

**Dedicated Freight Corridor Corporation of India Limited
(A Government of India Enterprise)**

Addendum No.4 Dated 03.07.2015

Addendum / Amendments to Bid Documents for

**DESIGN, SUPPLY, CONSTRUCTION, TESTING AND COMMISSIONING OF SIGNALLING, TELECOMMUNICATION AND ASSOCIATED
WORKS OF DOUBLE TRACK RAILWAY LINES UNDER CONSTRUCTION ON A DESIGN BUILD LUMP SUM BASIS FOR
MUGHALSARAI - NEW BHAUPUR SECTION OF EASTERN DEDICATED FREIGHT CORRIDOR**

CONTRACT PACKAGE CP- 203

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1.	1	-	66	Section IV – Bidding Forms	Form ELI 1.2: Party to Bidder Information Sheet	Replace “Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITB Sub-Clauses 4.1 and 4.2.” with “Articles of Incorporation or Registration of firm named in 2, above” against item no. 7 of Form ELI-1.2.
2.	2	1	202	6.2	Design Management	Replace the second sentence of Para 6.2.1 with the following: “The Design Team shall function from Contractor’s offsite Design office or from the Site office, based on requirement, to be determined by the Engineer and all meetings and discussions relating to design shall be held at Site office or in the office of Engineer/Employer or as instructed by the Engineer.”
3.	2	2	315-316	1.4	Scope of Works	At the end of sub-para 1.4.1(3) add the following: “The necessary alterations in Signalling at New Bhaupur station provided under EDFC Phase I, required to implement the system shall be carried out by the Contractor.”
4.	2	2	320	2.2.2(3)	Foundations for Signals	Replace content of sub-Para 2.2.2(3)(a) with the following: “All Signals shall have concrete foundations having a minimum grade of M20.”
5.	2	3	529	7.5.3	Voice Mail System (VMS)	In the first line of Para 7.5.3.1, replace “EDFC Phase-1” with “EDFC Phase 2”
6.	2	3	532	8.2	Scope of Work	Replace the last sentence of Clause 8.2.2 with the following:

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						“However in sections, where track alignment of Mughalsarai-New Bhaupur Section of EDFC is taking a detour (including Link Lines) and cannot be served by Base Station Sub-System (BSS) of IR, BSSs of DFCCIL shall be provided by the Contractor.”
7.	2	3	523	7.3.8	Integration of Telephone Networks	Delete “Call Pickup” at Sr. No.(5) of the table given under para 7.3.8.2 of Section VI, PS Telecommunication Works of Bidding Document
8.	2	3	569	12.7	Cabling	Delete Sub Para 12.7.2 of Section VI, PS Telecommunication Works of Bidding Document.
9.	2	3	576	12.12	Transient and Lightning Protection	<p>Replace Clause 12.12 of PS Telecommunication, Part 2, Section VI, Volume 3 by new Clause as follows:</p> <p>“12.12 Transient and Lightning Protection</p> <p>12.12.1 An effective transient protection system, complying to the following as a minimum must be provided to protect the telecommunication equipment from transients:</p> <ol style="list-style-type: none"> (1) Peak transients of up to 700 Volts on the DC Power Supply line for several microseconds. (2) Average transient duration of 2 microseconds with a repetition frequency of 15kHz to 100kHz (3) For short duration transients (<5ms) the variation approaches a sine wave (4) For longer duration transients (>5ms) the variation approaches rectangular pulses with an initial rate of rise up to 5×10^4 Volts per second. <p>12.12.2 Suitable electronic devices (such as silicon avalanche suppressor devices/transzorbs) having high surge handling capability, fast response time and low clamping voltage, etc; shall be incorporated in the telecommunication equipment to ensure that the latter withstands the above mentioned conditions without any damage or damage to other equipment</p>

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						<p>or permanent degradation in performance throughout the system lifetime. The selection criteria for such devices shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> (1) reverse standoff voltage shall be at least three times the maximum operating voltage; (2) pulse power rating shall be adequate to handle the peak pulse power of the transients and ensure their decay in less than 10% of the rise time for the worst pulse likely to be encountered from all possible sources including lightning and transients from overhead traction power system; (3) device lifetime shall not be less than that of the system for which it affords protection. <p>12.12.3 Surge protection devices shall be provided at TER end and outdoor equipment end, on power and data cables extending to outdoor telecommunication equipment installations as a minimum as defined below:</p> <ol style="list-style-type: none"> (1) clock displays surge protection devices at both ends (2) radio frequency feeder cables separately for each individual cable of VHF antenna & GPS antenna on both ends; (3) armour of optical fibre cable shall be directly earthed at TER end and earthed through a surge protection device at the other end station;" <p>“12.13 Lightning Protection</p> <p>12.13.1 While the station buildings will be provided with the lightning protection arrangements, the protection against lightning surges travelling through conductors into equipment shall be provided by Contractor using appropriate devices.</p> <p>12.13.2 The Contractor shall submit the proposed measures</p>

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						<p>for review by the Engineer.”</p> <p>“12.14 Housing, Enclosure and Cabinet</p> <p>12.14.1 All equipment installed shall be able to withstand vibration levels likely to be experienced in railway stations and along railway track side structures.</p> <p>12.14.2 All design of housing and enclosure shall be submitted to the Engineer for review.</p> <p>12.14.3 Unless specified otherwise, all equipment to be housed in outdoor environment (open areas, etc.) shall be with IP 65 enclosures.</p>
10.	2	4	608	1.4.5	Operational Requirements	<p>Replace the second sentence of sub-para 1.4.5(5) with the following: “The distance of Chain Link Fencing from the walls of SER, TER and S&T Power Supply Equipment Rooms shall generally be 1.5 meters or as decided and approved by the Engineer during design stage.”</p>
11.	2	4	610 & 612	1.4.7 and Annexure -1	Indicative Drawing of Signal and Telecom Equipment Rooms	<p>Replace Drawing No. - DFC/HQ/EN/EC/D-B/MGS-New Bhaupur/ S&T/01/2014 by Drawing No. DFC/HQ/EN/EC/D-B/MGS-New Bhaupur/ S&T/01/2014 Revision 1.</p>