DESIGN, SUPPLY, CONSTRUCTION, INSTALLATION, TESTING AND COMMISSIONING OF 2X25kV AC ELECTRIFICATION, SIGNALLING & TELECOMMUNICATION, E&M AND ASSOCIATED WORKS ON DESIGN BUILD LUMP SUM BASIS OF SAHNEWAL – PILKHANI SECTION (APPROXIMATELY 175 ROUTE KM OF SINGLE LINE) OF EASTERN DEDICATED FREIGHT CORRIDOR SYSTEMS WORKS CONTRACT PACKAGE 304

Response to Pre-Bid queries for System Bid document (CP-304)

<table>
<tr><th>Sr. No.</th><th>Reference to Bid Document</th><th>Clarification Sought by the Bidders</th><th>DFCCIL Response</th></tr>
<tr>
<td>884</td>
<td>Part -2 / Section VI Volume 2 / Particular Specification / table 5.2.2 / Page no. 38 of 334 (As per Addendum No. 15 dated 20/03/2018)

Table 5.2.2 : Train Operation Plan

<table>
<tr><th>Train Consist</th><th>Headway/ Frequency</th></tr>
<tr><td>1. 1x9000 kW/12000 HP electric locomotive plus 63 BOXN wagons (100T each)

2. All trains shall be fully loaded.

3. A mix of normal Train and long haul train in the ratio of 2:1 shall be considered for both UP & DN directions.

4. For 6500T - 2 train (Normal)

For 13000T - 1 train (Long haul)

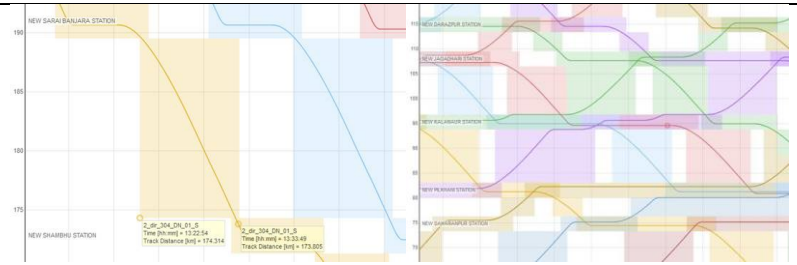
5. Train stoppage – At alternate Stations for crossing or any other reasons etc.</td><td>Headway 17 Min</td></tr>
</table>
</td>
<td>This is further to our Request For Clarification regarding Train operation plan & Pre-Bid Simulation submitted vide our Letter Nos. DFCC/CP304/L&T/2017-2018/VSK/004 dated 5/09/2017 and DFCC/CP304/L&T/2017-2018/VSK/006 dated 13/10/2017, for which we are still awaiting the clarification. The queries are attached again for your ready reference.

We are now in receipt of Addendum No. 15 on 20/03/2018, wherein the Train operation plan has been revised. In our earlier clarification, we had categorically highlighted the lack of clarity on train operation plan and inadequacies of the given power supply network.

Considering the given tender conditions and the Addendum thereon the input boundary conditions are as follows.
1) Route – Single Line Section
2) Headway – 17 mins
3) Train Mix – SSDSSD. operating from both directions (UP & DOWN)

We would like to reiterate that it is not feasible to have trains operating from both directions (UP & DOWN).

Some of the sections between stations are too long for an headway of 17 min. For example between Shambhu station and Banjara station: the trains need ~11 min to go from Banjara upto Shambhu, thus a train in the opposite direction can’t circulate on this 1 track section.</td>
<td>Please refer addendum No. 21 SN-153.</td>
</tr>
</table>

