

# **NOTICE INVITING EXPRESSION OF INTEREST (EOI)**

**EOI NO.: RCIL/NR/TM/JP/EOI/NWR/EI/MHU-BWK & BNW-BNWC/2024-25 DATED**  
**28-MAY-2024**

**Expression of Interest (EOI) from RailTel's Empaneled Business Associate Partners for Selection of Implementation Partner for exclusive PRE-BID TEAMING ARRANGEMENT for “Automatic Block Signaling System between Manheru-Bawani Khera in c/w doubling of MHU-BWK & BNW-BNWC Section of Bikaner Division of North Western Railway”.**

Issued by:



**RailTel Corporation of India Ltd**

*(A Mini-Ratna PSU under Ministry of Railways)*

Territory Office, Jaipur

Website:- <https://www.railtelindia.com>

### **Disclaimer**

RailTel Corporation of India Ltd. (herein after called the RailTel) has prepared this Expression of Interest (EOI) document solely to assist prospective bidders in making their decision of whether bid or not to bid.

While the RailTel has taken due care in the preparation of information contained herein and believes it to be accurate, neither the RailTel or any of its Authorities or Agencies nor any of their respective officers, employees, agents or advisors give any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it. This information is not intended to be exhaustive and interested parties are required to make their own inquiries and do site visits that it may require in order to submit the EOI. The information is provided on the basis that it is non-binding on RailTel, any of its authorities or agencies or any of their respective officers, employees, agents or advisors. The RailTel reserves the right not to proceed with the bidding/EOI process at any stage without assigning any reasons thereof, or to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the EOI further with any party submitting an EOI. No reimbursement of cost of any type will be paid to persons or entities submitting the EOI.

## End Customer Tender Details

|                              |  |
|------------------------------|--|
| <b>Tender Title</b>          | Part supply of material and execution of indoor-outdoor work related to provision of Electronic interlocking and MSDAC based Automatic Block Signalling system between Manheru- Bawani Khera in c/w doubling of MHU-BWK & BNW-BNWC sections of Bikaner Division of North Western Railway. The work involves provision of new Electronic Interlockings at MANHERU, BHIWANI Junction (In Second Phase), BAWANI KHERA, BHIWANI BYE PASS JUNCTION CABIN Stations and at Five Auto Signalling Huts (ALH) to control mid -section auto signals and 7 Nos of mid-section LC gates. The work includes modification in M/s Kyosan Make existing EI of BHIWANI Junction (in first phase) to suit patch doubling in MHU-BNW Section. The work also includes provision of dual MSDAC in Auto Section and single MSDAC in BNW Yard along with associated works like trenching & laying of signalling and Telecom cables in pre-fabricated ducts/DWC/GI pipes, supply – installation of point machines, Apparatus cases, Electric Lifting Barrier Gate, Signals, Track circuit equipment, Earthing material, Data loggers, ELD, FACS, AFDAS, IoT based RDPMS, Passenger Amenity Telecom Items etc. |
| <b>Tender No.</b>            | SNT_C_BKN_24-25_02   |
| <b>Date of Tender upload</b> | 06.05.2024   |
| <b>Floated on portal</b>     | <a href="http://www.ireps.gov.in">www.ireps.gov.in</a>   |



### Indian Railways E-Procurement System

Search Tender
⏏

Active Tenders Closing Today
All Active Tenders
Recently Closed Tenders
Custom Search
Custom Search (For live Tender-AI Based)
Live & Upcoming e-RA
Closed e-RA

(Please choose one or more option for search, view & Downloading E-Tender Notices and Click 'Show results' to view Details of E-tenders)

Search Criteria: Tender Number Starting with

Note: Please enter minimum first 3 characters of Tender Number or PLNO (these are case sensitive) or any 3 consecutive characters of Tender title or item description.

Organization: Indian Railway

Railway/PU \*: North Western Railway

Unit: All

Tender Status: All

Bidding System: All

Select Date: Tender Closing Date

Search For: SNT\_C\_BKN\_24-25\_02

Work Area \*: Works

Department \*: S AND T

Tender Type: All

From: 06/05/2024 To: 03/06/2024

Show Results

Tender search results 1

| Deptt./Bly. Unit                       | Tender No          | Tender Title  | Status    | Work Area | Due Date/Time    | Due Days | Actions |
|--|--------------------|---|-----------|-----------|------------------|----------|---------|
| DVCSTE-C-BKN-S AND T/NORTH WESTERN RLY | SNT_C_BKN_24-25_02 | Part supply of material and execution of Indoor-outdoor work related to provision of Electronic Interlocking and MSDAC b..... | Published | Works     | 03/06/2024 15:00 | 12       |         |

Print Results

Bidder is required to download and read complete RFP/ clarifications/ reply to pre-bid queries/ subsequent amendments/ subsequent corrigendum issued by the end customer till the last date of submission of response to this EOI. Submitting response/ bid to this EOI will be considered as that the bidder has submitted technical and financial bid considering all the entities mentioned above and agrees to all terms and conditions mentioned in end customer RFP and will not deviate from the quoted technical and financial solution.

