

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, TRAIN PROTECTION & WARNING SYSTEM, ELECTRONIC INTERLOCKING IN STATIONS, AUTOMATIC SIGNALLING IN BLOCK SECTIONS, 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 AND TRAIN MONITORING AND DIAGNOSTIC SYSTEM FOR DADRI – JNPT 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 and part of Phase 2)

CONTRACT PACKAGE ST P-5

Queries from Bidders

Sl. No.	Vol. No.	Section No.	Page No.	Clause No.	Title	Questions	DFCCIL's Response
6.	III Part 1	9 Part 1 Annex-2	17	6.10	Signalling SE/JE's Terminal	Please clarify the locations of SE offices planned for DFCW Phase-1 and Phase-2 separately.	Refer Vol. V, V-4-1-1 & V-4-1-2 for Phase 1 in which location of IMDs and sub-depots is given. The offices of SE/JEs shall be located in these IMDs and sub-depots. Scope of TMS work is modified to cover only Phase 1. Refer Item No. 172 of Addendum 3.
122.	III Part 2	9 Part 2	8	1.4 (2)	Video Signals	The telecomm system specified does not have the necessary band width to support video signal. Please delete "Video Signal", which is applicable only inside of OCC for surveillance.	Clause is self-explanatory. The telecom system should support video signal. The Clause remains unchanged.
123.	III	9 Part 2	11	2.2	Pre-furnished	Please confirm that pre-furnishing and pre-	Clause 2.2.2 is self-

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	Part 2				and Pre-wired cabin	wiring of the cabinet inside of Pre-fabricated Hut is not mandatory requirement, however that the Contractor can consider this option based on the time schedule and logistics consideration. In the case of telecommunication hut, the wiring is less and may not be found the big merit.	explanatory.
124.	III Part 2	9 Part 2	11 62	2.2.3 6.5.3.16	OCC Location in Ahmedabad	Please identify DFC OCC location in Ahmedabad for the planning of OFC cabling and GSM-R BTS.	OCC shall be in and around Ahmedabad City within a distance of about 15 km from the Right Of Way. Clause 10.1.1 is accordingly modified. Refer item No. 110 of Addendum 3
125.	III Part 2	9 Part 2	18	4.2.1.2	LED Indicator	Is this required on each and every cards of the telephone system as EPABX? Kindly clarify this.	Clause is self-explanatory that all active equipment shall have LED indications.
126.	III Part 2	9 Part 2	20	5.1.1	SDH Network	Please clarify whether DFC network is integrated with IR existing network. If yes please defined the interface and its location.	Clause is self-explanatory.
127.	III Part 2	9 Part 2	20	5.1.5	WAN	Please confirm WAN network between OCC, Stations & EMLD is built upon the EoS interfaces of SDH communication system.	Please refer to clause 5.3.6 and its sub-clauses.
128.	III Part 2	20 Part 2	20	5.1.7	WAN for BMS	Please clarify the scope of work of BMS, which is specified as WAN user, by ST P-5 Contractor.	Requirements for BMS will be determined during design stage and subject to No Objection by the Engineer.
129.	III Part 2	9 Part 2	21	5.3.3.1.3	Secondary OFC Cable Network for Auto Location Hut	Please clarify the secondary network connection for Auto Location Hut. Is the connection is tapped and terminated at all locations or provision of spur link if the distance from Telecom Hut (BTS) is less	Please refer item No. 85 of Addendum 3 to clause 5.3.3.1.4

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						than 2 km.	
130.	III Part 2	9 Part 2	21	5.3.3.1.5	OFC Spare Cores	Please confirm the required spares are at least 50% of the used core.	Clause is self-explanatory
131.	III Part 2	9 Part 2	22	5.3.4.2	SDH Matrix Capacity	Please clarify the capacity of SDH matrix supporting STM-16/4/1.	Size of the nodes has been revised. SDH nodes at stations, ELMD & OCC shall as a minimum be STM16 or higher. Refer item No. 127 of Addendum 3.
132.	III Part 2	9 Part 2	23	5.3.4.7	SDH EoS	EoS is transparent to MPLS using PWE3, moreover incase PWE3 are used for E1,s then such requirements can be easily met with a SDH mux rather than using MPLS. We suggest to kindly remove the requirement	Please refer item No. 145 of Addendum 3.
133.	III Part 2	9 Part 2	23	5.3.4.8	SDH Layer 2	IEEE 802.3ah recommendation is applicable for EFM & not for SDH or EoSDH. We suggest to kindly removing the requirement.	Clause 5.3.4.8 remains unchanged. Contractor shall comply with the Clause.
134.	III Part 2	9 Part 2	23	5.3.4.9	SDH Common Card Hot Standby Configuration	Please clarify whether controller card protection is necessary or not if the failure of a single card will not lead to traffic down but only manageability will be affected	Clause is self-explanatory.
135.	III Part 2	9 Part 2	27	5.3.10.1.10	SDH ELMD Integration	Kindly specify the expectation in terms of integration required. Do we have to provide NBI for Umbrella management NMS	Clause 5.3.10.1.10 is self-explanatory. Contractor shall comply with the clause.
136.	III Part 2	9 Part 2	28	5.3.10.4	SDH Performance Monitoring	Kindly clarify whether OFC system referred in the clause is SDH equipment or the fiber cable. In case it is fiber cable the NMS cannot provide any performance monitoring parameter for same.	Refer item No. 86 of Addendum 3. to clause 5.3.10.4.1
137.	III	9 Part 2	33	5.5.3.2.1	SDH Node	A few standards mentioned in the clause are	Refer item No. 88 of

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	Part 2				Equipment	not applicable to the system required, we suggest to remove those from the requirement: <ul style="list-style-type: none"> • G.708: STM-0 not applicable • G.709:OTN standard not applicable • G.782: ITU-T G.782 is not valid anymore, and has merged with G.783. 	Addendum 3.
138.	III Part 2	9 Part 2	37	6.1.1	GSM-R General	Please clarify whether DFC GSM-R is integrated with the existing IR GSM-R Network.	Clause is self explanatory.
139.	III Part 2	9 Part 2	38	6.3.1.1(5)	GSM-R Direct Service	Direct Mode is not supported by GSM-R infrastructure; it's a terminal functionality and none of GSM-R terminals support it today. Please confirm this requirement is not mandatory. SM-R infrastructure; it's a terminal functionality and none of GSM-R terminals support it today. Please confirm this requirement is not mandatory.	The contractor will comply with the PS requirement subject to No Objection by the Engineer.
140.	III Part 2	9 Part 2	60	6.5.2.2 6.5.2.3	GSM-R Frequency Spectrum	Please confirm how the Contractor is entitled to obtain approval or to obtain new spectrum from WPC without time implementation to the Employer.	DFCCIL will provide the necessary support. Refer item No. 153 of Addendum 3.
141.	III Part 2	9 Part 2	60	6.5.2.4	GSM-R Direct Mode	Same question to 6.3.1.1(5)	Please refer Sl. No. 139
142.	III Part 2	9 Part 2	61	6.5.3.7	GSM-R Fault Tolerant RF Coverage	Fault tolerant coverage would require more spectrums, than the allocated one. Please clarify if this requirement is applicable. If yes what is the additional spectrum that can be obtained.	Refer item No. 105 of Addendum 3.

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143.	III Part 2	9 Part 2	64	6.5.9.1	GSM-R Tower Height	Maximum tower height is not specified. Please confirm what is the maximum to be considered as requirement?	Please refer item No. 108 of Addendum 3 to clause 6.5.9.3.
144.	III Part 2	9 Part 2	65	6.6.1.	GSM-R Future Upgrade	Future BTS upgrade may require replacement of radio components, e.g. upgrade from O2 to O3 require replacement of external splitters	Please refer item No. 134 of Addendum 3. Words "as far as possible" added after the word "software" in third line of the clause.
145.	III Part 2	9 Part 2	67	7.1.1	EPABX Requirement	Please clarify whether DFC telephone network is connected to the existing IR network. If yes please define the interface and its location	Clause is self-explanatory.
146.	III Part 2	9 Part 2	67	7.3.2	EPABX Subscriber Telephone connection	Please clarify how to connect the subscriber through OFC to the exchanger.	The Contractor shall design the connection subject to No Objection by the Engineer. Please refer to drawing at page no. V-7-1-15 vol. V for reference.
147.	III Part 2	9 Part 2	68	7.3.7	EPABX Net Work Management Computer	Kindly confirm the PC and Printers are required at each station also. And same will use only for the maintenance purpose or management. If for management kindly elaborate in detail.	Please refer item No. 125 of Addendum 3 to S.N. 5 of table in clause 7.3.14. It is for Local functionality. The Contractor shall design the details subject to No Objection by the Engineer. (ATTACHMENT 9)
148.	III Part 2	9 Part 2	69	7.3.13	EPABX Network Connection to GSM-R Radio System	Please confirm the connections to GSM-is at Radio Server at OCC. Please clarify the type of interface.	Connection to GSM-R is at core Network. The contractor shall design the connections subject to No Objection by the Engineer
149.	III Part 2	9 Part 2	69	7.3.14 SN 11	EPABX VOIP Facility	Kindly provide the information related no. of VOIP extension and the IP trunk. Also the same shall be H323 or SIP, kindly confirm.	The contractor shall provide the EPABX with the facility of VOIP. Decision regarding

