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 AND 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 FREIGHTCORRIDOR

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

CONTRACT PACKAGE ST P-5

Queries from Bidders

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495.	III Part 1	9	29	5.8.1	Level crossing gates	We refer to clause 5.8.1 of Vol.-III wherein it is mentioned that "All level crossing gates shall be interlocked with signals. Tentative list of gates is kept in Data Book Vol. IV of Bid Documents". Total three level crossing gates are mentioned in Vol.-IV. Two of these three LC gates are within station limits of KisangarhBalabas and Makarpura IR stations. Please confirm that all the works of shifting the barriers, gate lodge and interlocking of	Refer item No. 423, 424, 425, 426 & 430 of Addm8 and item No. 464 of Addm 10. Details shall be worked outduring interface coordination between relevant Contractors at design stage.

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						these two LC gates is scope of IR. Because as per item no. 1.2 of annexure 7-4 of vol.-III of bid documents, "all signalling work at IR Junction stations including incorporation of interface circuits/ Block circuits into local circuits shall be carried out by IR".	
496.	3 (1/2)	9	29 of 87	5.8.1	Level Crossing Gates	In Sl. No. 423 of Addendum 8 it is stated that the contractor has to provide interlocking for 83 Nos. of LC gates out of a total of 372 Nos. In this regard, it may kindly be noted that interlocking of LC Gates shall have cost implication and in order to be able to cost them fully we require the following information: 1. Please identify the gates for which double booms have to be provided and the ones for which single booms have to be provided. 2. Since these are existing gates we are assuming them to cover both IR lines and DFCCIL lines. Is our understanding correct?	Item wise response is as under: 1. It shall be possible to finalise these details during interface coordination between relevant Contractors at design stage as it requires track alignment details to be available. However, please refer Addendum 426 Clause 1.9 wherein it is clarified that "Where separate set of barriers have to be provided for IR and DFCCIL tracks due to site requirements, supply and installation of Electric lifting Barrier for IR track shall be done by IR." 2. Refer Clause 5.8.7. 3. Refer Clause 1.8 of Annexure 7-4 issued as item No. 426 of Addm-8.

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						3. Further to point no. 2, we are assuming that all these gates require interlocking to signal and provision of approach warning only on DFCCIL lines and not on IR lines. Is our understanding correct? If not, please identify the gates which are to be interlocked to IR station and please clarify the works that will be carried out by IR and the ones which have to be carried out by the contractor.	Also refer item No. 464 of Addm 10.
499.	3	Annexure 7-4	1 of 2	1.4	LC gates at IR stations	As interface Is required at certain locations. Kindly provide us the operational requirement of such IR Station LC gates.	Details shall be worked out during interface coordination between relevant Contractors at design stage.
528.	3 (1/2)	9 (Annexure 7.6)	Pg. 4 of 7	1.5 (i) (f) 1.5 (ii) 1.5 (iii)	CTR interface between ST P5 and P5A TPWS equipment space Requirements TPWS Power supply load requirement	Please refer to your response given in queries no. 426, 427 & 428. You have mentioned that the details being sought shall be clarified post award of contract. Kindly note that these details are bound to have a cost impact on our project since we have to cater to this requirement. In such a scenario it is very important that the location	As STP 5A pertaining to TPWS system is a Design, Build package, it is not possible for DFCCIL to give these details. Such details are part of the interface to be worked out between the relevant contractors.

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						wise details are provided to us in the pre bid stage itself. For ready reference, the details required are reproduced below : 1. 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. 2. Please furnish the required space to be allocated for housing TPWS equipment in SER & Auto location huts. 3. 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).	
543.	III Part 1	9	29	5.8.1	Level crossing Gates	We refer to Sl. No. 423 of Addendum No. 8 wherein interlocking of additional 83 number main line LC gates is included in the scope of ST P-5 contractor and it is mentioned that details of these 83 level crossing gates shall be provided by the	The list of gates has been modified with required details. Refer item No. 464 and 469 of Addm 10.