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**रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड क्षेत्रीय कार्यालय जयपुर।**

**ईओआई संख्या: RCIL/NR/TM/JP/EOI/NWR/EI/MHU-BWK&BNW-BNWC/2024-25 दिनांक 28-मई-2024**

रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड, (यहां "रेलटेल" के रूप में संदर्भित) रेलटेल के एम्पेनेल्ड बिजनेस एसोसिएट पार्टनर्स से ईओआई को आमंत्रित करता है और पूर्व और बाद के कार्यान्वयन के चयन के लिए विशेष रूप से पूर्व-बोली टीमिंग व्यवस्था के लिए "स्वचालित ब्लॉक सिग्नलिंग" उत्तर पश्चिमी रेलवे पर Bikaner डिवीजन के MHU-BWK और BNW-BNWC सेक्शन के C/W डबलिंग में Manheru-Bhawani Khera के बीच प्रणाली विवरण इस प्रकार हैं:

### कालक्रम

|   |   |  |
|---|---|--|
| 1 | ईओआई फ्लोटिंग की तारीख                          | 28-मई-2024   |
| 2 | ईओआई के तहत बोलियां जमा करने की अंतिम तिथि      | 31-मई-2024, 12:00 बजे  |
| 3 | ईओआई के तहत प्राप्त बोलियों को खोला जाएगा       | 31-मई-2024, 12:30 बजे  |
| 4 | प्रस्तुत की जाने वाली प्रतियों की संख्या        | एकल चरण ( 2 पैकेट प्रणाली)   |
| 5 | ईओआई दस्तावेज़ की लागत कर सहित (गैर-वापसीयोग्य) | शून्य  |
| 6 | ईओआई प्रसंस्करण शुल्क कर सहित (गैर-वापसी योग्य) | रु. 8,850/-  |
| 7 | ईओआई की अनुमानित राशि                           | रु. 24,47,74,518/- (जीएसटी सहित)   |
| 8 | ईएमडी के लिए प्री-बिड अरेंजमेंट                 | टोकन ईओआई ईएमडी के लिए ईओआई के साथ रुपये 5,00,000/- (केवल पांच लाख रुपये) की राशि जमा होगी ।<br>अंतिम ईएमडी (चयनित बोलीदाता द्वारा जमा किया जाना है): रु.19,47,745/- टोकन ईओआई ईएमडी राशि तदनुसार समायोजित की जाएगी। |
| 9 | बोली जमा करने का तरीका                          | <a href="https://railtel.enivida.com">https://railtel.enivida.com</a> पर ऑनलाइन  |

**\*नोट:** रेलटेल अपने विवेक से उपरोक्त तिथियों को बदलने का अधिकार सुरक्षित रखता है।

प्रारंभ में ईओआई में भाग लेने के दौरान बोलीदाता को ईओआई के साथ रुपये 5,00,000/- (केवल पांच लाख रुपये) की राशि के लिए ईएमडी यानी टोकन ईओआई ईएमडी जमा करना होगा। ईएमडी का भुगतान केवल ई-निविदा पोर्टल पर ऑनलाइन भुगतान किया जा सकता है।

