Dedicated Freight Corridor Corporation of India Limited

(A Government of India Enterprise)

DESIGN AND CONSTRUCTION OF SIGNAL AND TELECOM WORKS FOR DOUBLE LINE RAILWAY INVOLVING TRAIN DETECTION SYSTEM, ELECTRONIC INTERLOCKING IN STATIONS, AUTOMATIC SIGNALLING IN BLOCK SECTIONS, TRAIN MONITORING & DIAGNOSTIC SYSTEM, INTERLOCKING OF LEVEL CROSSING GATES, DISPATCH TELEPHONE SYSTEM, FIBER OPTIC COMMUNICATION SYSTEM, GSM(R) SYSTEM, DIGITAL ELECTRONIC EXCHANGE SYSTEM, MASTER CLOCK SYSTEM AND VIDEO SURVEILLANCE SYSTEM FOR REWARI – MAKARPURA SECTION INCLUDING TESTING AND COMMISSIONING ON DESIGN-BUILD LUMP SUM PRICE BASIS OF WESTERN DEDICATED FREIGHT CORRIDOR

SIGNALLING AND TELECOMMUNICATION WORKS CONTRACT (Rewari – Makarpura of Phase 1)

CONTRACT PACKAGE ST P-5

Queries from Bidders

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
390.	l (1/2)	5 Part II	1.1.5.9	140 & 146-150	Coordination Events	Please provide coordination events of ST P-5 with ST P-5A.	Refer item No. 376 of Addm 8.
391.	II	8	4.13.6. 6	14	Language for O&M Manual	Clause 25.1.7 specifies O&M Manual in Engilish and Hindi.	Refer item No. 386, 387 & 388 of Addm 8.
			25.1.7	121	Language for O&M Manual	Please confirm that the language requested is only English as specified in Clause 4.13.6.6.	
392.	II	Appendi x-8	3.2.1	2	Software Quality Assurance Requirement	Please confirm that, ISO 9001 will be applied for the work package defined as SIL 0 or 1 Software as identified in Clause 3.2.1, and IEC62279 called for in Clause 3.4 is not	Clauses 3.2.1, 3.5.1 and 3.5.2 are self explanatory. No change is
			3.4	2	Software Development Programme	applicable.	envisaged.
393.	III Part 1	9	5.8.1	29	Level Crossing	Please indicate Type (Spl, A, B1, B2 or C), TVU and location (within station or outside	1) LC 109 is deleted. 2) TVU not required

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
			Annext ure-5	1	Chapter XIV of IRESEM	station) for the following LC identified in Vol.IV Sec15H LC-108 Sec15H LC-109 Sec 5 LC-1	as type of Class is given. 3) "List of level Crossings" at Page 187 & 188 of Vol. IV of Bid Documents is updated accordingly. Refer item No. 409 & 410 of Addm 8.
394.	III Part 1	9	5.8.1 Annext ure 7-4 (1.5)	29	Interface Issues with Indian Railway - LC	Please confirm that the following LC gates (see below) identified from VolIV shall be provided with the following equipment by ST P-5: Sec15H LC-108 Sec15H LC-109 Sec 5 LC-1 (1) New interlocking equipment/control panel, integrating those required for the existing line and DFCW line. (2) One single set of barrier and indicators for the existing line and DFCW line.	1) Confirmed. 2) No. of set of barriers shall depend on site conditions e.g. (a) Whether it is a single road or double road? (b) Width of single road can be covered by one barrier or two barriers? (c) If Track centers between adjacent lines are such that a road vehicle can stand between the two tracks when trains are passing, then separate sets of barriers shall be provided for such tracks. In view of above, the Contractor shall propose arrangement of

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
							barriers at design stage depending on site conditions.
	III Part 1	9	29	5.10	Power Supply System (PSS)	Please confirm our understanding of PSS load as follows; (1) PSS at stations and OCC shall provide the powers to all all signalling equipment and AC 230V users of the following telecomm sub systems only, with holding time of 4 hous;	1) While Clause 5.10 is self explanatory, special attention is drawn to sub-clause 5.10.1 and 5.10.10 of
	III Part 2	9	91	11.1.1	48VDC Battery Back up System	*LAN Switch for Signalling *GSM-R Central Equipment *Master Clock *Video Serveillance (2) The following telecomm subsystems are fed independent DC-48V power supply system per RDSO with holding time of 10 hours; *SDH *LAN Switch for Telecomm *EPBX *DTS	Volume III Part 1. 2) For requirement of power supply for telecom subsystems please refer to following clauses of Volume III Part 2: i) Clause 11.1.1& 11.1.2. ii) Clause 6.5.1.12. iii) Clause 9.5.5 iv) Clause 10.5.1.9. v) Clause 15.7.1. vi) Clause 5.5.3.5.1.5.
396.	III Part 1	9	Annext ure 7-4	1	Interface Issue with Inidian Railway	Please confirm that replacement work of existing TC relays for the existing IR lines with AC immune relays is under the responsibility under IR, including supply of	Confirmed.

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
						the relays	•
397.	III Part 1	9	Annext ure 7-4 (1.2) 6.3.13.	1	IR Junciton Stations linked with DFCW Juntion Stations	In some cases, DFCW connecting lines terminate not at the end of the existing IR station end, but at interstation track. In this connection, for all DFCW JS, please make it clear;	1. For names of existing stations which will have signaling system linked with DFCCIL JS, see response
	III Part 2	9	3 (4)	55	Radio System Coverage	which existing station shall be equipped with the signalling system liked with DFCW junction station, and; which exisiting station yard shall be covered by DFCW GSM-R system The related existing stations identified the bidder is as follows; Rewari JS Kishangarh Balawas Railway Station Ateri JS ①NWR Kathwas Station Only ②Concor ICD Station Phulera JS ①NWR Phureda Station ②NWR Himoda Station Bangurgram JS NWR Bangurugram Station Marwar JS WR Marwar Station Chadotar Station WR Chadotar Station Mahesana JS WR Mahesana Station Sabarmati North JS ①WR Sanand Station	2.The related existing stations of IR, identified by the bidder as connected to DFC junction stations, to be provided with RF coverage is correct and shall, however, be confirmed during interface with Civil Contractors.