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						Engineer at preliminary design stage. --- We request DFCCIL to provide location of 83 numbers level crossing gates on DFC main line (in terms of DFC chainage). Bidder can submit a competitive offer if location of level crossings is known and it wouldn't be possible for bidder to calculate the cost of automatic signaling and dispatcher telephone system without knowing location of 83 no. main line level crossing gates due to following reasons: (i) Since all the 83 nos. main line level crossing gates shall need to be interlocked, number of signals in block section that are controlled by EI will increase with provision of semi auto gate signals in order to maintain approx. 2 km. distance between signals. Since Interlocking of signals in block section has to be done using Electronic Interlocking, total number of ALH and quantity of associated Cables,	

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						electronic interlocking equipment greatly depends on the fact that how many ALH can be combined with LC gate Hut which depends on location of level crossing gates. (ii) Status ofapproaching trains, Axle Counter Track sections and signals for a distance of about 8 Km. need to be displayed in LC gate panel (Clause 5.8.4 of vol.-III part1). Length of cables to provide such indications on LC gate panel would depend on distance of ALH from gate lodge, because all the ALH may not be located at level crossing gate. (iii) Cost of providing dispatcher telephone at LC gate greatly depends on the distance between ALH/TH and LC gate, because all the ALH/TH may not be located at level crossing gate.	
544.	III Part 1	9	29	5.8.7	Level crossing Gates	We refer to Sl. No. 425 of Addendum No. 8 wherein it is mentioned that "Normally a single set of common lifting barriers shall beprovided	Item wise response is as under: (i) Will be separate. Also refer Clause 5.8.4 duly amended as per item No. 424 of Addm-8.

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						outside the IR and DFCCIL tracks so as to protect boththe IR as well as DFCCIL tracks by one set of booms". We request DFCCIL to clarify the scope of ST P-5 contractor in such cases of common set of lifting barrier, especially regarding followings: (i) Control cum indication panel for IR Lines and DFC lines will be common or separate. (ii) Equipment room, power supply etc. for controlling gate signals on IR lines will be common with DFC or separate.	(ii) Will be separate for IR. Details of involved interface shall be worked out at design stage.
548.	III Part 1	9	13	3.2.2	Standards	We refer to Sl. No. 394 of Addendum No. 8 wherein RDSO/SPN/203 is added for "Electronic Interlocking of big yards". Earlier there was only one RDSO specification (RDSO/SPN/192) for EI. Please clarify whether it is mandatory to provide EI system compliant to RDSO/SPN/203 for big yards. If yes, please mention the name of stations for which RDSO/SPN/203 would be applicable.	Selection of any one of the two specifications by the Bidder has been permitted for Electronic Interlocking of big yards. Refer item No. 461 of Addm-10.

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563.	3 part 1	9	30 of 87	5.8.1	Level Crossing Gates	We understand that, the total of 85 LC gates are to be interlocked with the DFCC signals. The following informations are immediately required. a) Location (Chainage) of all these 85 LC Gates. b) Whether these LC gates areInterlocked or Non Interlocked with IR signals? c) Existing type of these gates, mechanical or electrical? d) Separation of DFCC Track & IR Track at all these 85 LC Gates. e) Whether sliding booms are required or not	(a) Refer response to Query No. 543. (b) Not relevant as work on IR side shall be done by IR as per item 426 of Addm 8. (c) Not relevant as new Electric Lifting barriers shall be provided by the Contractor as per Employer's requirements. (d) It shall be possible to finalise these details during interface coordination between relevant Contractors at design stage as it requires track alignment details to be available. (e) Electric Lifting barriers shall be provided as per relevant RDSO Specification.
592.	III part-1	9	73	13.4.2	Security obligations	Source codes of software used in S&T systems are Intellectual Property of OEMs. Therefore,please kindly consider to delete the word "Source" from item (a) of clause 13.4.2.	The Clause has been suitably modified. Refer item No. 463 of Addm-10.
593.	II	8	85	15.2.7.1	Availability of source code and development tools	Source codes of software used in S&T systems are Intellectual Property of OEMs.	The Clause has been suitably modified. Refer item No. 459 of Addm-10.