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
		 Figure A Figure B In this case we may need a minimum headway of 22 min. And then for a degraded mode with voltage drop along the line it will be even worse and the headway may have to be increased to more than 28 mins or so. In most of the cases it will lead to a deadlock scenario (refer snapshots from Simulation tool). Therefore we suggest again to adopt a simple train operation plan with trains travelling only in one direction (having worst gradient) for the purpose simulation and equipment/conductor sizing. In case both directions (UP & DOWN) operation is insisted, the headway shall be revised to more than 28 mins, and DFCCIL needs to furnish a workable Train Operation Plan. Clarity on the Train Operation Plan at the bid stage is very critical as any change in the Train Operation Plan during execution stage may lead to severe variations in the Transformer ratings, conductor sizes, number of Paralleling Posts, additional positive feeder requirement, etc. We request you, once again, to clarify the above query to avoid ambiguity in the contract, leading to delays during project execution	
885	Part -2 / Section VI / Volume 4 / Particular Specification /Clause No. 8.1.2 / Page No. 1024 of 1309 (As per Sl. No. 126 of Addendum No. 14 dated 19/03/2018)	As per the referred clause (Addendum No. 14), “GSM-R EIRENE FRS v7.4.0 specification or latest and EIRENE SRS v15.4.0 specification or latest” has been replaced by “EIRENE FRS v7.3.0 specification and EIRENE SRS v15.3.0 specification”. As on date, new versions i.e. FRS v7.4.0 and SRS v15.4.0 are already officially available and equipments complying with the	Kindly refer Para 2.5.1, Part-2, Section (VI), Volume-1 of General specification and para 8.2.6.1 (2) of clause 8.2.6 of Vol 4/Part 2/Section VI.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
	General - The system shall be designed based on European Integrated Railway Radio Enhanced Network (EIRENE)'s Functional Requirements Specification (EIRENE FRS v7.3.0) and System Requirements Specification (EIRENE SRS v15.3.0).	latest standards are being implemented and used. Hence, we request you to kindly amend the clause specifying the design of GSM-R system as per EIRENE FRS v7.3.0 specification or latest and EIRENE SRS v15.3.0 specification or latest.	
886	Part -2 / Section VI / Volume 4 / Particular Specification /Clause No. 8.5.1.1 (3) /Page No. 1038 of1309 (As per Sl. No. 130of Addendum No. 14 dated19/03/2018) & Part -2 / Section VI / Volume 4 / Particular Specification /Clause No. 8.4.6.2 / Page No. 1038 of1309 **Technical Requirements: General -** The new Mobile Services Switching Sub-System (MSS) being supplied should be a proven design and should be inter operable with existing Radio, Core and IN systems of DFCC. A client certificate of successful working of the design should be provided by the Contractor. **Interoperability Requirements:** The system shall be designed in such a manner that the GSM-R of WDFC can be used in case GSM-R system of EDFC is unavailable so as to ensure uninterrupted communication throughout Eastern and Western corridors of DFCCIL. To achieve this, the IN provided under this contract shall be configured in mated pair/ Geo-redundant configuration with IN of WDFC. For that the contractor shall work in close coordination with contractor of STP-5.	As per our interpretation of both the referred clauses, the requirement of"…..Inter-operable withexistingINsystemsofDFCC"and"INsystemmatedpair/Geo-redundantrequirement" makes it mandatory for the Contractor to supply the 'IN system' from same vendor of STP- 5. Hence we request you to kindly delete these clauses and make it a vendor independent requirement.	Request not accepted. The Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
887	Part-2 Section VI / Volume 4 / Particular Specification / Clause No. 8.4.6.1 / Page No. 1037 of 1309 (As per Sl. No. 127 of Addendum no. 14 dated 19/03/2018) Intelligent Network (IN), Network Sub System (NSS) and base Station Subsystem (BSS) being provided under this contract shall comply with the inter – operability requirements for mobile equipment (Cab Radio & Hand Portable as per EIRENE specifications) to be supplied under this contract, in use over Indian Railways and to be supplied for other GSM-R networks of DFCCIL. Bidder shall submit final NOBO certificate at the time of bid submission.	As per our understanding the solution shall be finalized only after the detailed interoperable design. Hence we request you to kindly allow the contractor to submit the final NOBO certificate after the detailed interoperable design and before the delivery of the system.	Please refer to addendum No. 21 SN-155.
888	Part-2 Section VI / Volume 4 / Particular Specification / Clause No. 8.4.6.7 / Page No. 1038 of 1309 (As per Sl. No. 128 of Addendum no. 14 dated 19/03/2018) NSS being provided under this contract is desirable to be interoperable with BSS being provided at Allahabad under contract package CP-104, CP-105 & CP -203 and being provided at OCC at Ahmedabad under Contract Package STP-5/STP-17/CTP-14.	As per our understanding the OEM/ solution are yet to be finalized on CP-105, CP-203, STP17 and CTP14. Hence confirmation/details of make, type of installed system in these packages are required to propose the interoperable solution. Hence we request you to kindly allow the CP-304 in interoperability solution to be submitted after the finalization of system requirements at CP-105, CP-203, STP17 and CTP14. Subsequently, NOBO shall be submitted after the approval of detailed interoperable design.	The successful bidder shall coordinate with the contractor of CP-104, CP-105, CP-203 and STP-5/STP-17/CTP-14 for successful implementation of the feature. The Bidder may contact the concerned field unit to get the details of make, type in these packages. Please refer to addendum No. 21 SN-155.
889	Part-2 Section VI / Volume 4 / Particular Specification / Clause No. 8.4.6.4 / Page No. 1038 of 1309 (As per Sl. No. 129 of Addendum no. 14 dated 19/03/2018) &	As per our understanding, since the part of CP-304 track is running parallel to Indian Railways track and is to be covered with existing GSMR network of Delhi -Ambala-Ludhiana section of Northern Railway (as per clause 8.2.2), interoperability with NSS of IR is required. Clause no. 8.2.2 is reproduced below: “MTRC system in Delhi-Ambala-Ludhiana section has been provide by Indian Railway (IR). As such in Sahnewal-Ambala-Pilkhani section of DFCCIL where the track alignment is running parallel to	NSS under this contract is no longer required to be interoperable with NSS of IR. This is as per advice of IR.