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							H323 or SIP to be taken by the Engineer during design stage.
150.	III Part 2	9 Part 2	72	7.5.2.2 (1)(2)(3)	EPABX Extension Line Interface	For the Digital extension the point no.1, 2, 3 is not applicable since digital line loop resistance is 600 ohm and support upto 800 meter and point no.3 also does not work because digital phone come in normal state automatically. kindly amend the same.	Clause is self-explanatory.
151.	III Part 2	9 Part 2	72	7.5.2.3	EPABX Digital Extension	The digital line extension is on 3b+D ISDN signalling. The data transmission can happen through a adaptor interface with digital phone and uses 2b+D. Kindly confirm that will you required the adaptor from the day one or the product support only.	Adaptor is required to be supported.
152.	III Part 2	9 Part 2	72	7.5.2.5 (1)	EPABX Analog Telephone Set	Kindly confirm whether the set is with Clip, Display.	Clause is self-explanatory.
153.	III Part 2	9 Part 2	72	7.5.2.5.(2)	EPABX Analog Feature Telephone Set	The functional and memories key required the additional AA size batteries inside the phone, kindly amend the (i) point for the same.	Clause 7.5.2.5(2) is self-explanatory and additional battery is not acceptable.
154.	III Part 2	9 Part 2	75	7.5.5.4	EPABX Lap Top PC for Local Maintenance	Please confirm the number of Lap Top required is one per each EPABX.	Please refer to S.N. 9 of table – contract spares of appendix 5.
155.	III Part 2	9 Part 2	77	8.1.1	DTS for SER and TER	Please confirm that DTS will not be provided at normally unmanned SER, TER, Auto Location Hut and Telecom Hut as it is so identified from Appendix 2.	Clause 8.1.1 and Appendix 2 are self-explanatory and the Contractor shall comply with the Clauses.
156.	III Part 2	9 Part 2	79	8.3.3.1	DTS Telephone at Level Crossing	Kindly confirm the Type of telephone instrument required at Level crossing gates,	It shall be same type as in clause 8.3.2.1 for remote locations subject to No Objection by the Engineer.

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157.	III Part 2	9 Part 2	80	8.5.2	DTS Switch Network	Please clarify whether DTS network can be an integral part of EPABX network, if RAM condition is met.	Contractor shall propose the Dispatch Telephone system design subject to No Objection by the Engineer.
158.	III Part 2	9 Part 2	82	9.3.2	Master Clock Sys. Synchronizing Pulse	Please clarify which sort of synchronization pulses can be used to synchronize the slave clocks, i.e.: - NTP (Facilitate supervision of clocks through NMS). - MOBA Line (10-20 VAC signal, can be carried up to 1.6 KM, simple installation: 2 wire cabling.	The Contractor shall design the system subject to No Objection by the Engineer
159.	III Part 2	9 Part 2	85	9.5.3(1)		Please clarify what "1+1" specifies, Does it mean a redundant / dual master clock with switchover unit to avail redundant output. Please confirm.	Yes. It is to provide hot backup.
160.	III Part 2	9 Part 2 Appendix-2	3	Table	DTS External Connection	Please identify the location of the existing IR OCC, 6 locations for Phase-1, for cable route planning. Reference DWG V-7-1-13 defines only 4 location name only..	Please refer item No. 117 of Addendum 3 to Appendix 2.
161.	III Part 2	9 Part 2 Appendix-4	7	Table	Clock Schedule	The list indicates only digital clock schedule. Please indicate analog slave clock schedule if required per Clause 9.5.4	Analog slave clock is not required therefore it is not included in the schedule
162.	V	11		V-1-1-5 To V-1-1-9	Work Areas	Please confirm the work areas defined in these tables are the exact areas for stations, mainlines and connecting lines to be covered by ST P-5 Contract.	All the chainage/lengths as indicated in V-1-1-5 to V-1-1-9 are indicative, approximate and for reference only. It shall be reviewed and firmed up by the civil contractor.
163.	V	11		V-5-1 V-5-2	Layout Drawing of JS/CS	The drawings included are only CT-3 and Marwar in CT-2 and Phulera/Rewari in CT-3. Please provide the missing drawing along with the updated drawings for Marwar in CT-	V-5-1 and V-5-2 represent layout of buildings at JS/CS. V-5-1-1 to V-5-1-4 is a set of typical layout of buildings at

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						2 and Phulera/Rewari in CT-3.	crossing stations of CT P-1 and CT P-2 (refer drawing title). For Schematic diagram of yards refer V-3-1, V-3-2 and V-3-3
181.	III Part 1	5	28	5.7.8	Block sections	Auto location hut air-conditioning has to be more specific .Since PSS and battery portion does not require ac, it is proposed to use ac only for EI portion with built in ac with eqpt. Rack. Use of any commercial ac will be theft prone	Type of AC proposed by you is same as specified in Clause 3.3 of Annexure 8 of Vol. III, Part 1 of Bid documents. However, PSS and battery also need to be provided with AC.
187.	III Part 1	9	64 of 84	10.7.4.4	Earthing of outdoor installations	The Main Earth Bus Bar for earthing outdoor S&T gears to be provided by P5 contractor or other contractor? Who will provide burried earth conductor and arial earth wire ? Can the rails be used as main earth bus bar?	1) Refer to Clause 10.7.4.5 of Vol. III, Part 1 of Bid Documents which is revised as under: “(a) EM P-4 Contractor shall develop Project wide Earthing and Bonding Management Plan. ST P-5 Contractor shall coordinate and provide earthing system accordingly as per International practice. (b) Extension of Traction Earth from the agreed track side connection point to Signalling equipment shall be done by ST P-5 Contractor as per agreed system of Earthing Management plan. (c) EM P-4 Contractor shall be connecting OHE masts and rails to Traction Earth.”

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							Refer item No. 157 of Addendum 3.
188.	III Part 1	9	64 of 84	10.7.4.5	Earthing of outdoor installations	What are the locations where earthing is provided by other contractors? Shouldn't dedicated earthing connections be provided for outdoor S&T gears like MSDAC DP's instead of connecting them to earthing systems provided by Civil/traction contractor which may be used for earthing non safety critical equipments?	Refer to response to Q. 187 above.
190.	III Part 1	9	Annexure 2: Page 3 of 44	4.1 C(iv)	Train Operation	1. If OCC is not located along WDFC route, please confirm that ROW or laying cables from WDFC network to OCC shall be arranged by DFCCIL. 2. Can the cable be laid along IR track on IR Land. 3. Is it possible to extend the connectivity to OCC by hiring Dark fibres from Railtel	Refer response to S No 124
195.	III Part 1	9	4 of 84	1.4.3.2	OCC	1. Exactly, how many TMS Terminals are to be provided for IR at IR locations? "Three or more...." does not have an upper limit. Please define the upper limit of terminals for IR. 2. Can TMS Terminals be extended on hired OFC Channels or hired dark fibers, if IR locations happen to be away from WDFC route and do not have WDFC telecom infrastructure?	1) Refer item No. 40 & 41 of Addendum 2. 2) Shall be decided by the Engineer during design stage.
212.	III Part 1	9	64 of 84	10.7.4.4	Earthing of outdoor installations	1. Please elaborate "Main Earth Busbar". 2. Is Aerial Earth Wire or Buried Earth Conductor provided along the corridor for earthing of equipment? 3. Can the Rails be used as Earth Terminal	Refer to response to Q. No. 187 above,

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						for Earthing of outdoor equipment?	
213.	III Part 1	9	64 of 84	10.7.4.5	Earthing of outdoor installations	1. What are the locations along main line where Earth Terminals shall be provided by Civil / Traction Contractor? 2. If Earth Terminals are provided at regular intervals, what is the distance between two terminals.	1. Refer to response to Q. No. 187 above. 2. Refer to Clause 10.7.3.1 of Vol. III – Part 1 of Bid documents.
227.	III Part 1	9	Annexure 1: Page 1 of 13	1.2	SCOPE	Design and construction of TMS for Ph-2 without any input in the form of Signaling, cannot be accurate and have lot of assumptions. It is difficult to satisfy the Employer with so many uncertainties. Moreover, there can be issues of compatibility of TMS and CBI, as the make of future CBI is not known to STP-5 contractor. Looking to the possibility of these issues, provision of only telecom infrastructure shall be made in the field for future expansion of TMS, which will be modular and expandable to cater the requirement of Ph-2.	Scope of TMS work is modified to cover only Phase 1. Refer Item No. 173 of Addendum 3.
228.	III Part 1	9	Annexure 1: Page 2 of 13	5.1 (i)	Live Indications in Control Office (On Overview Mimic Indication Panel):	OCC will have equipment of many departments. Please clarify who will provide power supply, UPS, clean Earth, Main Earth for OCC. If a common UPS is conceived for OCC, please also clarify who will lay power cables from UPS to equipment installed for systems other than STP-5.	1) Power supply for combined S&T load at OCC is to be provided by P-5 Contractor as per Clause 5.10.1 of Vol. III – Part 1 of Bid documents. 2) For Clean earth, refer modified Clauses 15.7.4.8 & 15.7.4.13 and other applicable sub-clauses under Clause 15.7 of Vol. III – Part 2 of Bid documents. Refer item Nos. 113 & 114 of Addendum 3.