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						Therefore,please kindly consider to delete "including Source Code listings" from second line of clause 15.2.7.1.	
594.	II	8	86	15.2.10.1	Test Software	Source codes of software used in S&T systems are Intellectual Property of OEMs. Therefore,please kindly consider to delete "including Source Code listings" from sixth line of clause 15.2.10.1.	The Clause has been suitably modified. Refer item No. 460 of Addm-10.
595.	III part-1	9	13	3.3.2	Standards	We refer to item no. 394 of addendum-8 where a new specification RDSO/SPN/203 for "Electronic Interlocking for big yards" has been added. --- We request you to allow use of EI as per RDSO/SPN/192 for big yards also and make the requirement of RDSO/SPN/203 optional, due to following reasons: (i) RDSO/SPN/203 is still a draft specification and there is no record of implementation on IR whereas EI system as per RDSO/SPN/192 are implemented even for big yards in IR.	Refer response to Query No.548.

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						(ii) Object Controller from Japanese OEMs are indoor equipment that can be accommodated in prefabricated hut not location box. Additional cost of pre-fab hut, Air conditioning and power cables would be involved as OC would be installed at distributed locations within station yard. (iii) As per clause 8.4.2 of RDSO/SPN/203, "The object controller shall have Solid state Point & Signal modules and dulyvalidated and meeting all safety requirements to directly drive Points & Signals". Direct driving by DO cards is highly susceptible to damage due to lightning and other surges.	
596	III part-1	9	25	5.5.1.22	Electronic Interlocking System	We refer to item no. 581 of replies to queries part-8 and would like to point out that ASM terminal referred in annexure-2 10.1 is ASM	TMS terminal with Controller in OCC shall be used for controlling EI under CTC. Similarly, TMS terminal with ASM shall be used for

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						terminal of TMS whereas EI controlling VDUreferred in clause 5.5.1.22 is part of EI system. Since functions of these two terminals are different, please consider to modify your reply where it is mentioned that "both are same".	controlling EI under Local Control. Hence, no change is envisaged.
597	III part-1	9	49	9.5	Sources of equipment supply	We refer to item no. 576 of replies to queries part-8 wherein it is mentioned that cross acceptance approval is to be obtained before manufacture and supply. ---------- We understand that obtaining the cross acceptance approval from RDSO for EI and MSDAC is mandatory requirement and responsibility of contractor. Cross acceptance process may take long time, therefore we request you to make the requirement of completing cross acceptance procedure before commissioning of Rewari – Dabla section. Condition of starting manufacturing and supply after cross acceptance would affect the completion period of project and restrict the competition among Japanese	No change is envisaged.

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						suppliers willing to offer their product for this project.	
598	III part-1	9	15-16	4.3.5	Reliability requirement	As per particular specifications part-1 clause 4.3.5, we understand that MTBF of not less than 7 days is to be achieved for entire signaling system in Rewari-Makarpura section (station and block section). All the vital signaling equipments have to comply with RDSO specifications where individual MTBF requirements are defined and it is very difficult to achieve 7days MTBF for complete signaling system putting all the sub-systems in series. Moreover contractor hasno flexibility to make changes in product itself to improve reliability considering the RDSO approval. We request you to delete this MTBF requirement of less than 7 days for complete signaling system as MTBF requirement for individual systems is already being met as per RDSO specifications.	RDSO does not define MTBF of every item used in a signaling system. Moreover, MTBF requirement given in the Clause is considered achievable. Hence, no change is envisaged.
599	III part-1	9	4 of 4	Annex.-8 Cl. 10.1	Pre-fab. Auto Location Hut	We refer to clause 10.1 of annexure-8 modified vide item no. 296 of addm. 4A to suit the requirements of Low maintenance battery.	Panel air conditioning shall be for Housing Racks containing electronic equipment. No change is envisaged.