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NSS being provide under this Contract shall be inter – operable with Network Sub System (NSS) being provide for Indian Railways at New Delhi.</td><td>existing Delhi-Ambala-Ludhiana section of IR, and can be served by BSSs of Delhi-Ambala-Ludhiana section of IR, Base Station Sub System (BSSs) of IR will be shared by DFCCIL. However in Sahnewal-Ambala-Khurja section of DFCCIL where the track alignment of DFCCIL is taking a detour from Delhi-Ambala-Ludhiana section of IR and cannot be served by BSSs of Delhi-Ambala-Ludhiana section of IR, BSSs of DFCCIL shall be provided by Contractor”.

As per the above clause, in the parallel section, the Base Station Sub System (BSSs) of IR will be shared by DFCCIL.

In Addendum No. 14, Sl. No. 129 Clause no. 8.4.6.4 has been deleted ~~(NSS being provided under this Contract shall be inter-operable with Network Sub System (NSS) being provide for Indian railways at New Delhi)~~

Kindly confirm if this Network Sub System (NSS) being provided under this Contract is no longer required to be interoperable with Network Sub System (NSS) being provide for Indian Railways at New Delhi.

If NSS of this contract is required to be interoperable with existing NSS of Indian Railways at New Delhi, kindly clarify the manner by which such sharing of Base Station sub System (BSSs) can take place.</td><td></td></tr>
<tr><td>890</td><td>Addendum No. 15

<table><tr><th>Train Consist</th><th>Headway/Freq</th></tr><tr><td>1 X 9000kW/12000HP electric locomotive plus 63 BOXN wagons (100T each)</td><td rowspan="3">Headway 17 Min</td></tr><tr><td>All the trains shall be fully loaded</td></tr><tr><td>A mix of normal train and long haul train in the</td></tr></table></td><td>As per the issued addendum no. 15 on 20-03-2018, where in the train operation plan is revised. In our earlier clarification raised through KPTL-STS/DFCC/SAHNEWAL-PILKHANI/17-18/03 dated 18th Jan 2018, we have defined the ambiguity of the train operation plan and General supply of the system.

As per the condition defined in addendum 15, train operation movement in any particular direction is given as Single – Single - Double – Single – Single – Double.

We see an ambiguity in keeping a headway of 17 min. While running the trains simultaneously in both UP and Down direction (i.e. there are block sections that have travel time > 11 min and adding the stoppage time, this will increase further).</td><td>Please refer response at query SN- 884.</td></tr>
</table>