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
						②WR Goraghuma Station Sabarmati South JS ①WR Sanand Station ②WR Goraghuma Station Makaruupra JS WR Makapura Station	•
398.	III Part2	9	20	5.1	OFC Communicati on	Please clarify whether MPLS-TP technology can be introduced to integrate SDH & WAN/LAN into one network	Refer to DFCCIL response to query nos. 127 & 253. As is evident from sub-clause 5.3.6.1, WAN shall connect OCC, Stations and ELMD etc. in Ring topology using Optic Fiber Cable as a separate network.
399.	V	-	-	Addendum- 1 Attachment- 8	Transverse Control Points for Package 3	In the same manner as for CT-1 and CT-2, please indicate the Chainage for each transverse control point	The exact chainages of the traverse control points for CT P-3 Package are not available. However, the GPS locations of the traverse control points can be corelated at site with the ROW offsets at different chainages, which has been physically staked all along the alignment at site.
400.	V	V-4-1-1		List of Building in JS and CS	IMD Sub Depot	According to General Rules indicated in the foot note 3) and 4), the following JS/CS shall be provided with IMD Sub depot. However,	List of facilities indicated in the table at V-4-1-1 & V-4-1-2

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
	No.	No.	No.				Response
	III Part 2	Appendi x 1 Appendi x 4	1	EPABX Telephone Location and Quantity Clock Schedule	IMD Sub Depot	the list itself does not indicate IMD Sub depot at *Banas CS *Phulera JS *Sabarmati North JS ,while EPBX Telephone list in Vol.III Part 2 does not indicate IMD Sub depot at *Palanpur JS ,while Clock Schedule in Vol.III Part 2 does not indicate IMD Sub depot at *Banas CS *Phulera JS .while building layout drawings of Phulera JS	of volume V are correct and final except as indicated in item No. 389 of addendum 8. As per List, there is no IMD Sub-depot at *Banas CS *Phulera JS *Sabarmati North JS Palanpur has IMD as per list and telephones are provided for the same.
	V	V-5-1-5 V-5-3-13		Building Layout in Phulera Building Layout in Sabarmati- North		and Sabarati North JS indicate IMD Sub depot in station area. Please clarify the location of IMD Sub Depot.	
401.	V	V-4-1-1 V-5-1-5		List of Building in JS and CS Building Layout in Pulera	TW Shed	TW Shed is indicated in Building List, while it is indicated in dotted line in Building Layout Drawing in Phulera. Please clarify whether TW Shed is installed in Phulera for Phase-1.	TW Shed (TWS) indicated in dotted line means that it shall be provided in future.

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
402.	III Part 1	Annex 7-6		1.5(iv)	Interface Issues between ST P-5 and ST P-5A	We refer to item no. 1.5(iv) of Annex. 7-6 amended vide SI. No. 362 of Addendum No.6 dated: 11.02.2014 wherein it is mentioned that "P-5 contractor shall provide the said repeater relay in the location box containing the LEU". In this regard, we understand that P-5 contractor also need to supply and lay the signaling cable, between machine room/ALH and location box containing the LEU, required for energizing ECR repeater relay. Kindly confirm.	P-5 Contractor shall be required to include cable requirement for this purpose in his Cable Route Plan.
403.	III Part 1	Annex 7-6		1.5(iii)(b)	Interface Issues between ST P-5 and ST P-5A	We refer to item no. 1.5(iii)(b) of Annex. 7-6 ammended vide SI. No. 361 of Addendum No.6 dated: 11.02.2014 wherein it is mentioned that "P-5A contractor shall use as it is, convert to required voltage or extend available power supply from panel and/or location box	The understanding in principle is correct. However, details of the same shall be worked out as interface between the relevant Contractors.
404.	III Part 1	Annex 7-6	-	1.5(viii)	Interface Issues between ST P-5 and ST P-5A	We refer to item no. 1.5(viii) of Annex. 7-6 included vide SI. No. 363 of Addendum No.6 dated: 11.02.2014	Splicing includes OF cable upto LEU location box. However, its termination work in

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
	No.	No.	No.				Response
						available fibers for monitoring of TPWS equipment along the trackside, not only the splicing but OF cable between jointing pit and LEU location box including termination in location box shall be provided by P-5 contractor. Kindly confirm.	LEU location box shall be jointly worked out by relevant Contractors in interface.
405.	III Part 1	9	75	13.6.1	Spares	Kindly clarify whether spares for items like cable termination rack, cabinets and location box etc. also need to be provided by contractor. If yes what will be the quantity (percentage).	Refer item No. 406 of addendum 8.
406.	II	7	20	7.3.2.2 and 7.3.2.3	Project Management Information System (PMIS)	We refer to item 7.3.2.2 and 7.3.2.3 of Vol. II amended vide Sl. No. 371 & 372 of Addendum No.7 dated: 25.02.2014	1) Yes, the Contractor needs to provide Work Programme data in given Excel templates to DFCCIL for uploading into IT system. 2) For documents and bills, the Contractor will be provided access through Portal. SAP License for that would be provided by DFCCIL. However, cost of the same shall be borne by the Contractor.

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
	No.	No.	No.				Response
						package SAP, please clarify whether contractor has to provide soft copy of works program data/drawing in desired format to DFCCIL for uploading in to IT system OR DFCCIL will allow contractor to access the ERP of DFCCIL to make him enable to upload the required data directly in to DFCCIL's IT system. Since DFCCIL would be holding the license for ERP package SAP, please clarify regarding the licenses to be procured by contractor.	
407.	1	3	124 of 191	6.5 (ii)	Aftercare Services	 Kindly elaborate your requirements under Aftercare Services. Kindly provide with format for submission of financial proposal of the same. Kindly clarify whether or not the same shall be considered in evaluation of our price bid. 	Delete the whole subclause 6.5(ii): Aftercare Service of Installed S&T System and Equipment. Refer item No. 413 of addendum 8.
408.	1	3	120 of 191	3	Outline Quality Plan	It is already covered in form I-B-1. Kindly delete the same from this form.	The referred Clause states that this plan is to be submitted as "part of Bid Documents" (which shall be in form I-B-1) and not as part of I-B-7. However, requirements mentioned in I-B-7 must be included in the Plan submitted in I-B-1 and duly referred to in I-B-7.
409.	1	3	121 of 191	4	Outline Safety Plan	It is already covered in form I-B-1. Kindly delete the same from this form.	The referred Clause states that this plan is to be submitted as