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						Since specifications of Battery is now changed again to VRLA battery vide Addm.9, We request you to reinstate original clause 10.1 of annexure-8 regarding air conditioning. Please also clarify whether air conditioning equipment for cooling the equipment room can be provided or air conditioner for cooling individual equipment racks is anticipated because meaning of panel air conditioner is not clear. Please provide more details about panel air conditioner.	
600	III part-1	9	30 of 44	Annex. - 2 Cl. 10.5(i)	Terminals with ELMD and Lobbies Hardware – Industrial Grade PC	Hardware specification of Industrial grade PC given in bid document is for very old configuration of IPC. Now fan less industrial grade PC of compact size is available that can be mounted on computer table itself. Please kindly consider to modify this clause to include latest specifications of fan less industrial grade PC.	The Clause has been suitably modified.Refer item No. 471 of Addm 10.
601	II	8	42 of 135	8.6.1.2	Clause 8.5.3 missing	Please clarify the description regarding Clause 8.5.3.	Reference to Clause 8.5.3 has been corrected to read as 10.9.3. Refer item No. 472 of Addm 10.
602	II	8	89 of 135	16.4.1.8	Electronic control racks and cabinets	Since this description mentions indoor equipment,	No change is envisaged.

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						not less than IP51 would be enough instead of IP 54. Please kindly consider to replace the word from IP 54 to IP51.	
603.	III Part 1	9	Annexure 8: 1 of 4	2.2	Adequate thermal insulation shall be provided by using mineral wool or rubber or fibre glass of adequate thickness.	We would like to bring to your kind attention the fact the vendors no longer manufacture portacabins using Mineral wool, Rubber or fibre glass for Railway Applications. In line with the practice of IR we propose to use Polyurethane Foam (PUF) of required thickness to provide adequate thermal insulation. Please note this is the materials used for similar applications all over Indian Railways because of the very low thermal conductivity at these temperature & the structural strength associated with it. Please confirm, that the above material can be used for Porta huts of ST P5 project.	Material for thermal insulation has been changed to Polyurethane Foam (PUF). Refer item No. 473 of Addm. 10.
604.	Vol: III, Section 9,Part-2	7	67 of 128	7.2.3.1		The referred clause indicates that "All the buildings shall be provided with concealed ducts / pipes for wiring of telecom facilities by civil works contractors." We understand that all inter / Intra building ducts / trenches and concealed	Clause 7.2.3.1 and relevant clauses of Appendix 9-3 are self explanatory.

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						conduits for Telephone System, Dispatcher Phone System and Master clock distribution cables will be done by civil works contractor. ST P5 contractor will only draw the cables/wires through the above conduits. Pl. confirm that bidder's understanding is correct.	
605.	Vol: III, Section 9,Part-2	Appendix 1	1 of 40	--	EPABX Telephone location and Qty	The Appendix indicates telephone requirement at IMD only for certain stations. IMD building is available near to Phulera station as per Drawing No : NKC-CTS-BLD-JP-00001 (Sheet 2 of 5), however the Appendix 1 does not indicate any telephone quantity for the same. Kindly confirm that the telephones are required only at the locations indicated in the Appendix.	Volume V is for reference drawings. Provisions in Appendix 1 are part of Employer's Requirements and have to be complied.
606.	Vol: III, Section 9,Part-2	7	20 of 128	--		We assume that all Data cables for E1, LAN etc shall be of CAT 5E type. Please confirm that bidder's understanding is correct.	Contractor shall design the systems with data cables appropriate to the requirements subject to No Objection by the Engineer.
607.	Vol: III, Secti	9	85 of 128	9.5.4	Display Clocks	We assume that the slave clocks can be powered by Non-UPS 230 V AC +/- 20%,	Refer clause 9.5.5 which is self-explanatory.