**अंतिम ईएमडी (चयनित बोलीदाता द्वारा जमा किया जाना है):**

- आरसीएससीई आरएफपी/निविदा के विरुद्ध रेलटेल द्वारा अंतिम बोली प्रस्ताव प्रस्तुत करने से पहले रु. 19,47,745 जमा करना होगा। टोकन ईओआई ईएमडी राशि तदनुसार समायोजित की जाएगी।
- सीओआर आरएफपी/निविदा के विरुद्ध रेलटेल द्वारा बोली प्रस्ताव प्रस्तुत करने से पहले सफल बीए द्वारा अंतिम ईएमडी जमा करना होगा, PBG/NEFT/RTGS/FD के रूप में। FD के मामले में, LIEN को रेलटेल कॉर्पोरेशन के नाम पर होना चाहिए।
- शेष ईएमडी के लिए ईओआई अंडरटेकिंग प्रस्ताव के साथ जमा करना होगा।
- शेष ईएमडी जमा न करने पर टोकन 'ईओआई ईएमडी' जब्त कर लिया जाएगा।
- एनईएफटी/आरटीजीएस: खाता नाम: रेलटेल एनआर कलेक्शन खाता बैंक का नाम: यूनियन बैंक ऑफ इंडिया शाखा का नाम: कनाट प्लेस दिल्ली, खाता संख्या: 307801010917906, आईएफएससी कोड: यूबीआईएन0530786, एमआईसीआर कोड: 110026006
- डिमांड ड्राफ्ट: रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड के पक्ष में नई दिल्ली में देय।
- बैंक गारंटी: यह ध्यान दिया जा सकता है की टोकन ईएमडी रुपये 5,00,000/- ऑनलाइन जमा करना होगा और शेष ईएमडी बीजी के रूप में भी जमा किया जा सकता है। ईएमडी का भुगतान किसी भी अनुसूचित वाणिज्यिक बैंक/राष्ट्रीयकृत बैंक द्वारा जारी अनुलग्नक-9 के अनुसार संलग्न प्रारूप में बैंक गारंटी के रूप में किया जा सकता है, जो बोली वैधता अवधि के बाद 90 दिनों के लिए वैध है।

ईएमडी रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड के पक्ष में ऑनलाइन बैंक हस्तांतरण के माध्यम से दिल्ली में देय होनी चाहिए। पार्टनर को प्रस्ताव के साथ ऑनलाइन भुगतान हस्तांतरण विवरण जैसे यूटीआर नंबर तारीख और बैंक साझा करना होगा।

ईएमडी/पीबीजी जमा करने के लिए रेलटेल बैंक विवरण:

रेलटेल SFMS विवरण -

बीजी advising message - IFN 760COV/ IFN 767COV via SFMS

ICICI बैंक का IFSC कोड (ICIC0000007) इस्तेमाल करना होगा। फ़ील्ड 7037 में अद्वितीय संदर्भ (RAILTEL6103)।

योग्य बिजनेस एसोसिएट्स को निम्नलिखित नामांकित संपर्क व्यक्तियों के माध्यम से ईओआई दस्तावेज़ के लिए इस निमंत्रण से संबंधित सभी संचार निर्देशित करने की आवश्यकता है:

इस ईओआई के लिए संपर्क विवरण:

स्तर:1 संपर्क: श्री. पंकज सिंह, वरिष्ठ प्रबंधक/तकनीकी

ईमेल: psingh@railtelindia.com संपर्क: +91-7087039937

स्तर:2 संपर्क: श्री. एस.एस. जेफ, संयुक्त महाप्रबंधक/जयपुर

ईमेल: ssjeph@railtelindia.com संपर्क: +91-9001044112



## **EOI NOTICE**

RailTel Corporation of India Limited, Territory office, Jaipur.

**EOI NO.: RCIL/NR/TM/JP/EOI/NWR/EI/MHU-BWK & BNW-BNWC/2024-25 DATED 28-MAY-2024**

**RailTel Corporation of India Ltd., (here after referred to as “RailTel”) invites EOIs from RailTel’s Empaneled Business Associate Partners for Selection of Pre and Post Implementation Partner from RailTel Empaneled Business Associate for exclusive PRE-BID TEAMING ARRANGEMENT for “Automatic Block Signaling system between Manheru-Bhawani Khera in c/w doubling of MHU-BWK & BNW-BNWC section of Bikaner Division on North Western Railway”.**

The details are as under:

### **SCHEDULE OF EVENTS**

|   |   |  |
|---|---|--|
| 1 | Date of EOI Floating                              | 28-May-2024  |
| 2 | Last date for submission of Bids against EOI      | 31-May-2024 at 12:00 Hours   |
| 3 | Opening of Bids received against EOI              | 31-May-2024 at 12:30 Hours   |
| 4 | Number of copies to be submitted                  | Single Stage (Two Packet System)   |
| 5 | EOI document cost inclusive tax (non-refundable)  | Nil  |
| 6 | EOI processing fee inclusive tax (non-refundable) | Rs. 8,850/-  |
| 7 | Estimated amount of EOI                           | Rs. 24,47,74,518/- (inclusive of GST)  |
| 8 | EMD for Pre-Bid Arrangement                       | Token EOI EMD for an amount of Rs. 5,00,000/- (Rs. Five Lakhs only) along with the EOI.<br>Final EMD (to be submitted by selected bidder):<br>Rs.19,47,745/- <u>before final bid proposal submission by RailTel against CoR RFP/Tender.</u><br>Token EOI EMD amount shall be adjusted accordingly. |
| 9 | Bid Submission Mode                               | Online on <a href="https://railtel.enivida.com">https://railtel.enivida.com</a>  |

\*Note: RailTel reserves the right to change the above dates at its discretion.