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
•	No.	No.	No.				Response
							"part of Bid
							Documents" (which
							shall be in form I-B-
							1) and not as part of
							I-B-7. However,
							requirements
							mentioned in I-B-7
							must be included in
							the Plan submitted
							in I-B-1 and duly
440	4	2	404 -4		Outline.	It is already sourced in forms LD4 Kindly	referred to in I-B-7.
410.	1	3	121 of 191	5	Outline	It is already covered in form I-B-1. Kindly delete the same from this form	The referred Clause
			191		Environment al Plan	delete the same from this form	states that this plan is to be submitted as
					ai Pian		"part of Bid
							Documents" (which
							shall be in form I-B-
							1) and not as part of
							I-B-7. However,
							requirements
							mentioned in I-B-7
							must be included in
							the Plan submitted
							in I-B-1 and duly
							referred to in I-B-7.
411.	1	3	122 of	6.2 (iv)	Installation	It is already covered in form I-B-1, clause	The referred Clause
711.	'		191	0.2 (17)	Plan	(e). Kindly delete the same from this form.	states that this plan
			101		I IGII	(c). Rinary delete the same from the form:	is to be submitted as
							"part of Bid
							Documents" (which
							shall be in form I-B-
							1) and not as part of
							I-B-7. However,
							requirements
							mentioned in I-B-7
							must be included in

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
-	No.	No.	No.				Response the Plan submitted in I-B-1 and duly referred to in I-B-7.
412.	1	3	125 of 191	9	Bid Programme and Proposed Design and Certification programme	It is already covered in form I-B-4. Kindly delete the same from this form.	The referred Clause states that this Programme is to be submitted as "part of Bid Documents" (which shall be in form I-B-4) and not as part of I-B-7. However, requirements mentioned in I-B-7 must be included in the Programme submitted in I-B-4 and duly referred to in I-B-7.
413.	1	3	126 of 191	10	Manufacture , Installation and construction methods	It is already covered in form I-B-1, clause (e). Kindly delete the same from this form.	The referred Clause states that these Methods details are to be submitted as "part of Bid Documents" (which shall be in form I-B-1) and not as part of I-B-7. However, requirements mentioned in I-B-7 must be included in these Methods details submitted in I-B-1 and duly referred to in I-B-7.
414.	1	6	26 of	Schedule	Payment	There is no payment milestone against the	This has been

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
•	No.	No.	No. 70	5.4.1	Schedule - Installation of Equipment in Auto Location Huts (Except MSDAC)	supply of Auto location Huts. Considering the quantum involved, we envisage that this will have an adverse effect on the contractor's cash flow. Kindly include a payment milestone against the supply (delivery at site) of huts.	Response included in the referred schedule. Refer item No. 385 of addendum 8.
415.	1 (1/2)	3	123 of 191	6.3 (v)	Detailed information on specific Clauses as mentioned in RDSO specification of EI, DAC, TPWS etc.	The requirements of this submittal are not clear. Kindly elaborate the same.	Detailed information to be submitted on specific Clauses shall become clear on going through the relevant specifications. Some examples, but not limited to, are as under: (i) Clause 10 of El specification No. RDSO/SPN/192. (ii) Some Clauses may have options available and Bidder shall be required to give specific information about equipment proposed to be supplied by him.
416.	1 (1/2)	3	123 of 191	6.3 (vi)	Cross Acceptance Procedure	Please provide us the procedure that is to be followed for Cross Acceptance of equipment.	This document may be obtained from RDSO.
417.	3 (1/2)				Cross Acceptance of Telecom	Please list the sub systems which fall under the purview of RDSO Cross Acceptance criteria.	No Cross Acceptance for Telecom systems.

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
					systems		•
418.	1 (1/2)	5	141 of 191	8.2	Time of Completion	Please furnish the schedule of availability of 120 Locos of Phase I for which the onboard equipment are to be commissioned as per MS – 8.	Since P5 Contractor has to supply onboard equipment to enable P7 Contractor to install it during Loco manufacture, this is part of Interface Management by the Contractor based on which he will be required to submit Coordinated Supply/ Installation Plan as per details given in Employer's Requirements.
419.	3	1	Anne xure 2 : Pg 8 of 44	6.1 (XV)	Applications / Central Server	The (3) Three years warranty period for this item begins from installation date or date of receiving of taking over certificate. Please clarify.	Refer item No. 390 of addendum 8.
420.	3	1	Anne xure 2: Pg 10 of 44	6.3 – point no.6	Logging of Data on Servers	Will the contractor be responsible for data lost during copying due to errors caused by any forms other than technical? Please confirm.	The Employer's Requirement in this Clause is clear and shall be met.
421.	3	3 (Design Criteria & Standar d)	Pg. 13 of 87	3.3.3	General and Subsidiary Rules (G&SR) of DFCCIL	We request you to furnish the G&SR of DFCCIL for us to incorporate design standards to meet tender requirements.	Refer response to Query No. 194.
422.	3	8 (Annex	Pg. 1 of 2	1.5	Scope of Interface	If the delay is caused by Indian Railways, then how the contractor shall be	Refer Clause 13.2.15 of Vol. II of

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
•	No.	No.	No.				Response
		ure 7.4)				compensated? Please clarify.	Bid Documents.
423.	3	8 (Annex ure 7.4)	Pg. 1 of 2	1	Definition and Scope	Please refer to your response given under SI. No. 117 & 191 in Set 2. You have stated that the bidder has to propose the type of block working for each link line for each IR station and DFCC station interface. We have the following concerns pertaining to this statement: 1. Due to lack of clear instructions / specifications, each bidder's proposal and understanding is bound to be different. Hence, the bidders shall not be competing on the same platform. 2. During execution, our suggestion might not be acceptable to the engineer and this exposes us to unquantifiable risk. 3. In SI. No. 191 of Set 2, you have mentioned that all the work under IR jurisdiction shall be done by them. Please establish clear battery limits for works to be executed by ST P5 contractor and those to be done by IR. In the absence of clarity, this can lead to interface issues between the contractor and IR.	Refer item No. 391, 393, 394 & 395 of addendum 8.
424.	3	8 (Annex ure 7.5)	Pg. 1 of 4	1.6	ST P-5 shall be the lead contractor.	We understand that as the leader of interface ST P5 contractor shall only be responsible for exchange of required data with all the concerned stakeholders. Kindly confirm	While all interfacing Contractors are responsible for meeting Interface Management Requirements as per details contained in relevant Clauses in Employer's Requirements, lead Contractor is