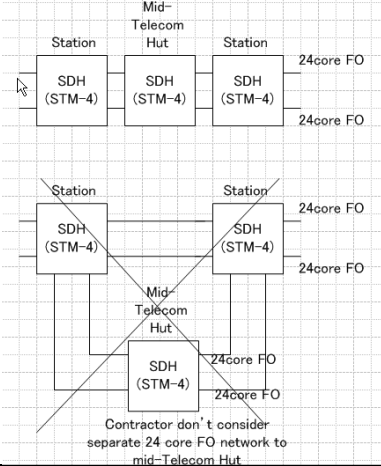
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							3) Regarding Main earth, refer to Clause 10.7.3.1 of Vol. III – Part 1 of Bid documents.
230.	III Part 1	9	--	--	--	<p>The OCC is not located on WDFC land and hence Right Of Way (ROW) has to be ensured for providing Telecom Infrastructure from WDFC route to OCC. In this ref, please clarify:</p> <p>1. OCC is located on WDFC land on WDFC route: Please advise the exact location (coordinates) of OCC and its distance from nearest WDFC station.</p> <p>2. OCC located on IR land, having access to WDFC line through IR land:</p> <p>a. Please confirm that ROW from IR shall be arranged to STP-5 contractor by DFCCIL as and when required.</p> <p>b. Can telecom connectivity be extended by means of dark fibers hired from Railtel?</p> <p>3. OCC located on private /DFCCIL land having no access to WDFC line through DFCCIL or IR land:</p> <p>a. Please clarify if DFCCIL or STP-5 contractor will arrange the ROW.</p> <p>b. Can STP-5 contractor provide telecom connectivity through dark fibres hired from private agency?</p> <p>c. In case ROW is not available despite making reasonable efforts, can microwave be provided on the patch for extending telecom connectivity</p>	Refer response to Q. No. 124 above.
231.	III Part 1	9	Annexure 1:	5.1 (ii)	Live Indications in Control Office	Without approved interlocking design for Ph-II, the locations of Auto Locs and signals is not known, and hence it is not possible to	Scope of TMS work is modified to cover only Phase 1.

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			Page 2 of 13		(On Overview Mimic Indication Panel):	indicate them on Mimic panels in OCC. Please clarify?	Refer Item No. 175 of Addendum 3.
236.	III Part 1	9	4 of 84	1.4.3.2	OCC	Kindly confirm locations of IR and exact quantity of TMS terminals to be provided. If location is away from WDFC line, the approximate distance and availability of Right Of Way may be advised.	Refer to response to Q. No. 195.
239.	III Part 2	9	38 of 128	6.2.2.2	Scope of Services	Inter-ministerial interface for procuring these licenses shall be co-ordinated by DFCC?	DFCCIL will support and facilitate for obtaining clearances from WPC, SACFA and Civil Aviation Authorities.
240.	III Part 2	9	55 of 128	6.3.13.3	Coverage and performance	How far are the residential quarters located from the DFCC stations? Appx distance and availability of ROW may be indicated	Please refer to Reference Drawings V-5-1-1 to V-5-3-29 in volume V for indicative location of buildings at stations.
241.	III Part 2	9	67 of 128	7.3.5	System Requirement	What is the duration for which Recorded data be retrievable?	Please refer to clauses 7.5.4.1, 6.3.11.4.3 & 6.3.11.5.
242.	III Part 2	9	121 of 128	18.1.3	General Requirements	Clause 18.1.3 states that Training Shall not commence during design phase while the Table included in 18.3.2 indicates that various Training programmes are scheduled during design phase. Pl. clarify contradiction	Please refer item No. 116 of Addendum 3 to clause 18.3.2. (ATTACHMENT 1)
243.	III Part 2	9	122 of 128	18.3.2 (2)	Training Courses	What does this clause imply?	Clause is self-explanatory.
244.	III Part 2	9	21 of 128	5.3.3.1.4	Optical Fiber Cable Backbone Network	Can PIJF cables be used instead for 12/6 C OFC fibres for smaller spur links?	Clause is self-explanatory.
245.	III	9	29 of	5.4.3	Availability	Which of the measures suggested will be	The contractor shall design

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	Part 2		128		Requirements	implemeneted for Improving Availability?	the system complying with the Employer's requirements subject to No Objection by the Engineer.
246.	III Part 2	9	86 of 128	10.1.1	General	1. Please advise te exact location of OCC in Ahmedabad. 2. Is OCC located on IR land, or on private land away from IR land?	Refer response to S N 124 above
247.	III Part 2	9	86 of 128	10.1.1	General	The OCC is not located on WDFC land and hence Right Of Way (ROW) has to be ensured for providing Telecom Infrastructure from WDFC route to OCC. In this ref, please clarify: 1. OCC is loacted on WDFC land on WDFC rout: Pleae advise the exact location (coordinates) of OCC and its distance from nearest WDFC station. 2. OCC located on IR land, having access to WDFC line through IR land: a. Please confirm that ROW from IR shall be arranged to STP-5 contrator by DFCCIL as and when required. b. Can telecom connectivity be extended by means f dark fibers hired from Railtel? 3. OCC located on private /DFCCIL land having no access to WDFC line through DFCCIL or IR land: a. Please clarify if DFCCIL or STP-5 contractor will arrange the ROW. b. Can STP-5 contractor provide telecom connecivity through dark fibres hired from private agency? c. In case ROW is not available despite making reasonable efforts, can microwave be provided on the the patch fro extending	Refer response to S N 124 above. . 2& 3 shall be decided by the Engineer during design stage.

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						telecom connectivity	
250.	III Part 2					Kindly provide the data and drawings indicating the locations where the SDH and WAN system is required.	The Contractor shall design the system complying with Employer's Requirements subject to No Objection by the Engineer.
251.	III Part 2					Kindly provide the overall channel plan and BOQ for the SDH*Primary Multiplexer system required at each location.	The Contractor shall design the system complying with Employer's Requirements subject to No Objection by the Engineer.
252.	III Part 2					The location of Porta Huts is not indicated. The same will be required for designing of the Fibre Optic system.	The Contractor shall determine the locations of Porta huts based on the RF coverage design of GSMR radio system etc and submit to the Engineer for review and consent.
253.	III Part 2 V III Part 2	9 Part 2 9 Part 2	20 V-7-1-5 34	5.1.6 5.1.7 5.2.1.(4)	SDH and Wide Area Network	(1) Bidder considers Wide Area Networking (WAN) is provided on SDH as shown in Drawing NKC-S&T-SSD-AL-20004 (Version-A) V-7-1-5, and is not an independent system utilizing separate F.O connection from SDH. Please confirm. In relation to the above, please confirm that the minimum bandwidth of 28Gbps specified for WAN layer 3 switch in Par.5.5.3.5 is not WAN system performance but for equipment performance.	(1) Refer to clause 5.3.6 and sub-clauses and item No. 119 of Addendum 3 showing revised Drawing NKC-S&T-SSD-AL-20004 (Version-B) V-7-1-5. Other Clauses are self-explanatory. (ATTACHMENT 12) (2). Clause 5.5.3.5 is self-explanatory.
254.	III Part 2	9 Part 2	22 62	5.3.4.4 6.5.3.17	BTS connection	Para 5.4.4.4 states STM-1 ADM or higher is to be provided for each telecom hut for GSM-R. However, Par. 6.5.3.17 specifies 2Mb/s (E1)	Clause 6.5.3.17 is self-explanatory. The contractor shall comply with the

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						ring connection to BTS. Bidder understands that the ring connection shall be achieved with STM-1 (secondary network) and that a single E1 (2Mbps) connection shall be provided between STM-1 (ADM) and BTS physically in telecom hut. The ring configuration with 2Mbps is considered logical allocation in STM network. Please confirm.	requirement.
255.	V		V-7-1-4		OFC Connection for Signalling Hut	None of Telecom Drawings indicates OFC connection for inter-station Signalling Hut. Please confirm the secondary OFC network connects Signalling Hut as well as Telecom Hut for STM-1 Data Transmission and grey core provision for signalling system as required.	Refer to clause 5.3.5.5 (3) for dark fiber for signaling requirements. Also refer item No. 85 of Addendum 3 to clause 5.3.3.1.4. The contractor shall design the complete OFC network for signaling and telecom system subject to No Objection from the Engineer.
256.	III Part 2	9 Part 2	21 V-7-1-4	5.3.3.1.3	SDH and OFC	Para 5.3.3.1.3 states that Optical fiber cables of the second network shall be terminated in ODFs in CER in OCC. However, in diagram V-7-1-4, this link is not shown. Bidder understands that OCC connects both first network (24 core F.O) and secondary network (12 core F.O). Please confirm.	Clause 5.3.3.1.3 is self-explanatory. Refer item No. 136 of Addendum 3 modified drawing NKC-S&T-SSD-AL-20003 (Version-B) V-7-1-4 showing termination of secondary OFC cable in OCC/CER, main OFC cable 24 fibers changed to 48 fibers and Main OFC cable termination in Porta hut deleted. (ATTACHMENT 11)
257.	V	III	21	5.3.3.1.2	SDH and OFC	Para 5.3.3.1.2 states that "In addition OFC cables of the First network shall also be	1.Refer item Nos. 136 of


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		V		V-7-1-3 V-7-1-4		<p>terminated at one of the SDH/GSM-R node in porta huts...". However, drawing V-7-1-3 shows 24-core FO between the stations. Bidder understands that the first network with 24-core F.O connect is provided as "Station - Mid Telecom Hut – Station" only. No separate first network with 24- core fiber (one for Station – Station, other for Station-Mid Telecom Hut -Station) is considered. Please confirm it.</p> 	<p>Addendum 3 modified drawing NKC-S&T-SSD-AL-20003 (Version-B) V-7-1-3 showing termination of secondary OFC cable in OCC/CER and main OFC cable 24 fibers changed to 48 fibers . Main OFC cable termination in Porta hut deleted 2.Refer item No. 139 of Addendum 3 to clause 5.3.3.1.2.</p>
258.	V	9 Par 2	V-4-2-	-	OCC Building drawing	<p>No OCC building drawing is available. Please furnish it so that Bidder can correctly size telecommunication facility in OCC, such as Video Surveillance System, Telephone System etc.</p>	<p>OCC building complex layout shall be prepared at Detailed Design stage with due involvement of P5 Contractor as it is an Interface item. It should be possible to work out requirements based on information given in relevant</p>