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	on 9,Part-2					50 hz supply i.e. without Battery backup. Kindly confirm whether our understanding is correct.	
608.	Vol: III, Section 9,Part-2	5	--	--		We assume that OA / IT LAN network active/passive components i.e. switches and Structural cabling etc for OCC, Stations, ELMD etc are not in ST P-5 contractor's except for the two nos. Layer-3 switches at OCC, 2 nos. Layer-3 switches and 2 nos. Layer-2 switches at Stations as part of WAN network. Pl. confirm that further distribution of LAN cabling from these switches to individual workstations will be done by others.	New clauses 5.3.6.11.1, to 5.3.6.11.4 included vide Sl. No. 311 of Addendum 4A and other relevant clauses of chapter 5 are self-explanatory. Contractor shall design and construct the system as per provisions of Employer's Requirements subject to No Objection by the Engineer.
609.	Vol: III, Section 9,Part-2	5	24 of 128	5.3.6.3		The referred clause indicates that **" Ethernet Services such as EPL Services, EVPL Services, E-LAN Services--- etc., shall be extended to the locations like Auto section locations, LC Gates, TSSs, SPs, SSPs, ATSs etc. using EoS of OFC system or if required by suitable Layer 2 switch networks for meeting the**	Bidder should read the Employer's Requirements of volume III Part 2 including Appendices as a whole which are self-explanatory.

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						requirements of systems within this contract and outside this contract as decided by the Engineer."Bidder assumes that only fiber connectivity has to be made available at the above locations for extending the ethernet services from the Auto section locations to the LC Gates/TSS/SP/SSP/ATS etc Bidder assumes that supply of Layer 2 Switches and any Fibre Optic transeivers at TSS, LC Gates, SP, SSP, ATS etc for the LAN services are not in bidder's scope. Please confirm.	
610.	Vol: III, Section 9,Part-2	Appendix-1 Section-7	1 of 40 67 of 128	7.2.3.1	Telephone Location	From the Appendix-1, bidder understands that the telephone instruments are distributed among various buildings such as service buildings, IMD's. residential building etc. which are geographically away from station building. From the referred clause 7.2.3.1 bidder understands that civil contractor will provide concealed ducts / pipes for wiring of telecom facilities in all the buildings.	Clause 7.2.3.1 and relevant clauses of Appendix 9-3 are self-explanatory.

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						Apart from the above, bidder assumes that the cable trenches / trays between station buildings to other buildings as listed in appendix-1 & appendix -4, will be done by civil contractor, ST P-5 contractor will only lay the required cables in the same trench. kindly confirm whether our understanding is correct.	
611.	Vol: III, Section 9,Part-2 Vol:V	Section -7 V-7-1-10	69 of 128 NKC-S&T-SSD-AL-20009 (Ver-B)	7.3.14	Telephone Exchange Block Diagram	From the referred clause 7.3.14 bidder understands that 1 No E1/PRI for DID Lines to be provided at each EPABX Exchange. From the referred drawing, the quantity of E1's at each EPABX exchange location varies, i.e., - At OCC - S1 - 37 E1's - First and last EPABX of the loop - 10 E1's - Intermediate stations - 7 E1's The referred drawing and the clause is contradicting. Kindly confirm the no.of E1's to be considered at each EPABX locations.	Provisions of Cl. 7.3.14 are as a minimum. Contractor shall design the PABX network and determine the required number of E1s for each PABX complying with all requirements of the Employer's Requirements subject to No Objection by the Engineer.
612.	Vol: III,	8	77 of 128	8.1.3		The referred clause indicates that **"Hot line**	Leased lines for extending the telephones as per clause 8.1.3 are not in the scope of ST P-5.

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	Section 9,Part-2					**telephone connections to emergency services shall be extended on leased lines from the telecom equipment rooms closest to their locations".** Bidder assumes that the leased line connectivity at required locations for hotline telephone connections including the payment for the leased lines will be made available by DFCC and not in Bidder's scope of works. Kindly confirm whether our understanding is correct.	
613.	Vol: III, Section 9,Part-2	8	79 of 128	8.3.1.1.1	Dispatch Telephone System (DTS)	The referred clause indicates that **"The DTS console shall also be provided with functions for operation as an ordinary telephone set. The DTS console shall be equipped with keypad for dialling to originate EPABX telephone call and support on-hook dialling".** Bidder assumes that the DTS system can be implemented through the EPABX exchange provided for Telephone system by suitably logically separating the DTS and Telephone	Please refer response to query No. 157.