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
							responsible to take lead for the same.
425.	3	8 (Annex ure 7.6)	Pg. 4 of 7	1.5 (e)	Laying of cables:	The reworks caused due to damaging of cables and other field instruments by ST P-5A (TPWS) contractor shall be resolved under Variation Order. We do not envisage the restoration of the damaged infrastructure to be smooth under any other modality. Please amend the clause suitably.	Refer item No. 396 of addendum 8.
426.	3	8 (Annex ure 7.6)	Pg. 4 of 7	1.5 (i) (f)	CTR interface between ST P5 and P5A	Please provide the location-wise requirements of terminals of the ST P5-A (TPWS) contractor for us to consider appropriate number of terminals in our CTR. We shall be considering the CTR to accommodate our requirements plus 20% spares for future use as per tender requirements.	These details shall be determined at interface stage by the relevant contractors.
427.	3	8 (Annex ure 7.6)	Pg. 4 of 7	1.5 (ii)	TPWS equipment space requirements	Please furnish the required space to be allocated for housing TPWS equipment in SER & Auto location huts.	These details shall be determined at interface stage by the relevant contractors.
428.	3	8 (Annex ure 7.6)	Pg. 4 of 7	1.5 (iii)	Power supply load requirement	Please provide the location-wise (per station, per auto-location, per OCC, etc.) load requirement of TPWS equipment for us to consider additional capability in our power supply system (PSS).	These details shall be determined at interface stage by the relevant contractors.
429.	3	8 (Annex ure 7.6)	Pg. 4 of 7	1.5 (i) (h)	Laying of Bricks in the cable trenches.	Laying of bricks in cable trenches to distinguish between ST P5 and ST P5A cables shall be under the scope of ST P5A contractor. Kindly confirm.	The Clause is clear and no change is envisaged.
430.	3	1	Pg. 2 of 87	1.3.6	TMS terminal	We understand only TMS terminals have to be provided (One workstation) for all positions. Please confirm. Also clarify what	(i) One each workstation shall be provided for every

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
•	No.	No.	No.				Response
						is required for Asst. Controller.	controller position except Asst. Controller. (ii) Asst. Controller shall not be provided with any signaling equipment.
431.	3	1	Pg. 3 of 87	1.3.8	Design life	As contractors we can only ensure to supply the signaling equipment as per RDSO specifications and sourced from Part 1 RDSO approved vendors, wherever applicable. Moreover, the imported equipments have to be Cross Accepted. This is the primary requirement of the tender. Hence, the design life shall be as per the mandates of RDSO specs. Hence, please delete this clause.	Refer item No. 391 & 392 of addendum 8.
432.	3	1	Pg. 4 of 87	1.4.3.2	TMS terminals	Kindly confirm the list of designated places where the TMS terminals have to be provided.	Refer item No. 397 of addendum 8.
433.	3	1	Pg. 4 of 87	1.4.3.3	Misc. User terminals	Please confirm that only a total of 35 terminals are to be provided by us. Also confirm the locations in which it needs to be provided.	Refer item No. 398 of addendum 8.
434.	3	1	Pg. 5 of 87	1.4.5	Crew Lobbies & Signal Maintenance Base:	Kindly clarify what other equipments are required?	Any equipment which the Contractor may consider necessary for functioning of TMS terminal.
435.	3	5	Pg. 30 of 87	5.7.7	Auto location huts	Can the signaling, telecom and GSMR equipments be accommodated inside a single hut (different rooms), if feasible?	Yes but different rooms with independent entries and locking facilities subject to NO

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
							Objection by the Engineer.
436.	3	5	Pg. 23 of 87	5.10.4	Input power supply	 It is mentioned that the input power supply shall be provided by some other contractor. Please confirm that the ST P5 contractor is not required to provide DG set at each station. What are the power sources at an autolocation? UP AT & DN AT or UP AT & DN AT and DG Set Is the ST P5 contractor required to provide a DG Set at each Auto-location? Is the ST P5 contractor required to provide the Auto changeover panel at every auto-location? 	1) Confirmed. 2) See details against "Block sections" location in Clause 5.10.4. 3) No. 4) Refer Clause 3.4.2 of Annexure 7-1 duly modified as per item No. 75 of
437.	1(1/2)	3	Pg: 120 of 191	IB-7 (1a)	Technical Particulars – Signal and Telecommun ication	Preliminary & Detailed Design - How many sets of drawings and designs / sets of each document is to be submitted?	Addendum 2. Refer ITB 20.1 of Vol. I Part 1/2 for number of copies to be submitted.
438.	1(1/2)				System Reconnaissa nce survey and inception	Please elaborate the complete requirements of Reconnaissance survey and inception report.	Reconnaissance survey is done by the Contractor to get acquainted with the

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
•	NO.	NO.	NO.		report		section before taking up Design work. It does not require any submission to be made. For inception report, refer item No. 399, 400, 401 & 402 of addendum 8.
439.	1(1/2)	1	Pg: 17 of 191	1.5	Currencies of Bid and Payment	Since it is a LSTK contract therefore the purpose of substantiating the amounts included in the unit rates & prices is not understood. Kindly Clarify	No change in ITB 15.2 is envisaged. However it is clarified that the detailed breakdown of the prices shall be required to appreciate and to check the unbalanced requirement of the local and foreign currency components of the bid
440.	1	4	137	(4)(v)	Minimum Percentage of STEP Component	Please refer your response to query no. 80 given in set 2. As per the response, the SI. No. 5 of Addendum No. 2.could not be found in addendum 2.	Please refer Sl. No. 27 of Addendum No. 2 and also refer Sl. No. 28 of Addendum No. 2 for Query no. 91.
441.	Gen	-	-	-	Concession Form C	Please confirm whether Form C will be provided by the Employer to the contractor?	The Employer will not provide Form-C.
442.	Gen	-	-	-	High Sea	Kindly confirm whether Employer will	Employer will not

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
	140.	140.	140.		Sales / ocassional import	accept High Sea Sales / Sale Occasions Import in case of import of material for this project	accept High Sea Sales/ Sale Occasions Import.
443.	Gen	-	-	-	New technical standard or regulation	Kindly confirm that any proposal for the compliance with the new applicable technical standards & regulations coming into effect after the Base Date shall constitute a variation	Refer Clause 5.4 of GCC.
444.	Gen	-	-	-	Bifurcation of Contract Value falling in every state for registration & VAT Payment	This project will be executed in three states (i.e. Haryana, Rajasthan & Gujarat). In all these three states VAT is applicable and accordingly VAT Registration will be required in all these three states. For registration & VAT Payment purpose the bifurcation of Contract Value falling in every state will be required. Shall DFCC provide such type of bifurcation?	This being a linear project, apportioned state-wise bifurcation (approximate) of the Contract Value, as required shall be provided to the Contractor. However, this shall be without any liability to the Employer.
445.	Gen	-	-	-	WCT-TDS & IT-TDS certificates for individual consortium members	We understand that the payment can be made by DFCC to the respective member of Consortium directly. Shall DFCC issue WCT-TDS & IT-TDS Certificate in the name of respective consortium member?	Yes. In case of the payment is made to individual members of the consortium, the Tax Deduction Certificates will be issued in the name of individual members of the Consortium.