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							Clauses of Bid documents:
261.	III Part 2	9 Part 2	61	6.5.3.7	GSM-R Double coverage	<p>Bidder understands that para. 6.5.3.7 requests double coverage. Please confirm if the Bidder's understanding is correct.</p> <p>In case of double coverage, please clarify if bidder can choose any one of the following methods, or, please let Bidders know Owner's choice of the method (refer to the schematic image on the next page).</p> <p>1) Co-site (Master-Slave) 2) Co-site (Different Frequency) 3) Inter-leave (Different Frequency)</p>	Refer response to SN 142 above.
262.	III Part 2	9	59 13	6.5.1.1 3.1.2	Technical Requirements Performance Requirements	<p>1. Current Eirene specifications can be met by proposing both R99 & ETSI compliant R4 core. Does the equipment vendor need to supply R99 which is now obsolete or ETSI compliant R4 core, which is currently being deployed worldwide and is the future of GSM-R? Since 15 years of service is required from the system from the date of deployment, so it is in the interest of the railways to deploy latest R4 technology. Globally R4 is already deployed in GSMR in various countries like UK, Austria, Czech republic, Germany, Lithuania, France etc..</p> <p>2. If one vendor proposes R99 and the others propose R4 core, how would the comparative evaluation happen between the two vendors?</p>	Refer item Nos. 99, & 100 of Addendum 3.
263.	III	9	17	4.1.1.2	Design	a) How many live global references does the	As per provisions in Volume

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	Part 2				Requirements	<p>bidder need to provide for the proposed core & radio equipment at the time of the bid?</p> <p>b) Globally railways ask for NoBo (Notarised Body – Appointed by UIC) certification for the proposed core & radio equipment as a proof for conforming to international standards. Does the bidder need to submit a NoBo certificate for core & radio along with the bid?</p>	<p>1 of ST P 5 bid document.</p> <p>Refer item Nos. 91 of Addendum 3.</p>
264.	III Part 2	9	57	6.4.6	Performance Specifications	Is the bidder required to submit an interoperability certificate for proposed core & radio equipment specifying interoperability with at least one other vendor from GSMR environment along with the bid?	Refer item Nos. 96 of Addendum 3.
265.	III Part 2	9	60	6.5.2.3	Frequency Planning	A supplier neither has power over WPC nor any Locus Standi to request additional spectrum. Therefore the Contractor cannot be responsible to arrange more frequency. Please confirm if the bidder understanding is correct.	Refer to response at SN 140
266.	III Part 2	9	38	6.3.1.1 (5) & 6.5.2.4	System Requirement	Direct Mode (DMO) is not supported by GSM-R infrastructure; it's a terminal functionality and none of GSM-R terminals support it today. Please confirm that this requirement is not mandatory.	Refer to response at SN 139
267.	III Part 2	9	60	6.5.2.7	System Requirement	Supplier cannot ensure "no interference" from other radio systems. Considering RF survey is part of implementation phase, at bid stage it is impossible to ensure that RxQual value be 3 or better. We understand therefore this requirement is not applicable for Bid submission. Please confirm correct understanding.	Clause 6.5.2.7 remains unchanged. Contractor shall comply with the clause.
268.	III	9	61	6.5.3.7	System	Fault tolerant coverage would require more	Refer response to SN 142

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	Part 2				Requirement	spectrum, than the allocated one. Please clarify if this requirement is applicable. If yes what is the additional spectrum that can be obtained.	above.
269.	III Part 2	9	65	6.6.1	System Requirement	Future BTS upgrade may require replacement of hardware, e.g. upgrade from O2 to O3 require replacement of external splitters. Request that the clause may be suitably modified to allow replacement of hardware for upgrade.	Refer response to item 144.
270.	III Part 2	9	64	6.5.9	System Requirement	Maximum tower height is not specified. Please confirm what is the maximum to be considered as requirement?	Refer response to item 143.
271.	III Part 2	9			System Requirement	Maximum power output of BTS is not specified. Please confirm the maximum power to be considered as requirement?	Contractor shall design the radio system subject to No Objection by the Engineer.
272.	III Part 2	9	66	6.6.2	System Expansion	Please provide Phase 2 requirements of expansion of central switch in the tender.	Requirements of phase 2 may be assumed as 80% of phase 1. Contractor shall however fully comply with the Employer's Requirements clause 6.6.2. Refer item No. 141 of Addendum 3.
273.	III Part 2	6	37	6.1.1	GSM-R Communication System	Does 'wireless data channel' imply 'packet switched (PS) data' or can it be construed as 'circuit switched (CS) data'? If it is PS, then network will need to be provided with GPRS. In this connection Clause 6.5.1.1 3) (page 58) may also be seen	Refer response at SN 262 above
274.	III Part 2	6	53	6.3.11	Dispatcher Console	Is Dispatcher Console same as Core Dispatcher?	Clause is self-explanatory.
275.	III Part 2	Appendix 5	8 of 40	6, 7, 23	Dispatcher Console 100 lines,	If Dispatcher Console is same as Core Dispatcher, then what is the meaning of 100 lines and 30 lines? Moreover, 1 No. RDW as	Description of item Nos 6, 7 & 8 of Appendix 5 modified. Refer item No. 118 of

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					Dispatcher Console 50 lines	spare for OCC is also listed therein in addition. Request clarify	Addendum 3. (ATTACHMENT 3)
276.	III Part 2	6	54	6.3.11.4.3 & 6.3.11.5	RDW & Fixed radio terminal	Recording facility for all GSM-R network calls centralized in a Voice Recording System (VRS). Would this be still required?	No change in Employer's Requirements
277.	III Part 2	6	55	6.3.13.3	Coverage & Performance	Requirement to provide coverage of IR stations connected to WDFC junctions may entail separate base station at IR station due to distance between IR and EDFC alignments. WDFC may agree that in such cases coverage will be conditional.	RF coverage is required as per Employer's Requirements. Contractor shall design the system accordingly.
278.	III Part 2	6	59	6.5.1.5	Technical Requirements	Is Traffic Dispatcher same as RDW?	Refer to clause 6.3.11 and its sub-clauses.
279.	III Part 2	6	63, 64	6.5.8 & 6.5.8.6	Technical Requirements	Is 'train borne antenna' different from 'cab radio antenna'?	Both are same.
280.	III Part 2	9 Part 2	61	6.5.3.7	GSM-R Double coverage	This is with reference to query raised earlier on Double Coverage and reply thereto by WDFC (Mr Sharma/Consultant). It was clarified by Mr. Sharma that by Double Coverage, it was meant that if a BTS fails, then the signal should still be strong enough that the Cab Radio should be able to communicate with the next BTS, even if the Hand Held radio stops working. However, it is our opinion that this will result in Adjacent channel interference due to frequency planning with limited channels (8 spots). Moreover, we will need to recreate Data base in BSC with new hand over parameters.	Refer to response at SN 142 above.
281.	III	6	60	6.5.2.7	Frequency	Adjacent channel interference as mentioned	Refer to response at SN 267

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	Part 2				Planning	in point 8 above will impact Rx Qual. In such a circumstance Rx Qual 3 or better than 3 will not be possible. This may please be clarified.	above.
282.	III Part 2	6	61	6.5.3.8	Radio Frequency Coverage	It is not possible to provide RF Signal plots for up-link for cab radio and handheld(indoor and outdoor coverage) since all planning/measurement tools only provide downlink measurements.	Refer item No. 124 of Addendum 3.
283.	III Part 2	6	59	6.5.1.3	Technical Requirements	Does requirement of automatic changeover of between main and hot standby MSC imply 2 MSCs to be in redundant hot standby configuration?	Refer item No. 149 of Addendum 3. Clause is otherwise self- explanatory.
284.	III Part1	9 Part 2	Annex ure 7-5 1/2	1.5	Scope of TMS for Phase 2	<p>This paragraph requests “provision” of TMS equipment at stations, Auto Location Huts, IMDs etc. of Phase 2. Please urgently provide schematic diagrams of yard for phase 2 stations so that Bidders can estimate cost for TMS equipment supply and work for the Phase 2, without waiting for ST P-17 document set.</p> <p>If such schematic diagrams are not available, please accept our cost estimate based on the attached wayside equipment list with rough estimated quantities of phase</p>  <p style="text-align: center;">Wayside Equipment List v</p> <p>2 equipment.</p>	<p>Scope of TMS work is modified to cover only Phase 1.</p> <p>Refer Item No. 197 of Addendum 3.</p>
285.	III Part2	9 Part 2	-	-	Railway Vectors file	<p>If owner has vector file (railway vectors) of Truck alignment, please furnish it to Bidders for study of GSM-R.</p> <p>Vector file: track data in DXF or DWG file (DXF is desirable if possible).</p> <p>If such drawings are not available, please</p>	<p>GPS coordinates for packages 1 and 2 are already available in vol V. Similar data for package 3 (Iqbalgarh – Vadodara) is provided in the Transverse</p>

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						provide following drawings in DXF or DWG: ITB Vol.5 V-1-1-1:NKC-CTS-ALI-AL-00001 GENERAL MAP OF DFC V-1-1-2:NKC-CTS-ALI-AL-00002 GENERAL MAP OF WESTERN DFC V-1-1-3:NKC-CTS-ALI-AL-00003 GENERAL MAP OF PHASE-1 V-1-1-4:NKC-CTS-ALI-AL-00004 SEC LOCATION MAP	Control Points details given now. Refer item No. 123 of Addendum 3. (ATTACHMENT 8)
286.	III Part 1	9 Part 1	24	5.5.1.16 1) & 2)	Type of Point Machine	As UIC60 rails and thick web switch will be provided on the track in this project, IRS type point machine (220 mm throw) with external clamp lock. Please clarify whether our selection and understanding is correct or not.	Your understanding about use of 220 mm throw point machine with external clamp lock is correct. Also refer Cl. 5.6.9 of Vol. III Part 1 of Bid documents.
288.	III Part 2	9 Part 2	21	5.3.3.1.5	Core of Fiber Optic Cable	According to information from RDSO, recently 48 core fiber optic also is used in Indian Railway. Bidder would like to clarify if 48 core FO cable can be used instead of 24 core cable if required cores of network would exceed 24 cores.	Yes. Refer item No. 126 of Addendum 3 to clause 5.5.3.7.2.
289.	III Part 2	9 Part 2	23	5.3.5.5	Ethernet 10/100ports for SCADA, BMS, Dispatcher Telephone system, Clock System	Bidder understands SDH network is used for GSM-R, Dispatcher system, Telephone system and Clock system, etc. and they are connected through E1 or 10/100 port provided at ADM. WAN (10GigE (primary (Between Stations)), 1GigE (secondary): 1000Base from 10GE L3 Switch)) is used for signal system, SCADA system and general purpose. Please confirm the split of the application.	Clause is self-explanatory
290.	III	9	24	5.3.6.2	10Gig E	Bidder considers 10GigE is provided	Clause is self-explanatory.