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						extensions in the EPABX System at OCC, Stations. Pl. confirm that bidder's understanding is correct.	
614.	III Part 1 Annexure 3 Vol - 5	Section – 9	1 V 7-1-3	--	Phase I Stations (JS-10, CS-21) Major Optical Fibre Network Cable.	Inter distance chainages shown are not matching with calculated chainages given in drawing V 7-1-3 volume 5. Please clarify.	Annexure-3 gives only approximate station to station distance to give an idea of length of Block Section and does not contain any chainages. Hence, matching with a drawing containing chainages is not appropriate.
615.	Vol-III Part 1 & 2	9	Vol. 3 – P1 / Annexure – 8 Page 4 of 4 Vol. 3 – P2 / Appendix 7 Page 15 of 40	10.1 11.1	Panel Air-conditioning	The OEMs (STEP & Non STEP) whose electronic systems are to be accommodated in the Electronic Rooms (SER & TER) of the Auto-Location Huts (ALHs) have objected to the installation of the Panel Air-Conditioning equipment on top of their electronic equipment as they fear this will have an impact on their EMC compliance, vibration conditions (Safety Case) and basic rack assembly design. In view of this, kindly amend the clause to state that the ambient temperature inside the Electronic Equipment rooms (SER & TER) in portahuts is regulated at 24	Panel ACs shall be designed in coordination with OEM of Signalling and Telecommunication equipment so as to meet the functional requirements of Signalling and Telecommunication equipment.

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						+/- 2 degree Celsius with the use of room air-conditioners.	
616.	Gen	--	--	--	Cross – acceptance for all imported item	In case of sourcing some of the items from Japan which are not under the list of STEP items in order to meet the STEP % of 49.56% prescribed in this tender, please confirm that these items shall be procured under Project specific approval.	Approvals for imported Signalling items shall be governed by existing provisions in Employers' Requirements. Some of the important Clauses to be referred for the same are as under: Vol. II: Cl. 2.3.2 Vol. III: Cl. 1.3.10, Cl. 9.5(2) as amended vide item No. 278 of Addm. 4A, Cl. 9.5(3) as amended vide item No. 357 of Addm. 6 & Cl. 9.6.
617.	Gen	--	--	--	Performance Bank Guarantee	In Addendum No. 9, a separate cost center for Onboard equipment has been introduced. A. In addition to this we request DFCCIL to make provision in the tender for release of the Performance Bank Guarantee (PBG) (= 5% of the CV) in the following manner : • The Milestone for handing over of wayside works is 3.85 years (200 weeks) whereas the milestone for handing	Please refer the response to query at Sl. No. 473.

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						over of On-board works is 6.5 years (338 weeks). • The Onboard works consists only of supply of GSM (R) antenna for 120 Locos and supervision of its IT&C in the first loco which amounts to approximately 2% of the Contract Value only. • DFCCIL is requested to make provision in the tender for release of Performance Security in two parts i.e., one part after handover of Rewari – Makarpura section and the second after handover of Onboard works wherein the value of each part of the PBG is commensurate to the value of works handed over. B. We would also like to inform you that issuing a Performance bank Guarantee for a period of 8.5 years is perceived to be a huge risk in the corporates.	

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618.	Volume 1 (1/2)	Part II : Part A: Appendix to Bid	143 of 191	14.2	Advance Payment	Details of utilization of initial Mobilization Advance are being required to receive second Advance Payment of remaining 5 percent. However, since Contractor will submit unconditional Bank Guarantee for an amount equivalent to the component of the advance payment to receive Advance Payment and the amount of second Advance Payment of Employer is accordingly guaranteed, we would like you to consider changing the condition for second Mobilization Advance of remaining 5 % as follows; (b) (Five) 5 percent: On submission of the Inception Report.	No change in the ATB 14.2 is envisaged.
619.	Vol-III Part 1	-	-	-	Cross Acceptance of Signaling Equipment	**Refer: Reply to Queries – Set 8 Sl. No: 493** 1. We would like to bring to your kind notice that at present as per the prevailing tender conditions under STEP criteria, the vendors for the imported signaling	No change in the response to Query No. 493 is envisaged.