SI.No	Vol. No.	Section No.	Page	Clause No.	Title	Questions	DFCCIL's
446.	Gen	NO	No.	-	Building Layout of OC C	We request you to furnish the building layout plan of OCC building.	Response OCC building complex is same as "Control Room (CTC) & Office of Regional Manager" shown in the list of buildings against Sabarmati South on page V-4-1-2 of volume V Reference Drawings. The area of this complex as indicated in the list of buildings is 2500 sqm. Building layout plan pertaining to OCC shall be finalized during the interface between relevant Contractors.
447.	3	9	Pg: 15 of 87	4.1	Engineering Philosophy	Please confirm that the ISA of ST – P5 contractor is not required to carry out ISA of ST P5A contractor.	This will be decided by the Employer at appropriate stage in view of Item No. 254 of Addm A4A.
448.	1(1/2)	5	Pg: 143 of 191	14.5(b)(i)	Plant and Materials for payment when shipped en route to the Site	The price schedule has provisions for payment when shipped en-route to the site only for the following items i) Electronic Interlocking. (ii) Train Protection and Warning System (TPWS). (iii) Train Monitoring and Diagnostic System (TMS) (iv) Digital Axle Counters to have a clarity on interim payment, the	The provision of payment on submission of Bill of Lading in respect of all the identified items has been made in the Payment Schedules.

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
	No.	NO.	140.			same provision shall be provided for other imported items also by providing cost centres for "submission of Bill of lading for other imported items". We would request you to kindly modify the price schedule accordingly.	Accordingly no change in Price Schedule / Payment Schedule is envisaged at this stage.
449.	1(1/2)	5	Pg: 155 of 191	PC 1.2 (f)	Interpretation s	"In these Contract conditions, provisions including the expression "cost plus profit" require this profit to be one twentieth of this cost." Profit as one twentieth of cost is not practical, we request you to kindly change it to 15% of the cost.	No change is warranted in PC 1.2(f). The provision has been kept in line with FIDIC Guidelines. (Notes for Preparation of Tender Documents – Page 5 of Guidelines for preparation of Particular Conditions.
450.	1(1/2)	5	Pg: 164 of 191	13.2	Value Engineering	The portion of the clause may please be replaced as below. "If the proposal of variation as a result of Value Engineering is approved, the reasonable share to be given to the Contractor shall be 50% of the net saving resulted due to Value Engineering."	No change in PC 13.2 is envisaged. As bids for the present package has been invited on Design Built Lump Sum basis, Bidders are expected to submit their design based on the

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
							optimum design.
451.	1(1/2)	5	Pg: 165 of 191	13.3	Variation Procedure	The following may also be kindly added: 1. Investigations, Engineering & Design cost 2. Additional Insurance(s) cost	Variations are prepared based on the current market rates as stipulated under GC & PC13.3. No change is envisaged in PC 13.3.
452.	1(1/2)	5	Pg: 165 of 191	13.7 (d)	Adjustments for Changes in Legislation (any change in the rates of any of the Taxes or royalties on Materials that have a direct effect on the Project)	The clause may please be modified as "any change or modification in the rates of any of the Taxes, duties, royalties, octroi etc. or introduction of any new taxes, duties, royalties, octroi etc. that have a direct effect on the Project"	No change in PC 13.7(d). Provisions of GC Sub-clause 13.7 of FIDIC Yellow Book and PC 13.7 are self explanatory.
453.	1(1/2)	5	Pg: 165 of 191	13.3	Variation Procedure	The approval for Variation shall state the period of extension of time, if any, allowed for the Variation. If no extension of time is allowed, the same shall be stated. Please confirm whether or not the extension of time means the extension of the date for project milestone.	The provisions in PC 13.3 are clear and self-explanatory.
454.	1(1/2)	5	Pg: 166 of 191	13.8	Adjustments for Change in Cost	Ln", "Mn" and "Un" are the current cost indices for period "n", expressed in the relevant currency of payment, each of	This is a standard provision as included in Sub-clause 13.8 of

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
•	NO.	NO.	NO.			which is applicable to the relevant tabulated cost element on the date 49 days for Local and Foreign currency components prior to the last day of the period (to which the particular payment certificate relates).	•
						Cost indices on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates) shall not be appropriate for adjustment of prices for local supply component of the work for which payment shall be made in local currency. We would request you to kindly change the "current cost indices or reference prices for period n" to the relevant RBI indices published 49 days prior to date of inspection for the supply items for which invoice is submitted by the contractor. This shall help in making PV claims consistent with the actual expenditure incurred as the expenditure and indices correlate to the same period of time.	
455.	1(1/2)	5	Pg: 172 of 191	20.6	Arbitration	In case of Contractor being a joint venture or consortium between a foreign company and a domestic company, wherein the Leader being a foreign company, such JV/ Consortium shall be treated as the foreign contractor. Kindly confirm that our understanding is correct.	Yes, being ICB.
456.	1 (2/2)	6	Pg: 3 of 70	Schedule 1 (ii)	Schedule of Adjustment	In a hypothetical scenario, if for an index there are two different currency source and	No. With reference to the provisions specified

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
	NO.	NO.	NO.		Data – Pt. no (ii)	at least more than one source of index is to be provided. In such cases, whether Contractor will be allowed to further bifurcate the index according to the different source of indices provided. Kindly clarify.	in the Schedule of Adjustment Data (Schedule 1 of Volume I Part 2/2), it is clarified that the Bidder shall indicate one source for each of the index for a foreign currency element of his Bid Price.
457.	1 (2/2)	6	Pg: 3 of 70	Schedule 1 (ii)	Schedule of Adjustment Data – Pt. no (ii)	Kindly confirm our understanding is correct. Contractor is at freedom to propose as many Price Adjustment Formulae in the case of very large and/or complex works contracts, for the foreign currency portion (i.e. for JPY & Tradable Foreign Currency portion).	The formula for adjustment for change in cost shall be as specified in PC 13.8. As specified in subpara (ii) of Schedule 1 (Volume I, Part 2/2), the Bidder is required to indicate the family of components and their proposed weightings coefficients along with their source and base value of indices, for adjustment of the foreign currency component of the Contract Price,
458.	3 part II	9 Part II	11 62	2.2.3 6.5.3.16	OCC location in Ahmedabad	Please refer to your response given under SI. No 124 & SI. No 190 of set 3. Kindly clarify if OCC is not located along WDFC route then ROW shall be arranged for the	Refer to clause 15.4.5 of volume III part 2. DFCCIL will facilitate for

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
-	1101	1101	1101			purpose of laying cables from WDFC network to OCC by DFCCIL.	obtaining ROW for cable route from the DFC ROW to OCC.
459.	III part	6	39	6.3.1.1 and 6.3.1.1(6) d)	Core network to be as per ETSI standard for Rel-4 & ETCS level 2 speed 220 km/h In the third line words "(ETSI) Global System for Mobile (GSM) Standards" are replaced by "(ETSI)TS 103 066 Version 1.1.1 or latest for Rel-4 Core Network requirement s for GSM- R, Global System for Mobile (GSM)	We request you to kindly consider the following changes: In the fifth line after words "SRS documents" sentence "Tenderer shall submit, along with his bid at the time of factory acceptance before delivery, certificates, from European Commission's notified certification bodies, confirming compliance to the standards in respect of the offered core and radio equipment." is added.	Refer to item No. 403 & 404 of addendum 8.