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
	ratio of 2:1 shall be considered for both UP and DN directions For 6500 T-2 Train (Normal) For 13000T- 1 Train (Long haul) Train stoppage – At alternative stations for crossing or any other reason etc.	We understand that the maximum load case can only take place when trains between Pilkhani to Sahnewal all move in one direction only. However, this is not clear from the provisions indicated. Thus requesting you to kindly opt for particular direction (One direction) operational plan (train moving in one direction) for carrying out the simulation. In case of the (UP & DN) direction movement kindly provide Train operation plan and Operating mesh for carrying out the simulation as raised in previous clarification. Operation plan is important for carrying out simulation study that can affect rating of various Equipments, Conductor sizes and Switching Post. Kindly clarify	
891	Chapter8, General Addendum 14, Sr.no.126-Read "EIRENE FRS v7.3.0 specification and EIRENE SRS v15.3.0 specification" instead of "EIRENE FRS v7.4.0 specification or latest and EIRENE SRS v15.4.0 specification or latest respectively", in PS Telecom	The current version being followed in Europe is FRSv7.4.0 and SRS v 15.4.0. It is suggested to follow the latest specification of EIRENE instead of earlier version while the latest is already officially available and being implemented. Hence request to change the EIRENE versions to the latest. Also, the Core and Radio equipment of vendors are now available as complied to EIRENE FRS7.4 and SRS 15.4.	Kindly refer Para 2.5.1, Part-2, Section (VI), Volume-1 of General specification and para 8.2.6.1 (2) of clause 8.2.6 of Vol 4/Part 2/Section VI.
892	8.4.6, Chapter8 Addendum 14, Sr.no.127-Bidder shall submit final NOBO certificate at the time of bid submission.	The solution shall be finalised only after the detailed design. Hence it is requested allow to submit the final No-Bo certificate after the detailed design and before the delivery based on detailed design.	Please refer to Addendum No. 21 SN- 155.
893	8.4.6, Chapter8 Addendum 14, Sr.no.128-Remove the line "BSS of IR provided at New Delhi & Tundla &" from sub clause 8.4.6.7 The Clause shall be read as "NSS being provided under this contract is desirable to be interoperable with BSS being provided at Allahabad under contract Package CP-104, CP-105 & CP- 203 and being provided at OCC at Ahmedabad under Contract Package STP-5/STP-17/CTP-14	We understand that The OEM/solutions are not finalised on CP-105, CP-203, STP17, CTP14. Hence confirmation/details of make, type in these packages are required to propose the solution which are interoperable.	The successful bidder shall coordinate with the contractor of CP-104, CP-105, CP-203 and STP-5/STP-17/CTP-14 for successful implementation of the feature. The Bidder may contact the concerned field unit to get the details of make, type in these packages.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
894	8.4.6, Chapter 8 Addendum 14, Sr.no.129-Remove sub clause 8.4.6.4 And update the numbering of sub clause 8.4.6.7 as 8.4.6.6.	Since the part of CP-304 track is in parallel to IR and to be covered with existing GSMR network of Delhi-Ambala-Ludhiana section of Northern Railways. (As per clause 8.2.2), interoperability with NSS of IR is required and hence request to retain the clause.	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR.
895	8.4.6, Chapter 8 Addendum 14, Sr.no.130-Remove the word "and Indian Railway" from para 3 of sub clause 8.5.1.1 The Clause shall be read as "The new Mobile Services Switching Sub-System (MSS) being supplied should be a proven design and should be inter operable with existing Radio, Core and IN systems of DFCC. A client certificate of successful working of the design should be provided by the Contractor."	As we understand the trains/cabs will move in between Indian Railways (IR) and DFCC tracks, it is advisable to have interface/interoperable with Indian Railways network. Also part of the CP-304 route/track, which is parallel to IR to be covered with existing GSMR network of Delhi-Ambala-Ludhiana section of Northern Railways. (as per clause 8.2.2) Hence it is required and request to retain the connectivity/interoperability with Indian Railways GSMR for optimised solution, smooth hand over and coverage.	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR.
896	8.4.6.2, Chapter8 Response to prebid queries, Sr. No.823-The system shall be designed in such a manner that the GSM-R of WDFC can be used in case GSM-R system of EDFC is unavailable so as to ensure uninterrupted communication throughout Eastern and Western corridors of DFCCIL. To achieve this, the IN provided under this contract shall be configured in mated pair/ Geo-redundant configuration with IN of WDFC. For that the contractor shall work in close coordination with contractor of STP-5 (WDFC).	To our knowledge there is worldwide no GSM-R installation with cooperating IN systems of different vendors. Also normally IN is connected through MSS/NSS. We understand that with this requirement, it is forcing to propose the IN of same vendor/OEM been considered in STP5 and forcing the requirement to single vendor/OEM situation which is against open tendering policy and for fair competition. Also the connectivity of IN between 2 vendors will be of very expensive solution and the adaptability, interoperability is not been tested till now. Hence request to delete/separate out the geo redundancy of IN,NSS systems with WDFC/STP-5 so that vendor independent solution can be proposed.	Request not accepted. The Provisions of the Bidding Document shall prevail.
897	Chapter 8, General Addendum 14, Sr. no. 126 Read "EIRENE FRS v7.3.0 specification and EIRENE SRS v15.3.0 specification" instead of "EIRENE FRS v7.4.0 specification or latest and EIRENE SRS v15.4.0 specification or latest respectively", in PS Telecom	The current version being followed in Europe is FRSv7.4.0 and SRS v 15.4.0. It is suggested to follow the latest specification of EIRENE instead of earlier version while the latest is already officially available and being implemented. Hence request to change the EIRENE versions to the latest. Also, the Core and Radio equipments of vendors are now available as complied to EIRENE FRS 7.4 and SRS 15.4	Kindly refer Para 2.5.1, Part-2, Section (VI), Volume-1 of General specification and para 8.2.6.1 (2) of clause 8.2.6 of Vol 4/Part 2/Section VI.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
