	Further, being a
		11. Rolling stock Current Limitation characteristics (If any)	Design build contract, the design shall be proposed by the
		12. Rail Resistance data.	Contractor.
		13. Rolling Stock acceleration/deceleration factor details.	
764.	Section IV, Bidding Forms, PRICE SCHEDULE 2.2.5  Apportionment of Contract Price for Payment of Cost Centre  TRAIN MANAGEMENT SYSTEM (TMS) AND SERVICE AND DIAGNOSTICS SYSTEM (S&D)  Note 1: Payment will be made on completion of each Payment Stage as	For various sub cost centres of Price Schedule 2.2.5, there may be phased delivery at project stage, therefore we would request you to allow the payment to contractor on pro-rata completion of each payment stage:	Request not accepted. The provisions of the Bidding Document shall prevail.
	per weightage(s) given in this schedule	We request you to replace the Note 1 by following, which would help to improve the Project Cash Flow. :-	
		"Payment will be made on Pro-rata completion of each Payment Stage as per Weightage given in this schedule."	
765.	Section IV, Bidding Forms, PRICE SCHEDULE 2.3.1 Apportionment of Contract Price for Payment of Cost Centre DESIGN AND DOCUMENTATION	For various sub cost centres of Price Schedule 2.3.1, there may be phased delivery at project stage, therefore we would request you to allow the payment to contractor on pro-rata completion of each payment stage:	Request not accepted. The provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2) 2. Payment will be made on completion of each Payment Stage as	(3) We request you to replace the Note 2 by	(4)
	Payment will be made on completion of each Payment Stage as per weightage(s) given in this schedule.	following, which would help to improve the Project Cash Flow. :-	
		"Payment will be made on Pro-rata completion of each Payment Stage as per Weightage given in this schedule."	
		Project Cash Flow.	
766.	Section IV, Bidding Forms, PRICE SCHEDULE 2.3.4  Apportionment of Contract Price for Payment of Cost Centre  TELECOM WORKS AT OPERATIONAL CONTROL CENTRE (OCC)  1. Payment will be made on completion of each Payment Stage as per weightage(s) given in this schedule.	For various sub cost centres of Price Schedule 2.3.4, there may be phased delivery at project stage, therefore we would request you to allow the payment to contractor on pro-rata completion of each payment stage:	Request not accepted. The provisions of the Bidding Document shall prevail.
	por worginago(o) given in une conocare.	We request you to replace the Note 1 by following, which would help to improve the Project Cash Flow. :-	
		"Payment will be made on Pro-rata completion of each Payment Stage as per Weightage given in this schedule."	
767.	Clause 8.16 PS Part II Vol II  The zinc coating for steel structures and parts shall be as per RDSO Specification no. ETI/OHE/13 (4/84) i.e. minimum coating of zinc shall be 610 gm / m², except for marine and chemically polluted areas. The polluted areas shall be identified as a result of pollution mapping by the contractor and approved by the Engineer, where the zinc coating shall be 1000 gm/ m². In case of need to use nonstandard SPS at special locations to be fixed to the steel structure, these shall be with clamps to avoid drilling of galvanized mast sections	This Clause shall be applicable for only steel structures and small parts of steel attachments on mast and not for OHE components. For OHE components, the Galvanization for OHE components shall be in accordance with RDSO Specification ETI/OHE/13 or European Standard EN ISO 1461 where galvanization zinc coating of lesser mass is allowed depending upon the thickness.	Please refer Addendum No. 10, Sr. no.96.
768.	Clause 8.14.4 – 2, PS Part II Vol II  Setting distance of fixed structures shall not be less than that specified in SSOD for EDFC. This shall be however, subject to review by the Engineer. The location of traction masts shall be such that visibility	Can we design all the OHE masts (single cantilever/multiple cantilever/Portals/ TTC/ Structures) with a standard implantation	The Provisions of the Bidding Document are self-explanatory and shall prevail.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
	of signals is not obstructed and shall be as indicated in ACTM. The OHE supporting masts/portals/drop arms shall be coordinated with signal locations to ensure clear signal visibility.	of 3.00m as the SSOD of EDFC permits 2.825m implantation for structures.	
		However, the implantation of structures in the visibility of signals will be designed such that the visibility of signals not obstructed and will be according to ACTM.	
769.	Clause 8.14.4 -2(a) PS Part II Vol II  The minimum setting of structures on curves shall be increased by the figures for curve allowance being taken from the schedule of dimensions for DFC Eastern corridor	Standard Schedule of dimensions for DFC for Eastern corridor Annexure 1 shows extra Lateral clearances on curves for Radius of Curve of 1750m or less. EDFC to confirm whether curve allowance to the OHE masts shall be given to the for the curve track with radius above 1750m.	The Provisions of the Bidding Document shall prevail.
770.	Clause 8.14.1, PS Part II Vol II  Overhead equipment structures for the main line tracks shall be mechanically and electrically independent except where specifically approved by the Engineer. In station yards, having three or more tracks, generally, portals shall be erected as per yard plan.	Can we use masts in between tracks in yard between mainline and loop line if the track centre is adequate to install mast with an offset of 2.825+curve allowance if any, as per standard schedule of dimensions for EDFC an implantation of 2.825m is allowed for individual structures without anchor or twin cantilever structures. Can we use masts in between tracks in yard between mainline and loop line if the track centre is adequate to install mast with an offset of 2.825+curve allowance if any, as per standard schedule of dimensions for EDFC an implantation of 2.825m is allowed for individual structures without anchor or twin cantilever structures.	The Provisions of the Bidding Document shall prevail.
771.	Clause 8.18.1 d, PS Part II Vol II  Porcelain insulators as per RDSO specification No. TI/SPC/(OHE)/INS/0070 shall be provided at all locations except at polluted locations and LC Gates where insulators as per RDSO	Can we install composite insulators as per RDSO specification TI/SPC/OHE/INSCOM/0070 (O4/07) or as per any other International standards with Aluminum tube cantilevers as the Porcelain	Please refer Addendum No. 10, Sr. no.97.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
(1)	(2)	(3)	(4)
	Specification TI/SPC/OHE/INSCOM/0070(04/07) shall be used. The locations where polluted zone type of insulators is to be installed shall be proposed after survey and shall be installed with the approval of Engineer.	insulators will not be suitable for aluminum cantilevers.	
772.	ITB 30.1, Section II, Part 1  "[] the prices shall be quoted by the Bidder entirely in Indian Rupees [].  A Bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country shall indicate [] the percentage of the bid price needed by him for the payment of such foreign currency requirement, limited to no more than three foreign currencies [	In case of a consortium composed by onshore and offshore companies, could you confirm that  - Each member of the consortium will invoice for their respective portions in the respective currencies (i.e. INR for onshore consortium members and foreign currencies for offshore consortium members limited to a maximum of three foreign currencies)  - DFCCIL shall pay directly to the respective bank account of each member of the consortium.	Request not agreed. Invoice will be preferred in the name of the JV/Contractor as indicated in clause 14.3 of PCC. However, regarding payment into individual bank account, clause 14.7 of PCC may be referred.