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	Part 2	Part 2				between Stations and OCC separately from SDH (STM-4) backbone. Please confirm if our understanding is correct.	
291.	III Part 2	9 Part 2	24	5.3.6.3	Bandwidth for Ethernet services	Bidder understands the Ethernet connection at Auto Section locations, LC gate, TSS, SPs, SSPs and ATs can be provided with L2 switch which is connected from 10/100/1000 port of L3 switch in relevant station (10G Ethernet). Please confirm if our understanding is correct.	Clause is self-explanatory.
292.	III Part 2	9 Part 2	54	6.3.11.4.3 6.3.13.7	Voice Recording System (VRS)	Bidder understands whichever individual VRS or centralized VRS is acceptable. Please confirm if our understanding is correct.	Clause 6.3.13.7 is self-explanatory. Further refer to clauses 7.2.2(6), 7.4.3.6, 7.3.4.7 & other relevant clauses.
293.	III Part 2	9 Part 2	60	6.5.2.4	DMO with Cab radio	According to manufacturer's information, none of CAB-supplier supports DMO function. Bidder cannot comply with the requirement if no supplier is available. If Client has any recommended vendors who can supply it, please advise.	Refer to S N 139 above
294.	III Part 2	9 Part 2	61	6.5.3.1 6.5.8.6	Antenna on the roof of a train Cab radio Antenna	Bidder understands "Antenna on the roof of a train" stated in 6.5.3.1 and "Cab radio antenna" stated in 6.5.8.6 are same. Please confirm if our understanding is correct.	Refer to S N 279 above.
295.	III Part 2	9 Part 2	91	11.3.1	Battery back-up system - Redundancy	Bidder understands distribution panel can be common. Please confirm if our understanding is correct. (Refer to below drawing)	The contractor shall design the system complying with the Employer's requirements subject to No Objection by the Engineer.
296.	I(1/2)	3C	113 of 191	Form I-B-4	Basic Programme for	As described in (3)(i) of Form 1-B-4, the basic Programme proposed by the bidder	The requirements of the Other Contractors are as

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				(3)	the Works	<p>shall accommodate the requirements of the Other Contractors engaged by the Employer upon the other work LOTS under the Project.</p> <p>Accordingly please provide the reference Programme of the following LOTS for the development of S&T Basic Programme, with the highest priority to those of CT P-1 to CT P-3, which will substantially affect to S&T Programme development and the proposed cost accordingly.</p> <ul style="list-style-type: none"> - CT P-1 & 2 - CTP -3 - RS P-7 - EM P-4 	specified in the Table: Co-ordination Events and Key Milestones, in Section 5 of Volume I.
297.	II	8	87 of 135	16.2.1.2	Cross Acceptance of approval from RDSO	<p>Please confirm that the following STEP components under RDSO Cross Acceptance Approval can be sourced from OEM in Japan as well, although the approved entities will be Indian Partners or OEM's subsidiary;</p> <ul style="list-style-type: none"> i) Electronic Interlocking ii) TPWS iii) Digital Axle Counter <p>Needless to say, the maintenance of the system will be definitively by the Indian Partners or OEM's subsidiary in Japan</p>	May be referred to RDSO while applying for Cross Acceptance approval.
298.	III Part 1	5	24	5.5.1.15	Automatic switching mode between day and night for signals	<p>Please consider to delete this item. Because this is not RDSO requirement, and we are afraid this will affects ECR current.</p>	<p>The Clause is deleted.</p> <p>Refer item No. 161 of Addendum 3.</p>

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					shall be available.		
299.	III Part 1	1	4	1.4.4 a)	Signalling inside the Depot shall be provided by P-7 contractor. However, P-5 contractor shall provide TPWS on Test Track as well as on entry and exit signals in the Depot. In addition, P-5 contractor shall provide Signalling Monitor console in TPWS maintenance room in the Depot linking it to console of Signal Fault Controller in OCC.	Please provide the Depot drawing in order for P5 bidder to quote the TPWS for Test Track as well as on entry and exit signals in the Depot.	Typical Signalling Plan of Depot is attached. Refer item No. 162 of Addendum 3.
300.	III Part 1		21	5.3.1 17)	Duplicated Doppler Radar speed sensor shall be provided to ensure compliance of Clause 5.3 of	Please consider to delete the Doppler Radar requirement, or make it as an option. Because we consider two speed sensors on the different axles is practical and suitable proposal.	Refer response to Q. No. 44.

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					RDSO specification.		
301.	III Part 1		53	9.7.8	Compatibility test of TPWS	Please clarify if the existing IR loco. and existing IR TPWS track to be provided free of charge for the TPWS interoperability test.	Yes.
302.	I	Table S.No 9	147		Test of Prototype Loco.	Please clarify if the brake performance as a goods train is measure by P7 contractor. P5 contractor needs the brake data as a goods train for TPWS onboard.	Refer to item (v) on page 6 of Annexure 7-2 of Vol. III Part 1 of Bid documents.
303.	III Part1		15	4.2.3	Presently TMS will not have any control function and therefore, can have SIL 0. However, since provision has to be kept for adding CTC functionality in future, its design shall be in conformity with SIL 2 required in future.	Please consider to keep SIL 0 after adding CTC functionality in future, because the EI (SIL4) guarantees the safety of route setting, it's not TMS's function. EI always rejects the CTC command if some contradiction is detected.	Refer response to Q. No. 202.
304.	III Part1		15	4.3.4	The TPWS line equipment shall be engineered for a minimum useful life of 15 years, based on the equipment being continuously in operation, and shall achieve an MTBSAF (Mean	Please clarify the definition of MTBSAF. What is the definition of Service Affecting Failures?	The Clause is modified as under: "The TPWS line equipment shall be engineered for a minimum service life of 15 years, based on the equipment being continuously in operation."

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					Time Between Service Affecting Failures) of no less than 1000 hours between any failures affecting the revenue train service.		Refer item No. 164 of Addendum 3.
305.	III Part1	Annex 1	11	9.3 i. a.	Failure of any Signalling gear including Electronic Interlocking, I/O controller, PSS, Axle Counter, Signal Lamp, Point Machine, Onboard TPWS (received through Radio), Line side Electronic Unit(LEU) of TPWS etc. in the entire section under scope.	Please consider to delete the sentence of "Onboard TPWS (received through Radio)", because TPWS (ETCS level1) does not use Radio communication. This requires costly customize for DFC.	The Clause is modified as under: "Failure of any Signalling gear including Electronic Interlocking, I/O controller, PSS, Axle Counter, Signal Lamp, Point Machine, Line side Electronic Unit (LEU) of TPWS etc. in the entire section under scope." Refer item No. 165 of Addendum 3.
306.	III Part1	3	14	3.5.1	The Contractor shall be required to establish a personal computer based Failure	Please clarify what kind of FRACAS tool the Employer expecting. What kind of data management is required for this project.	Refer Signal Engineering manual, especially the following paras: (i) Part 1, para 3.4. (ii) Part 1, Annexure 2 at page 83-84.

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					Reporting and Corrective Action System (FRACAS) to demonstrate compliance with specified system and equipment reliability. It shall be a database system containing fields similar (but not limited to) "Signal failure Register" and facility to generate Management Reports as per requirement of Engineer/Employer.		iii) Part 1, Annexure 3 at page 85-86. (iv) Part 2, para 11.5. However, details will be determined at Detailed design stage.
307.	II	15	83	15.1.2	Within fourteen (14) days of the installation of any software, developed or modified for this contract, into the Permanent Works by the Contractor, the Contractor shall submit to the Engineer for	Please delete the submission of source code.	The Clause is modified as under: "All executable code including all data configuration tables;" Refer item No. 35 of Addendum 2.