898	8.4.6, Chapter 8 Addendum 14, Sr. no. 127 Bidder shall submit final NOBO certificate at the time of bid submission.	The solution shall be finalised only after the detailed design. Hence it is requested allow to submit the final No-Bo certificate after the detailed design and before the delivery based on detailed design.	Please refer to addendum No. 21 SN-155.
899	8.4.6, Chapter 8 Addendum 14, Sr. no. 128 Remove the line “BSS or IR provided at New Delhi & Tundla &” from sub clause 8.4.6.7. The clause shall be read as “NSS being provided under this contract is desirable to be interoperable with BSS being provided at Allahabad under contract Package CP – 104, CP-105, & CP- 203 and being provided at OCC at Ahmedabad under Contract Package STP-5/SYP-17/CTP-14.	We understand that The OEM/solutions are not finalized on CP-105, CP-203, STP-17, CTP-14. Hence confirmation/details of make type in these packages are required to propose the solution on which are interoperable.	The successful bidder shall coordinate with the contractor of CP-104, CP-105, CP-203 and STP-5/STP-17/CTP-14 for successful implementation of the feature. The Bidder may contact the concerned field unit to get the details of make, type in these packages.
900	8.4.6, Chapter 8 Addendum 14, Sr. no. 129 Remove sub clause 8.4.6.4 And update the numbering of sub clause 8.4.6.7 as 8.4.6.6	Since the part of CP-304 track is in parallel to IR and to be covered with existing GSMR network of Delhi, Ambala-Ludhiana section of Northern Railways. (As per clause 8.2.2), interoperability with NSS or IR is required and hence requests to retain the clause.	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR.
901	8.4.6, Chapter Addendum 14, Sr. no. 130 Remove the word “and Indian Railway” from para 3 of sub clause 8.5.1.1. The clause shall be read as “The new Mobile Services Switching Sub-system (MSS) being supplied should be a proven design and should be inter operable with existing Radio, Core and IN system of DFCC. A client certificate of successful working of the design should be provided by the contractor.”	As we understand the trains/cabs will move in between Indian Railways (IR) and DFCC tracks, it is advisable to have interface/interoperable with Indian Railways network. Also part of the CP-304 route/track, which is parallel to IR to be covered with existing GSMR network of Delhi-Ambala-Ludhiana section of Northern Railways. (as per clause 8.2.2). Hence it is required and request to retain the connectivity/interoperability with Indian Railways GSMR for optimised solution, smooth hand over and coverage.	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
902	8.4.6.2, Chapter 8 Response to Pre-bid queries, Sr. no. 823 The system shall be designed in such a manner that the GSM-R of WDFC can be used in case GSM-R system of EDFC is unavailable so as to ensure uninterrupted communication throughout Eastern and Western corridors DFCCIL. To achieve this, the IN provided under this contract shall be configured in mated pair/ Geo-redundant configuration with IR of WDFC. For that the contractor shall work in close coordination with contractor of STP-5 (WDFC).	To our knowledge there is worldwide no GSM-R installation with cooperating IN system of different vendors. Also normally IN is connected through MSS/NSS. We understand that with this requirement, it is forcing to propose the IN of some vendor/OEM been considered in STP5 and forcing the requirement to single vendor/OEM situation which is against open tendering policy and for fair competition. Also the connectivity of IN between 2 vendors will be of very expensive solution and the adaptability, interoperability is not been tested till now. Hence request to delete/separate out the geo redundancy of IN, NSS System with WDFC/STP-5 so that vendor independent solution can be proposed.	Request not accepted. The Provisions of the Bidding Document shall prevail.
903	Chapter 8, General Addendum 14, Sr.no.126 Read “EIRENE FRS v7.3.0 specification and EIRENE SRS v15.3.0 specification” instead of “EIRENE FRS v7.4.0 specification or latest and EIRENE SRS v15.4.0 specification or latest respectively”, in PS Telecom.	The requested EIRENE versions of FRS 7.3.0 and SRS 15.3.0 are of older versions and of year 2012. The version being deployed in Europe is FRS v7.4.0 and SRS v 15.4.0 or latest. Also It is suggested to follow the latest specification of EIRENE instead of earlier version while the latest is already officially available and being implemented with additional functionalities like allowing IP interfaces on NSS, ETCS 2 over GPRS, Enhancement of Railway Emergency Calls (eREC) features which are most beneficial for DFCC for deployment, safety (as network is already requested for ETCS2 complied) to be at par with international Rly.networks. Reducing the requirement to FRS 7.3.0/FRS15.3.0 will deprive DFCC network from getting below functionalities: 1. QOS for ETCS level 2 or 3 2. Protection against unauthorized access to any of the functions and services provided by the network 3. Core Network Redundancy Features: i.e. RANFlex functionality 4. SIP interfaces in Core Network 5. Enhancement of Railway emergency calls Also, the Core and Radio equipments of vendors are now available as complied to EIRENE FRS7.4 and SRS 15.4 or latest as per UIC and user group, where in Indian Railways is also a member. We request to re-instate original clause. i.e the EIRENE versions to the 7.4.0/15.4.0 or latest. Also- FRS 8.0/SRS16.0 is also available now so latest version should be asked.	Kindly refer Para 2.5.1, Part-2, Section (VI), Volume-1 of General specification and para 8.2.6.1 (2) of clause 8.2.6 of Vol 4/Part 2/Section VI.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