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						equipment like EI, TMS and MSDAC are limited to one per sub system and are as good as nominated sub-contractors. Under this scenario, the FIDIC clause 4.4 cannot be applicable for imported signaling equipment as this clause has been framed considering that the contractor has multiple options for selection of sub-contractors. 2. We would like DFCCIL to review once again and confirm that under such conditions the Main Contractor should not be held liable for any delay on account of delay in procurement of Cross acceptance by these "Nominated" Subcontractors. 3. Also, as the cross acceptance of the product is based on the performance of the equipment on IR Lines for specified timelines as mentioned by RDSO, the delay in approval of the same cannot be	

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						assumed & indicated by the main contractor in his Works programme. 4. We thus request DFCCIL to relook into this and confirm that Contractor will not be held responsible for any delay in the Cross acceptance of the Signaling equipment (EI and MS-DAC) and also delays associated with it. We also understand that Japanese manufacturers have applied for specific project based approval for their system, hence we request DFCCIL to kindly arrange the same as this will ensure timely completion of the project.	
620.	Vol-III Part 1	Annexure 7-6			Interface Issues between ST P-5 and ST P-5A	**Refer: Reply to Queries – Set 8 Sl. No: 494** a) The ST P5 contractor has to interface with the ST P5A contractor on many aspects. The ones with cost implications are listed below: b) The Power Supply System provided by	As STP 5A pertaining to TPWS system is a Design, Build package, it is not possible for DFCCIL to give these details. Such details are part of the interface to be worked out between the relevant contractors.

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						ST P5 contractor shall cater to the requirements of ST P5A contract. c) The ST P5 contractor has to keep empty slots on CTR for the TPWS equipment. d) ST P5 contractor has to provide Panel air conditioning in 1+1 redundancy for all the electronic TPWS equipments in auto-location huts (ALH). Hence, we need the following information pertaining to TPWS system at each ALH: 1. The No. of TPWS equipment to be installed. 2. The dimensions of each TPWS equipment 3. The heat dissipated by each electronic TPWS equipment. 4. Confirmation that all the electronic TPWS equipment will be provided without any fan / ventilation	

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						arrangement so that the air movement within the electronic unit is solely controlled by the panel air-conditioner provided by the ST P5 contractor. All the above mentioned queries have an implication on the overall design and hence the cost for the signaling package. Hence we request DFCCIL to take this into consideration and provide the required design inputs to avoid any disparity between the assumptions of the various bidders. # -> Information under point d is not required if the contractor is allowed to regulate temperature in ALHs using room air conditioners.	
621.	Vol-III Part 1	9	26-87	5.5.1.16 (2)	Point machines	**Refer: Reply to Queries – Set 8 Sl. No: 567** This information regarding the point machine type (normal/canted) remains	Employer's requirements pertaining to Point machines are given in Cl. 5.5.1.16 of Vol. III Part 1 of Bid documents which are self explanatory.

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						to be critical at this stage in order to choose the type of Point machine and its ground connection, as the canted type Point machines are yet to be approved by RDSO. This has a cost implication on the overall project due to cost difference between the two types.	
622.	Volume 1 (2/2)	6	1 of 35	Schedule 5.1 to 5.16	Schedule 5- Schedule of payments	**Refer: Reply to Queries – Set 8 Sl. No: 530** Works pertaining to interface with IR at each Jn. Station: - The payment schedule 5.3 is sub categorized equipment wise (5.3.1 – EI at stations, 5.3.2 – MS DAC at stations, etc.). In such case, please identify the particular sub cost center which is deemed to accommodate the interface with IR stations. The STP5 contractor has to interface with IR for various scopes of works like TMS, Telecom, GSM-R and Auto signaling works etc. In view of this, we request DFCCIL to provide a separate cost center against the interface work with IR. This shall facilitate timely	No change in the response to Query No. 530 is envisaged.