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					retention by the Employer, the end user, two backup copies of the software, which shall include, without limitation: (v) All source and executable code including all data configuration tables;		
308.	III Part1		21	5.3.1 14)	Data base storage capacity of On board TPWS shall be so designed so as to keep in view the operational plan of using the Locomotive for about 3 months on main line before bringing it back to ELMD.	We consider 3 months requirement is not practical. Please consider the practical timing the loco. drops at the Integrated Maintenance Depot (IMD) on the DFC line.	The Clause is modified as under: "Data base storage capacity of On board TPWS shall be so designed so as to keep in view Clause 5.16 of RDSO's Spec of TPWS and the operational plan of using the Locomotive for about 3 months on main line before bringing it back to ELMD. It shall be possible to download required On Board Data when the Loco is under revenue operation. Necessary software shall be supplied to analyse downloaded data by competent signaling staff on line as well as transmit it to

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							ELMD for analysis by TPWS maintenance center staff.” Refer item No. 167 Of Addendum 3.
309.	III Part1		74	13.5.2 (5)	The maximum turnaround time for workshop repair shall be less than twenty eight (28) days. The turnaround time shall start to count when the defective parts are removed from the system and end when the parts are repaired and returned to stock or the system. Any extension of workshop repair time shall be got agreed by the Engineer.	Please consider the practical TAT. We would request 90 days.	No change in the clause envisaged.
310.	I		124	6.5 ii)	Aftercare Service of Installed S&T System and Equipment (a) The Employer	1) Can we understand that “in the execution of the maintenance works” is the DFCCIL's execution of the maintenance works 2) For TPWS, after the completion of DNP, three years warranty period is required. In this case can we understand that TPWS supplier should	1) Yes. 2) Yes.

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					requires an “aftercare service” by the Contractor in providing advice on the maintenance with ad-hoc consultation on periodic checking of S&T System and equipment, and troubleshooting, guarantee of supply of spare parts, consumable parts, maintenance of software etc., in the execution of the maintenance works after completion of the two year DNP period.	provide warranty period service and the Aftercare service in parallels.	
311.	III Part1		79	14.3 (10)	The Contractor shall be	On the other hand, in Vol II, 26.3 O&M instructor training is required.	It is confirmed that requirements under Clause

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					required to arrange technology transfer and training to the Employer's staff in respect of design, installation, testing and commissioning of the System and each subsystem. The Employer will nominate up to three (3) persons for each subsystem of the above training.	Please confirm that Vol III (1/2) 14.3 (10) requirement is same as Vol II, 26.3. Please confirm that the number of trainee is max 3 persons per subsystem is correct or not.	26.3 of Vol. II and Clause 14.3 (10) of Vol III (1/2) are for same purpose. Item No. 70 of Addendum 2 may also be seen.
312.	V	-	V-3-1-4 and V-8-1-2	-	Schematic Diagram of Yard (6) Dabla CS Traction Supply & Sectioning Dabla Crossing Station	There is discrepancy in the drawing for Dabla station. In the V-3-1-4, for the JNPT direction there is a future expansion of emergency cross over, however in the V-8-1-2, it is different position. Please confirm which is correct.	V-8-1-2 should be referred only for Traction supply & sectioning arrangement. The yard layout for signaling should be referred to only in V-3-1-4.
313.	V	-	V-3-3-5	-	Schematic Diagram of Yard (3) Timba CS	There is discrepancy on the emergency cross over in the drawing for Timba CS of JNPT side between V-3-3-5 and V-1-1-94 of Package-4, Vol-V (1/4).	Only drawings supplied as part of P5 Bid Documents should be referred.

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						Please confirm that we can use the V-3-3-5 of Package-5.	
314.	V	-	V-6-1-1	-	Typical Signalling Plan – Station	For the overrun protection section for up line there is a DAC but for down line's no DAC. Please confirm if there is DAC required for down line.	DAC track device in overrun protection section is deleted. Refer item No. 168 Of Addendum 3.
315.	V	11	V-4-2-6 & 7	Building Plans	Station Buildings for Crossing Stations and Junction Stations	(1) Please confirm that, although there is no indication of "For Information Only" on these drawings, the Bidder can propose the wider rooms for S&T equipment as required. (2) There is no sectional drawing of the building are provided in ITT. Please confirm that the bidder can also propose the height of the S&T related rooms as required, as well as the access door size to the rooms.	Table List of Buildings in Junction and Crossing stations on pages V-4-1-1 & V-4-1-2 indicate the total builtup area of various buildings at each station. The building plans as included in V--4-2-6 &7 are indicative and for reference only. The actual sizes of different rooms/buildings for system works shall be finalized in the interface co-ordination meeting between the different contractors.
316.	III Part-1	9 Part-1	24 of 84	5.5.1.14	Automatic Day and Night Switching for LED Signal	Day and night switching may be provided as a special additional feature by LED manufactures. However, it has not been approved by RDSO, nor the LED signal approved by RDSO will lose its approval if such addition is made. Please re-confirm that whether that function is required for this project or not.	Refer response to Query No. 298.
317.	III Part-1	9 Part-1 9 Part-1 Annex-89	25 of 84 10 of 53	5.5.1.21 7.1.3	Use of Separate Cables for UP and DOWN lines. Cable Laying on one side of the yard	1. Please confirm the Bidders understandings of the cable laying requirement in auto signalling section per the relevant ITT paragraphs, as follows; (1) If there is enough space between IR tracks and DFC tracks, the up-line cables and down-line cables shall be in the separate trench at each side of the track. However if protection brick is	For Block Sections, Civil Bid documents provide as under: "Generally the distance between DFC track center (the DFC track nearest to the existing IR tracks) and the existing IR line track centre shall be 7 meters, which may be reduced to 6 meters in exceptional cases (subject to

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		9 Part-1	59 of 84	10.4.18	beyond Home signal.	provided, the up-line cables and down-line cables can be laid down in the same trench. (please confirm the necessity of brick separation as well)	consent of Engineer and approval of Employer)." (1) The Clause 5.5.1.21 of Vol. III Part 1 is modified as under: "Separation for UP and DN lines: (i) Use of cables, I/O cards etc. shall be separate for UP and DN lines. (ii) Cables meant for UP and DN lines shall generally be laid in separate trenches outside respective DFCCIL tracks. In exceptional cases, when it is not possible to ensure the same, the Contractor shall suggest alternative method with detailed reasoning for consent by the Engineer and approval by the Employer. (iii) Location boxes meant for UP and DN lines shall generally be located separately outside respective DFCCIL tracks. In exceptional cases, when it is not possible to ensure the same, the Contractor shall suggest alternative method with detailed reasoning for consent by the Engineer and approval by the Employer."
		9 Part-2	21 of 28	5.3.3.1.1	Digging of Trench Between IR Tracks and WDFC OFC cable redundant installation along up track and down track	(2) In general, OFC cables which require redundant installation shall be laid down along up-track and down track separately. However, if there is no adequate space (note*) between IR track and DFC track, then both OFC cables shall be laid down in the same trench as above (1) with brick separation. (note*) The bidder is afraid that DFC lines are mostly in parallel to the existing IR line, and that the available spacing between the centerline of IR track and DFC track is just 6 m. In this case, neither of digging by manual nor horizontal drilling machine will be unrealistic beside the operating IR track. Furthermore, the digging will destroy the track formation overlapped by both lie and interfere against Electrification Pole foundations, which must be between IR track and DFC Track. 2. In the case that the up-line and down-line cables are laid down in the same trench at one side of the tracks, please confirm that the location boxes for the following services can be shared for both up-link and down-link as required; - Cable straight connection	(i) Use of cables, I/O cards etc. shall be separate for UP and DN lines. (ii) Cables meant for UP and DN lines shall generally be laid in separate trenches outside respective DFCCIL tracks. In exceptional cases, when it is not possible to ensure the same, the Contractor shall suggest alternative method with detailed reasoning for consent by the Engineer and approval by the Employer. (iii) Location boxes meant for UP and DN lines shall generally be located separately outside respective DFCCIL tracks. In exceptional cases, when it is not possible to ensure the same, the Contractor shall suggest alternative method with detailed reasoning for consent by the Engineer and approval by the Employer." Refer item No. 169 Of Addendum 3.

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						<ul style="list-style-type: none"> - Tail cable connection - Cut in relay for LED signals - Accommodation of MSDAC wayside equipment (Axle Counter Device) 	(2) Regarding separation of OFC and Signalling cables, refer Clause 10.4.23 of Vol. III Part 1 of Bid Documents.
318.	III Part-1	9 Part 1	16 of 84	4.4.4	Location Box inside illumination for night time maintenance	Please confirm that the illumination power can be fed from AC110V IPS utilizing the spare cores of AC110V LED signal cable. It is not cost effective to provide a separate dedicated power cable along the wayside, under the situation that the Bidder's plan to feed all the wayside signalling equipment from SER or ALH.	If power supply along the track is required only for light inside track side boxes, then 110VAC may be carried on one pair of signaling cable to meet this requirement.
319.	III Part-1	9 Part 1	73 of 84	13.5.1	DLP Period	While Volume III refers DLP period specified in GS, i.e. two years, the different DLP periods are specified for the following signalling system as indicated, please clarify which years are defined as DLP for this project;	In general, DLP of two years is applicable. Wherever it is specifically mentioned for a period exceeding two years, the same shall be applicable.
		9 Part 1 Annex-2	9 of 44	6.1 xv)	Three Years Warranty from OEM	TMS (3 years) 3 years Volume III Annex-2 EI 3 years – RDSO SPN 193-2012 No indication – RDSO SPN 192 -2005	
320.	III Part-2	9 Part 2	24 of 128	5.3.6.2	10 GigE Layer 3 Switch for WAN	10 GigE network may be specified for future expansion. However, considering the required bandwidth of the system required for DFCW, 10GigE network will be too high capacity and need more considerably high maintenance. Please clarify whether we can offer 1 GigE	No change in the requirements.