904	8.4.6, Chapter8 Addendum 14, Sr.no.127 The Clause shall be read as “Intelligent Network (IN), Network Sub System (NSS) and Base Station Subsystem (BSS) being provided under this contract shall comply with the inter-operability requirements for mobile equipment (Cab Radio & Hand Portable as per EIRENE specifications) to be supplied under this contract, in use over Indian Railways and to be supplied for other GSM-R networks of DFCCIL. Bidder shall submit final NOBO certificate at the time of bid submission.	Our understanding is that the individual equipment like BTS, BSC, MSC/ IN should be compliant to the Mandatory for Interoperability (indicated by ‘(MI)’ requirements mentioned as per EIRENE specifications. NOBO certificate should confirm to "MI" requirements. Please confirm. The solution shall be finalized only after the detailed design. Hence it is requested allow to submit the final No-Bo certificate after the detailed design and before the delivery based on detailed design.	Provisions of bidding document are sufficiently clear. Please Refer to Addendum No. 21, SN -155.
905	8.4.6, Chapter 8 Addendum 14, Sr.no.128 Remove the line “BSS of IR provided at New Delhi & Tundla &” from sub clause 8.4.6.7 The Clause shall be read as “NSS being provided under this contract is desirable to be interoperable with BSS being provided at Allahabad under contract Package CP-104, CP-105 & CP- 203 and being provided at OCC at Ahmedabad under Contract Package STP-5/STP-17/CTP-14	RFP clause 8.5.3.1 mentions "In sections, where track alignment of Sahnewal- Pilkhani section of EDFC is taking a detour from Sahnewal - Pilkhani section of Indian Railways or on DFCCIL track which cannot be served by BSS of Indian Railways, BSS of DFCCIL shall be provided by the Contractor. During actual operation of EDFC network the users will be using both DFCCIL network and also the existing IR network for continuous coverage. In view of this, the NSS, BSS being provided in this contract should also be interoperable with the existing NSS/BSS of IR network. Without interoperability with NSS/BSS of IR network, the continuous network availability cannot be implemented. We suggest to please modify this clause accordingly. We also understand that The OEM/solutions are not finalized on CP-105, CP-203, STP17,CTP14. Hence confirmation/details of make, type in these packages are required to propose the solutions which are interoperable.	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR. The successful bidder shall coordinate with the contractor of CP-104, CP-105, CP-203 and STP-5/STP-17/CTP-14 for successful implementation of the feature. The Bidder may contact the concerned field unit to get the details of make, type in these packages.
906	8.4.6, Chapter 8 Addendum 14, Sr.no.129 Remove sub clause 8.4.6.4 And update the numbering of sub clause 8.4.6.7 as 8.4.6.6.	Since the part of CP-304 track is in parallel to IR and to be covered with existing GSMR network of Delhi-Ambala-Ludhiana section of Northern Railways. (as per clause 8.2.2), interoperability with NSS of IR is required and hence request to retain the clause. Original RFP clause 8.4.6.4 mentions "NSS being provided under this Contract shall be inter - operable with Network Sub System (NSS) being provided for Indian Railways at New Delhi".	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
		During actual operation of EDFC network the users will be using both DFCCIL network and also the existing IR network for continuous coverage. In view of this, the NSS being provided in this contract should also be interoperable with the existing NSS/BSS of IR network. Without interoperability with NSS/BSS of IR network, the continuous network availability cannot be implemented.	
907	8.4.6, Chapter 8 Addendum 14, Sr.no.130 Remove the word "and Indian Railway" from para 3 of sub clause 8.5.1.1 The Clause shall be read as "The new Mobile Services Switching Sub-System (MSS) being supplied should be a proven design and should be inter operable with existing Radio, Core and IN systems of DFCC. A client certificate of successful working of the design should be provided by the Contractor."	As we understand the trains/cabs will move in between Indian Railways (IR) and DFCC tracks, it is advisable to have interface/interoperable with Indian Railways network. Also part of the CP-304 route/track, which is parallel to IR to be covered with existing GSMR network of Delhi-Ambala-Ludhiana section of Northern Railways. (as per clause 8.2.2). By removing, not connecting with IR network, shall be contradictory clause w.r.t requirement and also will lead to additional network in parallel lines and hence overall project cost. Hence it is required and requests to retain the connectivity/interoperability with Indian Railways GSMR for optimized solution, smooth hand over and coverage.	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR.
908	8.4.6.2, Chapter 8 Response to Pre-bid queries, Sr. No.823 The system shall be designed in such a manner that the GSM-R of WDFC can be used in case GSM-R system of EDFC is unavailable so as to ensure uninterrupted communication throughout Eastern and Western corridors of DFCCIL. To achieve this, the IN provided under this contract shall be configured in mated pair/ Geo-redundant configuration with IN of WDFC. For that the contractor shall work in close coordination with contractor of STP-5 (WDFC).	Query: We would also like to highlight that (as per our understanding) the Geo-redundancy mechanism for NSS is not specified under EIRENE standards and vendors do a proprietary implementation. We would request to mention the specific EIRENE clauses which refer to mated-pair/Geo-redundancy in NSS in a multi-vendor scenario.As this is not a standardized interface, the implementation for mater pair/Geo-redundancy between WDFC network and EDFC Network is not possible to be implemented. To our knowledge there is worldwide no GSM-R installation with mater-pair/Geo redundancy in multi-vendor scenario. Also normally IN is connected through MSS/NSS which has non standard interface as it is not defined in EIRENE. We understand that with this requirement, it is forcing to propose the IN of same vendor/OEM been considered in STP5 and forcing the requirement to single OEM based solution/situation. Also the connectivity of INs between 2 OEMs shall have to be dealt with proprietary interfaces, not standardized, vendor specific solution and the adaptability, interoperability is not been tested till now in any Railway networks. Such non-standard implementation will put DFCC network performance at risk. Hence request to delete/separate out the geo redundancy of IN, /SS systems with WDFC/STP-5 as it is not standardized interface as per EIRENE.	Request not accepted. The Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