Initially while participating in EoI the bidder needs to submit EMD i.e. Token EOI EMD for an amount of Rs.5,00,000/- (Rs. Five Lakhs only) along with the EOI. EMD can be paid as under:

- **Online payment on E-Nivida Portal only.**

**Final EMD (to be submitted by selected bidder):**

- **Rs.19,47,745/- before final bid proposal submission by RailTel against CoR RFP/Tender. Token EOI EMD amount shall be adjusted accordingly.**
- **The Final EMD has to be submitted by successful BA before bid proposal submission by RailTel against CoR RFP /Tender, in form of PBG/NEFT/RTGS/FD. In case of FD, lien must be in name of RailTel Corporation of India Limited.**
- **Undertaking for balance EMD shall be deposited along with the EoI Bid Proposal by the bidder.**
- **Non-submission of remaining EMD as applicable will lead to forfeiture of token ‘EOI EMD’.**
- **NEFT/ RTGS:** Account Name: RailTel NR Collection Account Bank Name: Union Bank of India Branch Name: Connaught Place Delhi, Account Number: 307801010917906, IFSC Code: UBIN0530786, MICR Code: 110026006
- **Demand Draft:** In favor of RailTel Corporation of India Limited payable at New Delhi.
- **Bank Guarantee:** It may be noted that token EMD of Rs. 5,00,000/- is to be deposited online and balance EMD can be deposited in form of BG also. EMD can be paid in form of Bank Guarantee in format attached as per annexure-9 issued by any scheduled commercial bank/Nationalized Bank, valid for 90 days beyond bid validity period.

The EMD should be in the favor of RailTel Corporation of India Limited payable at Delhi through online bank transfer. Partner needs to share the online payment transfer details like UTR No. date and Bank along with the proposal.

RailTel Bank Details for Submission of EMD / PBG:

RailTel SFMS details –

BG advising message – IFN 760COV/ IFN 767COV via SFMS.

IFSC Code of ICICI Bank to be used (ICIC0000007). Unique reference (RAILTEL6103) in field 7037}.

Eligible Business Associates are required to direct all communications related to this Invitation for EoI document, through the following Nominated Point of Contact persons:

**Contact Details for this EOI:**

Contact: Sh. Pankaj Singh, Senior Manager

Email: [psingh@railtelindia.com](mailto:psingh@railtelindia.com) Contact: +91- 7087039937

Contact: Sh. S.S. Jeph, JGM/JP

Email: [ssjeph@railtelindia.com](mailto:ssjeph@railtelindia.com) Contact: +91- 9001044112

Note:

1. The EOI response is invited from eligible Empaneled Partners of RailTel only.
2. All the document must be submitted with proper indexing and page no.
3. This is an exclusive pre-RFP partnership arrangement with empaneled business associate of RailTel for participating in the end customer RFP. Selected partner's authorised signatory has to give an undertaking they will not submit directly or indirectly their bids and techno-commercial solution/association with any other Organization once selected in this EOI for pre-bid teaming arrangement (before and after submission of bid to prospective customer Organization by RailTel). This undertaking has to be given with this EOI Response.
4. Transfer and Sub-letting: The Business Associate has no right to give, bargain, sell, assign or sublet or otherwise dispose-off the Contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the present Contract or any part thereof.
5. Bidder has to agree to comply with all OEM technical & Financial documentation including MAF, Technical certificates/others as per end-to-end requirement mentioned in the end customer's RFP.
6. Bidder also undertake to submit MAF of major items of the proposed solution and other documents required in the end Customer Organization's tender in favour of RailTel against the proposed products. The selected BA has to provide MAF from the OEM in the name of RailTel for bidding in the concerned tender of CoR, if their proposed solution is quoted to the customer.
7. The selected bidder will have to accept all Terms & Conditions of CoR RFP on back-to-back basis.
8. Any corrigendum(s) issued by CoR against pertinent tender/RFP shall be the part and scope of this EOI document on back-to-back basis.
9. No exemption/relaxation is applicable to MSME/Startups.
10. Only, the eligibility clause/criteria and marks scoring criteria for SI/BA (Prospective BA/SI) as mentioned in CoR's RFP is not applicable on the bidder/BA applying against this EOI. Rest all Terms & Conditions of RFP floated for pertinent tender will be complied by SI/BA/bidders.
11. However, OEM considered by SI for this project have to mandatorily comply all the eligibility & technical criteria/compliance on back-to-back basis in line with COR RFP and corrigendum(s) issued thereof.
12. Please refer CoR RFP Payment terms as this will remain applicable on back-to-back basis on successful bidders.
13. Bidder may check the price/commercial bid as per BOQ and match the same with FORMATS FOR