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						network if bandwidth requirement is met.	
321.	III Part 1	3.3.2	13 of 84	S.No32	Design Standard	Multi section digital axle counter specification No. RDSO-SPN-176-2005 : 11.5.5.7 mentions Driving Rain Test, in case of using the location box, we do not think to need the water proof test for ACD which is equipped in that box because the location box itself has enough water proof. Therefore would you accept the ACD which does not have water proof?	May be referred to RDSO while applying for Cross Acceptance approval.
322.	III Part 1	9 Part 1	25	5.5.1.22 [Table]	VDUs	Please clarify each VDU of EI should consist of 3 monitors and one controller.	It should meet Employer's Requirements as per Clause 10.4 of Annexure 2 of Vol. III Part 1 of Bid Documents.
323.	III Part 1	9 Part 1	28	5.6.7	Buffer Stop with twin Red Signals	Please clarify whether the twin red signals on the buffer stop shall be controlled by EI or only power supply is required for turning on all the time.	Buffer stop signal is part of Interlocking having only one aspect which needs to be proven as lit before taking off approach signal.
324.	III Part 1	9 Part 1	35	6. 2. 3)	System Cycle	The 200ms system cycle is not mentioned in the specification of RDSO/SPN192. Kindly inform the reason of using 200ms cycle time.	The Clause is modified as under: "Cycle time and response time shall meet the requirements of Clause 5.1.2 of RDSO Spec of EI. Cycle time and response time of the system shall be clearly indicated." Refer item No. 179 Of Addendum 3.
325.	III Part 1	9 Part 1 Annex-	1	1.3	Wall Display for SCADA	Please advise the required dimensions of SCADA display in the Wall Display of TMS.	This shall be designed by the Contractor to meet Employer's Requirements Vol. III Part 1

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		1					Clause 5.1(x) of Annexure 1.
326.	III Part 1	9 Part 1 Annex-1	1	2. (i)	Adding/Reducing Servers	Please clarify that in order to increase / reduce the number of monitored equipment by increasing / reducing the number of servers, minor changes in software is permitted.	Yes. However, details of the same shall be submitted to the Engineer for consent.
327.	III Part 1	9 Part 1 Annex-1	6	6. viii h.	Wrong Marking of Object/Functions	What is meant by “wrong marking of object/functions.”? Kindly elaborate.	For example (but not limited to), keying in of non existent signal/point/track section No.
328.	III Part 1	9 Part 1 Annex-1	7	7.2 ii.	MIS Report	Please kindly provide us the sample of the report, if possible.	This shall be dealt with at Detailed design stage.
329.	III Part 1	9 Part 1 Annex-1	12	10.3. vii.	Changing the details of Any Nodes	What is meant by “changing the details of any node.”? Kindly elaborate.	This may be required if any terminal or other equipment connected to a node gets modified.
330.	III Part 1	9 Part 1 Annex-2	8	6.1 viii)	Tape Drive	We propose to use Blu-ray Disc in place of 72 GB DAT tape drive. Please confirm.	The Clause is modified as under: “Blu-ray Disc recorder”. Refer item No. 181 Of Addendum 3.
331.	III Part 1	9 Part 1 Annex-2	9	6.2 11)	Off Line Forecasting Module	What is meant by “off line forecasting module.”? Kindly elaborate.	Refer Clause 11.7 & 11.8 of Annexure 2 of Vol. III Part 1 of Bid documents.
332.	III Part 1	9 Part 1 Annex-2	18	7.1 iii)	Protocol Conversion	Please clarify ‘protocol conversion’ means that the servers of dual LAN system can communicate in deferent protocols for deferent LANs.	This shall meet functional requirements of communication of LAN system e.g. in Clause 7.1 (ii) & (vi) of Annexure 2 of Vol. III Part 1 of Bid documents.
333.	III Part 1	9 Part 1 Annex-	33	11.1 x)	Modification/Alteration	Please clarify ‘modification/alteration’ means the function of changing the data base of TMS.	Refer details in Clause 11.1 (xii) (a) to (e) of Annexure 2 of Vol. III Part 1 of Bid

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		2					documents.
334.	III Part 1	9 Part 1 Annex-2	36	11.5 iii)	MIS Report	Please kindly provide us the sample of the report, if possible.	Refer response to Q. No. 328.
335.	I	5 Part A	143	14.5(b)(i)	Plant and Materials for payment when shipped enroute to the Site	Reference is made to the Addendum No.1, dated 14 Aug 2013, Sl. No. 10. Does the deletion mean that the bank guarantee described in Volume 1, Section 6, Schedule 5, Para 2.7 b) need not be required for the deleted components including (i), (ii), (iii) and (iv)?	The Bank Guarantees shall be required as specified in sub-para 2.7(b) of Schedule 5: Payment Schedule (Vol I Part 2/2). No change in the requirements of sub-para 2.7(b) of Schedule 5.
336.	I	5 Part A	143	14.5(c)(i)	Plant and Material for payment when delivered to the Site	Reference is made to the Addendum No.1, dated 14 Aug 2013, Sl. No. 11. Does the deletion mean that the bank guarantee described in Volume 1, Section 6, Schedule 5, Para 2.7 b) need not be required for the deleted components including (i), (ii), (iii) and (iv)?	Please refer response to the Q. No. 335 above.
337.	I	5 Part B	158	4.7	Setting Out	DFCCIL's response on 14 Aug 2013; This being Design & Build Lump Sum Contract, the Contractor is responsible for verifying the specified items of reference and correct positioning of all parts of Work. Accordingly, no change in PC 4.7 is envisaged. ----- Mistakes in setting out can be very costly for the Contractor. While we agree that the Contractor should verify the accuracy of the specified or notified items of reference, it is crucial that the Employer provides reliable	As clarified in response to Q. No. 10, this being a Design-Build Lump-sum Price Contract, it is responsibility of the Contractor to verify the information provided by the Employer in the Bid Document. Accordingly, no change in the PC 4.7 is envisaged.

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						information in writing to enable such verification. If the information provided by the Employer is incorrect, the Contractor should be compensated for the cost of correcting errors in the setting out. This would be achieved by reinstating the original paras. 2, 3 & 4 of Sub-clause 4.7.	
338.	I	5 Part B	158	4.10	Site Data	<p>DFCCIL's response on 14 Aug 2013; No change in the PC 4.10 is envisaged. -----</p> <p>(1) In para. 1, the words "in this regard" are not clear enough to describe the extent to which the Contractor has no claim against the Employer. Please replace those words by "against the Employer for any loss the Contractor may suffer as a result of misinterpretation of such data".</p> <p>(2) The original wording of para. 2 should be reinstated as it would be unrealistic to deem the Contractor aware of all site data in the pre bid stage without taking into account the fact that the Contractor has limited time and money to consider and obtain such information and could only take practicable measures in the circumstances. This deeming provision is too absolute and should be softened to take into account the reality.</p>	<p>(1) The specified provisions of PC 4.10 are considered appropriate. Accordingly, no change in PC 4.10 is envisaged.</p> <p>(2) Please refer response to Q. No. 337 above.</p>
339.	I	5 Part	162	8.4	Extension of	DFCCIL's response on 14 Aug 2013;	(1) The response to Q. No.

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		B			Time for Completion	<p>No Change in PC 8.4. The climatic/ meteorological conditions being well known cannot be a cause for Extension of Time. Further, 'Epidemic' is a situation beyond the control of both Contractor and Employer. As such, the situation can be dealt with under clause 19.1 (Force Majeure)</p> <p>-----</p> <p>(1) We request the withdrawal of the deletion of sub-clause (c) since it is not for the extreme cases described in 19.1 as "natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity" as Force Majeure, but for other "exceptionally adverse climatic conditions". Otherwise, we have to consider contingency usually not necessary for "Design Build" contract based on FIDIC of "Conditions of Contract for PLANT and Design-Build".</p> <p>(2) Sub-clause (d) does not deal with "well known" meteorological conditions but with "exceptionally adverse" conditions. It would be unfair to refuse an extension of Time for Completion if such exceptional conditions occur because they are by definition exceptional and therefore difficult/impossible to predict.</p> <p>(3) Please clarify why unforeseeable shortage in personnel was excluded. Considering that</p>	<p>13 and provisions of PC 8.4 are considered appropriate Accordingly, no change in PC 8.4 is envisaged.</p> <p>(2) The PC 8.4 for sub-clause (d) deals with "Unforeseeable shortage in the availability of personnel or Goods caused by epidemic or governmental actions" but not with the meteorological conditions. Accordingly, no change in the PC 8.4 is envisaged.</p> <p>(3) Shortage in availability of Personnel is not envisaged. Accordingly, no change in PC 8.4.</p> <p>(4) The term "governmental actions" can be subjective. The provisions of GC & PC 13.7, for shortage of Goods due to Changes in Legislation is specific and considered appropriate.</p>

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						such shortage is unforeseeable, it would be fair to allow an extension of the Time for Completion to the Contractor if it occurs. (4) Please clarify why the concept of "governmental action" was replaced by the more restrictive concept of change in Laws.	
340.	I	5 Part B	163	8.8	Suspension of Work	DFCCIL's response on 14 Aug 2013; It is standard clause defining the Contractor's entitlement during period of suspension. Accordingly, no change is envisaged in the PC 8.8. ----- (1) Please clarify which provisions of the Contract are concerned by sub-clause (a). Since suspension may be costly for the Contractor, the circumstances in which such suspension may occur should be clearly stated, Sub-clause (a) is too general. (2) The range of circumstances in sub-clauses (b) to (d) is too general/broad. These circumstances should be limited to force majeure circumstances of the type listed in clause 19.1. It is important for the Contractor that the reasons of suspension without cost compensation be as clear as possible in order to reduce unnecessary contingency for the suspension.	(1) Suspension of Work provided for in the Contract are need based, Works specific/ Programme requirements and are to be ascertained by the Contractor. (2) Sub-para (b) to (d) provides for the requirement of suspension of the works for proper execution of works and for safety reasons etc., which are the responsibility of the Contractor. (3) It is a Standard clause being followed by DFCCIL for the Project.