909	Chapter8, General Addendum 14, Sr.no.126 Read “EIRENE FRS v7.3.0 specification and EIRENE SRS v15.3.0 specification” instead of “EIRENE FRS v7.4.0 specification or latest and EIRENE SRS v15.4.0 specification or latest respectively”, in PS Telecom	The requested EIRENE versions of FRS 7.3.0 and SRS 15.3.0 are of older versions and of year 2012. The version being deployed in Europe is FRS v7.4.0 and SRS v 15.4.0 or latest. Also It is suggested to follow the latest specification of EIRENE instead of earlier version while the latest is already officially available and being implemented with additional functionalities like allowing IP interfaces on NSS, ETCS 2 over GPRS, Enhancement of Railway Emergency Calls (eREC) features which are most beneficial for DFCC for deployment, safety (as network is already requested for ETCS2 complied) to be at par with international Rly.networks. Reducing the requirement to FRS 7.3.0/FRS15.3.0 will deprive DFCC network from getting below functionalities: 1. QOS for ETCS level 2 or 3 2. Protection against unauthorised access to any of the functions and services provided by the network. 3. Core Network Redundancy Features: i.e. RANFlex functionality. 4. SIP interfaces in Core network. 5. Enhancement of Railway emergency calls. Also, the Core and Radio equipments of vendors are now available as complied to EIRENE FRS7.4 and SRS 15.4 or latest, which are back ward compatible, as per UIC, where in Indian Railways is also a member. We request to re-instate original clause. as change the EIRENE versions to the 7.4.0/15.4.0 or latest. Also- FRS 8.0/SRS16.0 is also available now so latest version should be asked	Kindly refer Para 2.5.1, Part-2, Section (VI), Volume-1 of General specification and para 8.2.6.1 (2) of clause 8.2.6 of Vol 4/Part 2/Section VI.
910	8.4.6, Chapter8 Addendum 14, Sr.no.127 The Clause shall be read as “Intelligent Network (IN), Network Sub System (NSS) and Base Station Subsystem (BSS) being provided under this contract shall comply with the inter-operability requirements for mobile equipment (Cab Radio & Hand Portable as per EIRENE specifications) to be supplied under this contract, in use over Indian Railways and to be supplied for other GSM-R networks of DFCCIL. Bidder shall submit final NOBO certificate at the time of bid submission.	Offered system will be compliant to the Mandatory for Interoperability (indicated by ‘(MI)’ requirements as per EIRENE specifications. NOBO certificate should confirm to "MI" requirements as per EIRENE. This is to clarify as in the EIRENE specifications.	Query is not clear. Please refer to addendum No. 21 SN-155.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
911	8.4.6, Chapter8 Addendum 14, Sr.no.128 Remove the line “BSS of IR provided at New Delhi & Tundla &” from sub clause 8.4.6.7 The Clause shall be read as “NSS being provided under this contract is desirable to be interoperable with BSS being provided at Allahabad under contract Package CP-104, CP-105 & CP- 203 and being provided at OCC at Ahmedabad under Contract Package STP-5/STP-17/CTP-14.	By removal of line "BSS of IR provided at New Delhi &Tundla" from 8.4.6.7 shall conflict with RFP clause 8.5.3.1 which mentions "In sections, where track alignment of Sahnewal- Pilkhani section of EDFC is taking a detour from Sahnewal - Pilkhani section of Indian Railways or on DFCCIL track which cannot be served by BSS of Indian Railways, BSS of DFCCIL shall be provided by the Contractor" and with RFP clause 8.2.2. In addition to that during actual operation of EDFC network the users will be using both DFCCIL network and also the existing IR network for continuous coverage. In view of this, the NSS, BSS being provided will require interoperability with the existing NSS/BSS of IR network. Without interoperability with NSS/BSS of IR network, the contimuous network availability cannot be implemented. We suggest to please modify and keep an existing clause to align it with clause 8.5.3.1 and meet operational requirements. Since OEM/solutions are not finalised on CP-105, CP-203, STP17,CTP14. Hence confirmation/details of make, type in these packages are required to confirm interoperability. If the same has been finalized, request you to kindly provide details. However we confirm that system shall be provided as per EIRENE standards which define the interoperability requirements.	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR. The successful bidder shall coordinate with the contractor of CP-104, CP-105, CP-203 and STP-5/STP-17/CTP-14 for successful implementation of the feature. The Bidder may contact the concerned field unit to get the details of make, type in these packages.
912	8.4.6, Chapter 8 Addendum 14, Sr.no.129 Remove sub clause 8.4.6.4 And update the numbering of sub clause 8.4.6.7 as 8.4.6.6.	By removal of clause 8.4.6.4 "NSS being provided under this Contract shall be inter - operable with Network Sub System (NSS) being provided for Indian Railways at New Delhi" shall conflict with RFP clause 8.5.3.1 which mentions "In sections, where track alignment of Sahnewal- Pilkhani section of EDFC is taking a detour from Sahnewal - Pilkhani section of Indian Railways or on DFCCIL track which cannot be served by BSS of Indian Railways, BSS of DFCCIL shall be provided by the Contractor" and also with RFP clause 8.2.2. In addition to that during actual operation of EDFC network the users will be using both DFCCIL network and also the existing IR network for continuous coverage. In view of this, the NSS, BSS being provided under this contract will require interoperability with the existing NSS/BSS of IR network.	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