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
•	No.	No.	No.		0		Response
					Standards		
					for BSS"		
					In the fifth		
					line after		
					words "SRS		
					documents"		
					sentence		
					"Tenderer		
					shall submit,		
					along with		
					his bid,		
					certificates,		
					from		
					European		
					Commission'		
					s notified		
					certification		
					bodies,		
					confirming		
					compliance		
					to the		
					standards in		
					respect of		
					the offered		
					core and		
					radio		
					equipment."		
					is added.		
					(6) d) Words		
					"120		
					km/h." are		
					replaced by		
					"220		
					km/h."		
460.	III part	6	58	6.5.1.1	ETSI	Same as above.	Requirement of
	2				standard for		clause 6.5.1.1 does

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
					Rel-4 (ETSI) TS 103 066 Version 1.1.1 or latest for Rel-4 Core Network requirement s for GSM- R and Global System of Mobile (GSM) Phase 2 standard for BSS.		not have anything to do with the submission of certificate from European Commission's notified certification bodies, confirming compliance to the standards in respect of the offered core and radio equipment.
461.	III – Part 1	13	76 of 87	13.4.1 – (3)	Software updates shall be provided as and when becoming available during design life of the system.	It would be tedious for the contractor to keep a track on the software updation during the entire design life of the system. The clause could be amended as "Software updates shall be provided as and when becoming available till defects notifications period."	Refer item 407 of Addm 8.
462.	III – Part 1	8	Anne xure 7-3: Page 4 of 6	4.6 (i)	Track crossing of cables at 50 locations per station considering Home to Home signal as station	Please indicate the length of each type of track crossing. Also, if a contractor feels the need to have extra track crossing at a particular location then can he construct one on his own. Please specify the procedures to be followed in this regard.	1) These details are to be worked out as Interface between concerned Contractors. 2) Provision of quantity is considered adequate and its

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's
	NO.	NO.	NO.		area and at 4 locations per Km in Block Sections		Response location should be determined during design stage and coordinated with interfacing Civil Contractor well in time.
463.	III – Part 1	5	28 of 84	5.6.7	Buffer stops at terminal stations shall be provided with twin red signals fixed about one meter apart.	Please clarify if the buffer stops mentioned here are to be provided by the ST-P5 contractor.	No. Buffer stops shall be provided by Civil contractor.
464.	III – Part 2	6	59 of 128	6.5.1.8	Supply of Mobile Radio Equipment	Please specify the number of GPH sets to be provided.	Number of GPH sets is not specified as these are not required at present.
465.	V	4	V-4-1- 1	4.1	List of Buildings in Junctions and Crossing stations	As per this drawing, there are IMDs, IMD sub depots, Sub depots and service buildings. But in the ESP provided, the track associated with each of these buildings is not shown. In this regard please clarify the following: - 1. Are these depots just buildings or do they have associated track infrastructure? 2. Is the ST P5 contractor required to do any indoor / outdoor signaling or telecom work in these buildings?	1. These buildings do not have associated track infrastructure except as shown in the ESP. 2. Requirements of signaling and telecom subsystems for these and other buildings at each station are clearly defined in the Employer's Requirements

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
							Volume III Part 1 & Part 2. Please refer accordingly.
466.	III – Part 2	6	37 of 128	6.1.2	GSM-R mobile communicati on system requirement s	Given as per addendum 4A SI.No. 299. "System architecture of Core Network should be latest Rel-4 based on European Telecommunication Standards Institute (ETSI) TS 103 066 Version 1.1.1. Radio Access Network (RAN), Mobile Stations (Cab Radio, OPH and GPH) should be as per latest EIRENE standards". As the Rel-4 is the recently introduced standard and yet to be implemented in Indian Railway networks, some major GSM-R suppliers have not yet installed the GSM-R with Rel-4 standards and they do not have reference projects as credentials. On that note, the suppliers have been awarded with GSM-R with Rel-4 standards for some European Railway networks recently. Will the LOA certificates of these projects be acceptable to fulfill the tender requirements? Please confirm.	GSM(R) with or without Rel 4 on Railway/ Metro Railway/ Monorail will be considered similar works for the purpose of experience.
467.	III – Part 2	6	38 of 128	6.3.1.1	System Requirement – GSM-R	As a part of the tender submittals, the contractor has to submit the user acceptance certificates for different products / sub-systems. In case of GSM-R system, as the system has similar functions as that of GSM system please confirm if the user acceptance certificate of GSM system shall also be acceptable or not?	Please refer response to Query No. 466.
468.	III – Part 2	6	21 of 128	5.3.3.1.2	Optical fiber cables of the first network shall be terminated in	Please furnish the details of other locations where the Optic Fiber Cable has to be terminated.	To be decided during design stage as per site conditions.

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's
•	NO.	NO.	NO.		ODFs in Central Equipment Room (CER) at OCC, TERs at stations and TER at the Electric Locomotive depot and any other locations as required.		Response
469.	III – Part 2	6	22 of 128	5.3.4	SDH network for ELMD	We understand that our scope of work shall be limited to providing and terminating OFC up till ELMD TER. The Equipment supply and further installations inside the ELMD as mentioned in 5.3.4.3 and 5.3.4.2 shall not be in the scope of work as per STP5 contract. Kindly confirm.	Please refer to clause 5.2.2 and Appendix 9-2 which are self-explanatory.
470.	III – Part 2	6	59 of 128	6.5.1.9 – (9)	OEM's original specification s (data sheets) and other configuration details as a minimum for all equipment listed below shall be submitted	Shunting radio is also a listed item for which the contractor has to submit the OEM documents. Please indicate the number of shunting radios to be provided for this project.	40 (forty) numbers of shunting radios and 40 (forty) numbers of spare batteries for shunting radios are required to be supplied. Please refer to item No. 408 of Addendum 8.