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						(3) Please clarify what makes this replacement clause a standard clause. The FIDIC template clause 8.8 is already a standard clause.	
341.	I	5 Part B	167	14.3	Application for Interim Payment Certificate	DFCCIL's response on 14 Aug 2013; The Sub Clause is kept merely to deter raising of spuriously inflated claim for Payment. Accordingly, no change in the PC 14.3 is envisaged. ----- The 10% penalty in this new clause is disproportionate to the behavior it is attempting to prevent. Unfortunately, errors in payment claims happen and are rarely intentional on the part of the Contractor. Further, 2 errors over the life of the Contract is not enough to indicate an intention to defraud the Employer. The Contractor's outstanding reputation is established through the assessment of its compliance with the qualification requirements and it would not be in the Contractor's best interest to engage in fraudulent practices in any case. There are alternatives to a financial penalty. We suggest that, if errors in payment claims happen so often that they become a concern to the Employer, the parties meet to discuss how to address the situation.	The payment claim bills should be presented by the Contractor based on the actual work done and should be correct at the first instance itself, true to its requirement. The 10% penalty shall be imposed from 2 nd instance onwards. Accordingly, first instance should be considered a signal and deterrent not to repeat the spuriously inflated payment claim. Accordingly, no change in the PC 14.3 is envisaged.
342.	I	5 Part B	168	14.7	Payment	DFCCIL's response on 14 Aug 2013; The required Document along with interim	The question pertains to the Post Contract Award stage.

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						<p>Payment Statement may be Test certificates and other document supporting the payment.</p> <p>-----</p> <p>We would like to know all documents required along with interim payment other than Test certificates. Please specify such documents concretely.</p>	<p>The supporting documents for payment claims for different items with different stages of all the Works shall be as consented by the Engineer and cannot be specified in the Bidding Stage.</p>
343.	I	1 Part A	17	17.1	Documents Establishing the Qualification of the Bidder	<p>DFCCIL's response on 14 Aug 2013; The requirement of each of the key activities of sub-factor 3.2(e)(iii) are required to be met either by all partners combined or can be a specialist sub-contractor (not more than one) for each of the key activity</p> <p>-----</p> <p>From the view point of preparing a competitive offer, more than on specialist sub-contractor can be nominated for sub-factor 3.2(e)(iii) and (iv) at bidding stage provided that each specialist sub-contractor can meet the corresponding qualification requirements. After awarding the bid, we can select one subcontractor among the nominated specialist-subcontractors. Please confirm.</p>	<p>More than one Specialist Sub-contractor may be proposed by the Bidder for the Sub-factor 3.2(e)(iii) & (iv) during the Bidding stage and shall be evaluated individually. Accordingly, out of the qualified Specialist Sub-contractors, selection of a Specialist Contractor individually meeting the specified requirements may be permitted after Award of Works, subject to condition that the Applicant clearly specifies the aforesaid "intention to do so" in the 'Letter of Technical Bid' in Bidding Stage.</p>
344.	I	5 Part B	170	17.3	Employer's Risk	<p>DFCCIL's response on 14 Aug 2013; No change in PC 17.3 is warranted. The FIDIC sub-clause 17.3(h) relates with operation of nature's Forces and this has been adequately covered under 19.1 (Force Majeure).</p>	<p>It is a Standard provision adopted by DFCCIL for the Project. Accordingly, no change in the PC 17.3 is envisaged.</p>

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						<p>-----</p> <p>Clauses 17.3 and 19.1 do not have the same purpose. It is true that, if an event of the type referred to in clause 17.3(h) occurs, it is likely that clause 19.1 will apply since the events listed in 17.3(h) are similar to those covered by clause 19.1(v). In that case, the Contractor may be entitled to an extension of the Time for Completion. However, the Contractor would not be entitled to compensation for the resulting losses it may have suffered. For that reason clause 17.3(h) should be reinstated to ensure that the Contractor can be compensated under clause 17.4(b). Deleting clause 17.3(h) makes the Contractor bear the risk of natural catastrophes etc.</p>	
345.	I	5 Part B	158	4.7	Setting Out	<p>We are of the opinion that optimal project risk sharing between the Employer and the Contractor will lead to the optimal total project cost. Hence, please kindly reinstate the original FIDIC condition of paragraph 2, 3, 4 of Sub-clause 4.7.</p> <p>Under the circumstances that the accuracy of the reference information from the Employer is not guaranteed to the Contractor, the risk sharing of Contractor's side has to become much higher, which may cause the Employer's total project cost increased.</p> <p>In that sense, please kindly reconsider the optimal risk sharing between the Employer</p>	Please refer the response to Q. No. 337 above.

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						and the Contractor to decrease the total project cost.	
346.	I	5 Part B	158	4.10	Site Data	<p>1) We think that the meaning of "in this regard" is ambiguous. Please kindly advise if our interpretation is correct as follows; the sentence "in this regard" means "in the accuracy of its own interpretation of such data".</p> <p>2) The deletion of the sentence "To the extent which was practicable (taking account of cost and time)"leads to expose the Contractor to unforeseeable risks and requires quite a few amount of contingencies to hedge those risks. Hence, please kindly consider not to delete this sentence and remain the FIDIC original condition unchanged.</p> <p>By deletion of those sentences, the Contractor would have less opportunities to state that it has been Unforeseeable under given circumstances compared to the original FIDIC condition. This would restrict Contractor's rights to claim which should have been available where a particular situation is Unforeseeable under the original FIDIC terms and conditions. Taking into account that Unforeseeable physical condition under 4.12 as amended also works restrictive over Contractor's rights, please reinstate the deleted parts.</p>	<p>(1) Please refer the response to Q. No. 338(1) above.</p> <p>(2) This being a Design-Build Lumpsum Price Contract, it is responsibility of the Contractor to verify the information provided by the Employer in the Bid Document. Accordingly, no change in the PC 4.10 is envisaged.</p>
347.	I	5 Part B	161	8.3	Programme	We reiterate that this clause is primarily Contractor's obligation and we do not clearly	The FIDIC sub-clause 13.3(b) pertains to the

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						<p>understand the meaning of your response. We believe that both parties need to inform the other party of specific probable future events or circumstances which may adversely affect the work, increase the Contract price or delay the execution of the Works. Without the aforesaid correspondences, normal project implementation will become quite difficult. Moreover, since the clause 13.3(b) refers to this deleted paragraph, there happens the inconsistency in the contract condition and the variation procedure would not become properly workable.</p>	<p>Engineer's specific request for a proposal from the Contractor for necessary modifications to the Programme as a result of revised Programme submitted by the Contractor as per the 1st para of FIDIC sub-clause 8.3, prior to instructing a Variation. Accordingly, there is no inconsistency between FIDIC sub-clause 13.3 and 8.3.</p>
348.	I	5 Part B	162	8.4	Extension of Time for Completion	<p>1) As for Sub-Clause (c), we believe that "exceptionally adverse climate condition" is not "being well known" climatic condition and is reasonable for a cause for Extension of Time. Therefore, please kindly reconsider our original request. If those situation is to be dealt with Force Majeure, please clearly include the incident of "exceptionally adverse climate condition" to the event of Force Majeure.</p> <p>2) As for Sub-Clause (d), there would be a possibility that any governmental actions which is uncontrollable for the Contractor, such as import control etc., occurs the unforeseeable shortages in the availability of Goods. Hence, please kindly consider to add the words of "any governmental actions" adding to the "change in law" as in the original FIDIC condition in terms of optimal</p>	<p>1. Please refer the response to Q. No. 339(1) above.</p> <p>2. Please refer the response to Q. No. 339(4) above.</p>

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						risk sharing between the Employer and the Contractor.	
349.	I	5 Part B	163	8.8	Suspension of Work	<p>1) Please kindly response to our past question as "With regard to Sub-clause (a) of paragraph 6, please kindly clarify which part in the contract is to be reference for." We do not clearly understand the meaning of this Sub-clause (a).</p> <p>2) With regard to your reply, we believe that the original condition of FIDIC is the standard clause. We reiterate that Sub-clause (b), (c), (d), (e) of paragraph 6 has a very wide range of incidents which cannot be controlled by the Contractor. Especially, "necessary for proper execution of Works" looks to have every kind of situation. And also "by reasons of weather condition" in Sub-clause (b) is absolutely uncontrollable for the Contractor. Please kindly reconsider limiting those incidents which is closely relating to national security and/or public safety for appropriate cost estimation from the bidders.</p>	<p>(1) Please refer the response to Q. No. 340(1) above.</p> <p>(2) Please refer the response to the Q. No. 340(2) above.</p>
350.	I	5 Part B	167	14.3	Application for Interim Payment Certificate	<p>We still believe that this penalty is too severe to the Contractor and any chances should be given to the Contractor to correct the mistake. Furthermore, we think that it is not a fair condition imposing the penalty toward the Contractor without any Actual Loss occurred</p>	Please refer response to Q. No 341 above.

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						to the Employer yet. Please kindly consider to add the following sentence to last word "extra claim" in the last sentence of the third paragraph; ", provided that the Employer shall give a reasonable period of time prior written notice providing opportunities to rectify the amount within such period."	
351.	I	5 Part B	170	17.3	Employer's Risk	<p>We wonder if each and every situation stipulated in 17.3(h) constitutes Force Majeure under 19.1 since all of first paragraph of 19.1 including (a) to (d) thereof should be met to be remedied by this clause.</p> <p>For instance, if a flood occurs and it is one that an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions, the Contractor cannot claim under Force Majeure unless such flood is exceptional circumstances.</p> <p>We believe that a certain situation exists which could not be remedied under 19.1 but under 17.3(h).</p> <p>Therefore, please kindly reinstate the original FIDIC condition of 17.3(h).</p>	Please refer the response to the Q. No. 344 above.