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						commissioning of DFCC works irrespective of delay in IR interface. Any delay in works at IR may lead to delay in payment for the entire milestone hence request to kindly arrange for separate cost centers to avoid this.	
623.	Vol-III Part 1	Annexure 1	9 of 13	7.6	Interface of TMS with CMS	**Refer: Reply to Queries – Set 8 Sl. No: 537** Kindly confirm our understanding is correct or not. • Crew data managed by the existing CMS is provided at the time of basic design for WDFC. Necessary data only is extracted and used in CMS of WDFC. In this context, please define the necessary data and the size of data. • New crew data is added manually. • Crew Controller enters "Crew booking" and "Sign on/off" into the system manually. • Crews' running time and distance are recorded and reported for the running allowances. • DFCCIL Crew	No change in the response to Query No. 537 is envisaged.

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						Management system is an offline system. This confirmation is required at this stage to correctly access the scope of TMS. Any change in the above shall have a major cost implication.	
624.	Vol. 1 (1/2)	2	57 of 191	3.2 (e) (iii)	Eligibility Criteria	**Refer: Reply to Queries – Set 8 Sl. No: 531** We would again like to bring to your kind notice the fact that the Japanese vendors shortlisted for this project have only Supply, testing & commissioning experience. We were informed that in their contracts, installation works are not a part of the scope and are dealt with separately. As the vendors for this project are predefined please modify the eligibility criteria by deleting the word "installation". In your response to our query, you have indicated that "no change" is envisaged. However, this will be a genuine problem for all the bidders. Hence, we request	No change in the response to Query No. 531 is envisaged.

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						you to relook into it and amend the clause suitably.	
625.	Gen	-	-	-	OCC Layout	**Refer: Reply to Queries – Set 8 Sl. No: 534** This information is very critical at this stage to assess the required number of CCTV. Hence we request DFCCIL to provide the layout of OCC which will help in maintaining the balance between various bidders.	Response given to query No. 446 and 534 is complete and no change in the same is envisaged.
626.	Vol-III Part 2	6	58	6.5.1.1 & 6.5.1.1(2)	OCC Location	**Refer: Reply to Queries – Set 8 Sl. No: 569** There is discrepancy in the information regarding the location of OCC given in Reply to Bidders set – 7 (Sl. No 446) and set – 8 (Sl. No 569). We request DFCCIL to clarify the same.	OCC Location given in earlier query No. 446 has been updated in response to later query No. 569.
627.	Vol-III Part 1	9	Annexure 2 :27 of 44	9.1	PSS at OCC is required to cater to Phase II TMS	**Refer: Reply to Queries – Set 8 Sl. No: 566** The PSS at OCC has to cater to the Phase II load along with the Phase I TMS and S&T loads. At this stage, the bidders of ST-P5 contract do not have the load requirement details for Phase II TMS. In view of this, we had requested DFCCIL to provide the load requirement	No change in the response to Query No. 566 is envisaged.

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						for Phase II TMS to enable the contractor to decide the optimum PSS rating at OCC. In response to queries Set No. 8, DFCCIL has stated that this information can be provided at the design stage only. We once again requested DFCCIL to provide these details at the bid stage as this has a significant cost implication.	
628.	Vol1 (1/2)	3	Page 130	Form I-B-10	Form IB-10 Vol. 2 / Clause 26.8.1	**Refer: Reply to Queries – Set 8 Sl. No: 506** Since Telecom systems are not falling under the purview of RDSO cross acceptance, the transfer of technology; an integral part of Cross Acceptance criteria shall only be applicable to imported Signalling Equipment as per Vol. 2 – GS / Clause 26.8.1. Please confirm our understanding. Also to this effect, please make the following modification to Form IB – 10. Please remove the words "and Telecommunication equipment" from the third line of First paragraph, Point	Transfer of Technology for manufacturing under Cross Acceptance criteria shall be as per Cl. 26.8.1 of Vol II of Bid documents. Necessary change has been made in I-B-10. Refer item No. 475 of Addm. 10.

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						No. 1 and Point No. 2.	