		Without interoperability with NSS/BSS of IR network, the continuous network availability cannot be implemented and ensured. We suggest to please modify and keep an existing clause to align it with clause 8.5.3.1 and meet operational requirements and to provide continuous coverage and smooth hand over	
913	8.4.6, Chapter 8 Addendum 14, Sr.no.130 Remove the word “and Indian Railway“ from para 3 of sub clause 8.5.1.1 The Clause shall be read as “The new Mobile Services Switching Sub-System (MSS) being supplied should be a proven design and should be inter operable with existing Radio, Core and IN systems of DFCC. A client certificate of successful working of the design should be provided by the Contractor.”	By removal of the word "and Indian Railways" from para 3 of clause 8.5.1.1, shall conflict with RFP clause 8.5.3.1 which mentions "In sections, where track alignment of Sahnewal- Pilkhani section of EDFC is taking a detour from Sahnewal - Pilkhani section of Indian Railways or on DFCCIL track which cannot be served by BSS of Indian Railways, BSS of DFCCIL shall be provided by the Contractor" and also with RFP clause 8.2.2 In addition to that during actual operation of EDFC network the users will be using both DFCCIL network and also the existing IR network for continuous coverage. In view of this, the NSS, BSS being provided under this contract will require interoperablity with the existing NSS/BSS of IR network as per EIRENE standards. Without interoperability with NSS/BSS of IR network, the continuous network availability cannot be implemented and ensured. We suggest to please modify and keep an existing clause to align it with clause 8.5.3.1 and meet operational requirements, optimised solution and to provide continuous coverage and smooth hand over.	Request not accepted. The Provisions of the Bidding Document shall prevail. This is as per advice of IR.
914	8.4.6.2, Chapter 8 Response to Pre-bid queries, Sr. No.823 The system shall be designed in such a manner that the GSM-R of WDFC can be used in case GSM-R system of EDFC is unavailable so as to ensure uninterrupted communication throughout Eastern and Western corridors of DFCCIL. To achieve this, the IN provided under this contract shall be configured in mated pair/ Geo-redundant configuration with IN of WDFC. For that the contractor shall work in close coordination with contractor of STP-5 (WDFC).	GSMR networks and specifications are driven by SRS/FRS of EIRENE standards. The system shall be supplied as per EIRENE standards and specifications. The requirements of mated pair Geo-redundancy mechanism is not specified in EIRENE and thus is only achievable between two systems of same vendor at both sites. Also, there is worldwide/globally no GSM-R installation with mated-pair/Geo redundancy in multi-vendor scenario in any of GSMR networks since it is not feasible to achieve as per EIRENE standards. MSS to MSS connectivity is of open interface and is interoperable as per EIRENE standards. Since this is technically not feasible to achieve (unless both sites have systems from the same vendor); request to delete / remove this requirement.	Request not accepted. The Provisions of the Bidding Document shall prevail.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
915	Guest House Drg Part 2, Section VI, Volume 1 General Specifications 1.3.1 (6) 1.3.2 Part 2, Section VI, Volume 5 PS – CW &E&M Part 2, Section VI, Volume 4 PS – Telecom 13.3.2 It is proposed to construct One (1) number Guest House by the CST contractor (CP-301) at Ambala / Chandigarh. The aforesaid Building and Structure works of Station Buildings, Depot, Residential Quarters and Guest House as indicated in table above, will be constructed by CST Contractor (CP-301). The Conducting for the structures required to be constructed for DFCCIL shall also be done by dedicated contractor (CP-301). However, all other electrification works including power supply, as necessary for these structures, shall be done by the system contractor of CP-304. Telecom Power Supply Equipment Rooms at Stations, IMD, IMSDs, Residential Colonies, Club/Institute and Guest House will be constructed by CST Contractor to install the Telecom Power Supply Equipment.	1. Kindly provide us the indicative drawing on Guest House being constructed by CST – CP-301 Contractor, to assess the E&M requirements at Bid stage. 2. Also confirm the location of the guest House and how we can have the Power source if it is in Ambala/Chandigarh, as it may be out of the alignment and no ASS nearby. This is essential to develop the ASS E&M, Telecom requirements.	(1) For drawing of guest house, the system contractor shall coordinate and interface with CST contractor during execution. However the plinth area of the guest house shall be 1000 sqm approximately. (2) Being a Design build lump sum contract, the system contractor shall coordinate and interface with CST contractor during execution.
916	Access to Buildings for E&M construction works ADDENDUM-8 SN-70 Refer extract below (Annexure below) Access dates of Formation & Track given Access to Station buildings missing for the following 1. 5 Junction station	We need access dates for the following, as they are very important for various associated E&M, SIG, and Telecom activities. 1. 5 Junction station 2. 9 Crossing station 3. 1 IMD 4. 3 IMSD 5. Type-A/B/C quarters – 94/47/2 6. Guest House	Being a Design build lump sum contract, the system contractor shall coordinate and interface with CST contractor for access to various buildings, quarters and guest house.

Sr. No.	Reference to Bid Document	Clarification Sought by the Bidders	DFCCIL Response
	2. 9 Crossing station 3. 1 IMD 4. 3 IMSD 5. Type-A/B/C quarters – 94/47/2 6. Guest House	As the Contractor CP-301 already exist and interface will be done with CST contractor in execution phase. Kindly provide us the access dates of above defined buildings similar to CP-105 Bid.	

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