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
•	NO.	No.	NO.		with the Preliminary/ Detailed design submissions for review and consent by the Engineer		ixesponse
471.	I – (1/2)	2	58 of 191	3.2 (e) (iv) – Pt (1) & Refer Addendum 4 – (205)	Specific Design Experience - Signalling	From the sentence, "The Design part Shall include design of signaling system involving Electronic Interlocking and TMS / CTC in Railways / Metro Railway / Monorails system. The requirement can be met subsystem wise", we understand that the criteria can be met for different sub-systems with different projects and by different subcontractors. Please clarify whether or not our understanding is correct.	Criteria can be met for different subsystems with different projects. Refer response to Query No. 74.
472.	I – (1/2)	2	58 of 191	3.2 (e) (iv) - Pt (2)	Specific Design Experience - Telecom	From the sentence, "The Design part Shall include design of telecom system involving Fibre optic based telecommunication network involving SDH, Add/Drop nodes, GSM(R) or GSM in Railways/Metro Railway/Monorails system. The requirement can be met sub-system wise", we understand that the criteria can be met for different sub-systems with different projects and by different sub-contractors. Please clarify whether or not our understanding is correct.	Refer response to Query No. 471.
473.	I – (1/2)	5	161 of 191	8.2	Time for Completion	As per the given milestones (MS 1 – 8), the wayside works (Rewari to Makarpura	No. change in the ATB & PC 4.2 is
	I – (1/2)	5	158 of	4.2	Performance	section) are to be completed in 200 weeks (at the end of MS 6) whereas the Onboard	envisaged.

SI.No	Vol. No.	Section	Page	Clause No.	Title	Questions	DFCCIL's
•	No. III – (2/2)	No. 9	No. 191 28 of 40	Appendix 9-2, SI. No. 9(a)	Security On-board radio and train radio antenna	works (MS8) are to be completed in 338 weeks (end of MS – 8). MS-8 is only applicable to a small portion of the GSM (R) works and as per the given schedule, the DNP of the wayside works shall be over before the TOC of onboard works. Furthermore, as per the present contract conditions the Performance Security (equal to 5% of the accepted contract value) shall be retained till the end of DNP of MS-8. We find this condition to be harsh as most of the works shall be over with the end of MS – 6. Hence, please make the following provisions in the contract: A portion of the Performance Security which is commensurate to the value of the wayside works (MS – 6) shall be returned to the contractor after successful completion of DNP of MS-6, Performance Security for a value commensurate to the value of works associated with MS-8 will be held till the end of its DNP.	Response
474.	I – (1/2)	5 – Part I 5 – Part II: Part A	46 141 of 191	Appendix to Bid: GC 8.2	Payment of Retention Money Time for Completion	 Please confirm that the Retention Money will be released in the following order: Payment of 1st half in 3 parts viz., after completion of MS-5, MS-6 and MS-8. Payment of 2nd half of the Retention Money after completion of DNP of each section. 	No, the Bidder's understanding is not correct. The release of retention money shall be as specified in FIDIC Sub-clause 14.9.
475.	III Part 2	6	39 of 128	6.3.1.1	Tenderers shall submit along with his bid,	As GSM (R) Rel-4 is a relatively new technology; some of the vendors are yet to collect NOBO certificates for GSM (R) application. However, they have been	Please refer response to Query No. 459.

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
•	NO.	NO.	NO.		certificates from European Commission' s Notified Certification Body	awarded a few GSM (R) projects with R-4 technology in Europe and are hopeful of obtaining these certificates in a few months' time. To enable us to collect proposals from all the GSM (R) vendors, please amend the referred clause as per the following: In the fifth line after words "SRS documents" sentence "Tenderer shall submit, at the time of factory acceptance before delivery, certificates from European Commission's notified certification bodies, confirming compliance to the standards in respect of the offered core and radio equipment." may be added.	Response
476.	III, Part 2	5	21 of 128	5.3.3.1.6	Optical Fiber Cable Communicat ion System Requirement s	Bidder understands that each of the Main, Secondary and Spur Fibre optic cables are to be laid through separate HDPE conduits. Bidder assumes that all Fibre optic cables can be unarmoured type for laying through HDPE conduits using blowing machines. Pl. confirm acceptance.	Outdoor type optical fiber cables are specified which shall be armoured. Unarmoured type cables are not acceptable.
477.	III, Part 2	5	21 of 128	5.3.3.1.6	Optical Fiber Cable Communicat ion System Requirement s	Bidder requests customer to confirm the elevation at which the HDPE conduit is to be routed and at what spacing from the railway track for the Fibre Optic cables routing. Also pl. confirm the requirement of route markers, blowing pits, splicing pits etc.	Please refer to clauses 10.4.23 and 5.7.10 of Employer's Requirements Volume III Part 1 which are self-explanatory.
478.	III, Part 2	10	86 of 128	10.1.1	Video Surveillance System Requirement s	Bidder understands that the video surveillance system is requirement only at OCC and not required at ELMD and various stations. Pl. confirm that bidder's understanding is correct.	Clause is self- explanatory and your understanding is correct.
479.	III,	10	86 of	10.1.1	Video	Bidder requests customer to provide the	For layout drawing

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
•	No. Part 2	No.	No. 128		Surveillance System Requirement s	layout drawing for the OCC for estimation of the CCTV Requirements at OCC facility.	Response of the OCC building complex, please refer to response to Query No. 446.
480.	III, Part 2	10	89 of 128	10.5.2.15	Video Surveillance System Requirement s	The requirement of RG-11 Video cable is indicated, based on the same bidder assumes that Analog CCTV cameras having RG-11 Coaxial video output in combination with Coaxial to IP Encoders based CCTV system are also acceptable instead of IP Cameras. Pl. confirm acceptance.	Please refer to full requirements of clauses 10.5.2 & 10.5.3 which are self-explanatory.
481.	Volume I, (1/2)	7	185 of 191	Sub- Clause 5.1 and Sub- clause 18.5	Form of Designer's Warranty	Please clarify whether or not the contractor has to submit the Form of Designer's Warranty in case a system / sub-system is being designed by the contractor himself.	The Designer's Warranty is a mandatory requirement and shall be required.
482.	III part 2	6	39	6.3.1.1 and 6.3.1.1(6) d)	We refer to SI.No.91 of Addendum. 3 In the third line words "(ETSI) Global System for Mobile (GSM) Standards" are replaced by "(ETSI)TS 103 066	Considering the competitive price offer, the bidder likes to keep options as many as possible for vendor selection at the bidding stage. Under this situation, please kindly consider the addition of the following sentence after "respect of the offered core and radio equipment ": "In the case that the certificates are still under assessment or certification process by the certification bodies, Tenderer shall indicated such status in the bid document and submit the certificates at latest before the factory acceptance test" (We consider that the similar flexibility has been provided for Cross Acceptance Certificate for the signalling equipment.)	Please refer response to query No. 459.

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
•	No.	No.	No.		Manaian		Response
					Version		
					1.1.1 or		
					latest for		
					Rel-4 Core		
					Network		
					requirement		
					s for GSM-		
					R, Global		
					System for		
					Mobile		
					(GSM)		
					Standards		
					for BSS"		
					In the fifth		
					line after		
					words "SRS		
					documents"		
					sentence		
					"Tenderer		
					shall submit,		
					along with		
					his bid,		
					certificates,		
					from		
					European		
					Commission'		
					s notified		
					certification		
					bodies,		
					confirming		
					compliance		
					to the		
					standards in		
					respect of		
					the offered		
					core and		

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
		1101	1101		radio equipment." is added.		посрение
483.	III Part 1	9	29	5.10.1	Power Supply System	We Refer to clause no. 5.10.1 of VolIII part 1, wherein it is mentioned that "PSS shall cater to combined S&T equipment loads at stations and OCC". In contradiction to above, followings are also mentioned; (i) Separate rooms for Telecom power supply and battery are shown near to OFC room at a distance of approx. 40 mtrs. from signaling power supply room in drawing number V-4-2-6 & V-4-2-7 of bid document VolV. (ii) Clause no. 11.2.1 of VolIII part 2 mentions that "Battery backup equipment shall conform to RDSO and/or TEC specifications and other international standards as applicable". Whereas there is no such requirement for signaling PSS. (iii) Clause no. 11.3.1 of VolIII part 2 calls for two 48V SMPS chargers with individual 48V battery bank. Whereas there is no such requirement for signaling PSS. Request you tomodify above referred clauses of VolIII part 2 so as to confirm that Signaling and telecom equipments at stations and OCC shall be fed from same PSS and that separate battery backup for telecom equipments is not required.	Clauses of Volume III Part 2 are self- explanatory. No change in the requirements is envisaged.
484.	III Part 1	9	29	5.10.3	Power Supply System	We request you to add following in clause 5.10.3: "Use of common Power Supply System	No change is envisaged.

SI.No	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
	140.	NO.	140.			would be permissible for signaling and telecom equipments, wherever possible". It will reduce the wayside equipments and associated maintenance efforts to be made by DFCCIL in future.	Response
485.	III Part 1	9	30	5.10.17	Power Supply System	We request you to clarify whether proven track record is also required for power supply equipments downstream the main UPS such as AC-DC or DC-DC converters and transformers that are required to feed individual sub systems.	Yes.
486.	III Part 1	9	30	5.10.9 & 5.10.13	Power Supply System	Please confirm whether battery set also need to be duplicated with redundant UPS.	Redundancy specified in Clause 5.10.9 is for PSS which includes battery sets.
487.	III Part 1	Annex 2	9 of 44	6.1(xv)	Application/ Central Server	Please clarify the start time of warranty, whether it will start from date of taking over by DFCCIL or after completion of DNP.	Refer item No. 390, 420 of Addm-8.
488.	I – Part (2 of 2)	6	1 to 35	Schedule 5.1 – Schedule 5.16	Schedule 5 – Payment Schedule	Please refer to schedule 5.1 – 5.16 given in Attachment: Addm - 4-4. The present payment procedure shall result in payment to the contractor to be in lots and these lots will be too far and too few in between. This shall result in negative cash flow to the contractor. We feel that the payment procedures can	The schedule already provides for pro-rata payments. No change is envisaged.

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
	No.	No.	No.				Response
						be revised without compromising the Design & Build nature of the contract. Our suggestions on the payment procedures are being submitted as an Annexure to this document. We request you to take our suggestions into consideration and revise the payment procedures accordingly.	
489.	I – Part (2 of 2)	6	1 to 35	Schedule 5.1 – Schedule 5.16	Schedule 5 – Payment Schedule	The payment schedule does not cater to the following works: - 1. Auto-location huts for Signalling 2. Auto-location huts for Telecom. 3. Works pertaining to interface with IR at each station. 4. GSM (R) On board equipment. Kindly incorporate the same in the Payment Schedule.	1. Refer item No. 385 of Addm-8. 2. Already included in schedule 5.9.1. 3. Already included in schedule 5.3 in Cost Center "Electronic Interlocking". 4. Already included in schedule 5.9.1
490.	I – Part (1 of 2)	2	56 of 191	3.2 (e) (iii) Specific Supply, Installation, Testing and Commissio ning Experience in Key Activities.	c(i). Supply of Electronic interlocking to Railways/ Metro Railways/ Monorails — 6 stations in any one year in last ten years. c(ii). Installation, Testing and commissioni	Usually Electronic Interlocking systems are supplied to customers as a part of EPC projects which involve supply, installation, testing & commissioning and other pertinent activities. Also as an industry practice, contractors are issued certificates which refer to dates of commissioning alone and do not illustrate the date of supply or installation. In the view of the above we request you to a) Combine the clauses c(i) & c(ii) and rephrase them to read "Commissioning of 6 Els in Railways/ Metro Railways/Monorails in any one year in last ten years".OR	In case of combined performance certificate for EPC projects which involve supply, installation, testing & commissioning, the date given by the bidder for supply shall be acceptable so long as it appears logical to cater for time required for installation, testing and commissioning activities.

SI.No	Vol.	Section	Page	Clause No.	Title	Questions	DFCCIL's
491.	I – Part (1 of 2)	Section No.	57 of 191	3.2 (e) (iii) Specific Supply, Installation, Testing and Commissio ning Experience in Key Activities.	ng of Electronic Interlocking system to Railways / Metro Railways / Monorails – 6 stations in any one year in last ten years. d. Train Management and diagnostic System (TMS) or Centralized Traffic Control System (CTC) to Railways/Met ro Railways/Met ro Railways/Mon orails – 1 system in any one year in last ten	the date of commissioning mentioned in the certificate and evaluate clause c(i) based on the date which is generally 12 months prior to the date of commissioning mentioned in the certificate. In any case, please clarify that the dates of commissioning given in the certificate will be taken into consideration for evaluation of qualification criteria and not any other methods. TMS / CTC is basically installed to have a central control over many individual stations which would otherwise be locally controlled by their respective interlocking system. Due to nature of the application it	Eligibility criteria requires completion date to be in any one year within last ten years and the work should include supply, installation, testing and commissioning.
					years.	System (CTC) to Railways/Metro Railway/Monorails – 1 system in last ten years."	