SUBMISSION OF THE COMMERCIAL BID of CoR's RFP and if found any discrepancy, may be brought in the notice of RailTel immediately and may modify their financial bid format as per CoR RFP financial bid document.

14. This is a customer centric bid on back-to-back basis. The benefits of MSME shall not be applicable on this EOI & Work Order issued basis this EOI.
15. All terms and conditions including SLA/Payment/Penalties will be applicable back-to-back to the bidder.
16. No advance payment is applicable in the EOI and payment will be released on receipt from the COR.
17. Offline documents like POA, NDA, Integrity pact and affidavit must be reach to RailTel office before opening of bid.

## **1. About RailTel**

RailTel Corporation of India Ltd (RailTel) is one of the largest neutral telecom infrastructure providers in the country owning a Pan-India optic fibre network on exclusive Right of Way (ROW) along Railway track. The OFC network presently reaches to over 4500 towns & cities of the country including several rural areas. With its Pan India high-capacity network, RailTel is working towards creating a knowledge society at various fronts. The portfolio of services provided by RailTel includes Data Centre & DR services, Tele-presence as a service, NLD services, IP-1 services, Internet and Broadband services on a pan-India basis.

Equipped with an ISO 9001, 20000-1:2011 & 27000 certification, RailTel offers a wide gamut of managed telecom services to Indian Telecom market including Managed lease lines, Tower colocation, MPLS based IP-VPN, Internet, Data Centre services, NGN based voice carriage services to Telecom Operators, Dark fibre leasing to MSOs/LCOs. The major customer segment for RailTel comprises of Enterprises, Banks, Government Institutions/Department, Educational Institutions/Universities, Telecom Service Providers, Internet Service Providers, MSOs, etc. RailTel being a “Mini Ratna (Category-I)” PSU is steaming ahead in the enterprise segment with the launch of various services coupled with capacity augmentation in its Core network.

## **2. Background of EOI**

RailTel Corporation of India Ltd (hereafter referred to as ‘RailTel’) an ICT arm of Indian Railways has been in the forefront of building innovative platforms and solutions and vision to build range of Information and Communication Technology (ICT) Services for its customers.

In this regard, RailTel intends to submit Techno-Commercial offer to Customer of RailTel (CoR) in NWR (hereafter referred as ‘CoR’) and accordingly seeks to select a suitable partner for pre-bid arrangement.

**RailTel intends to submit Techno-Commercial offer to Customer of RailTel (CoR) for Automatic Block Signaling system between Manheru-Bawani Khera in c/w doubling of MHU-BWK & BNW-BNWC section of Bikaner Division of North Western Railway.**

RailTel invites EOIs from RailTel's Empaneled Partners for the selection of suitable partner for participating in above mentioned work for the agreed scope work. The empaneled partner is expected to have excellent execution capability and good understanding of customer local environment.

**Bidder has to agree to comply with all OEM technical & financial documentation including MAF, Technical certificates/others as per end-to-end requirement mentioned in the EOI. Bidder also undertake to submit MAF of major items of the proposed solution and other documents required in the EOI in favor of RailTel against the proposed products. The selected BA has to provide MAF from the OEM in the name of RailTel for further submitting proposal to CoR, if their proposed solution is quoted to the customer.**

The details of pertinent tender are as below:

RailTel invites EOIs from RailTel's Empaneled Partners for the selection of suitable partner to submit best techno commercial proposal to CoR for the complete scope of work as mentioned in the EOI. The empaneled partner is expected to have excellent execution capability and good understanding of customer local environment.

The make and model shall be clearly mentioned in the proposal.

### **3. Scope of Work & Partner Selection**

#### Scope of Work

The scope of work will be as mentioned in CoR RFP, available on portal [www.ireps.gov.in](http://www.ireps.gov.in) with Tender reference no. SNT\_C\_BKN\_24-25\_02, dt.06.05.24

Special Note: RailTel may or may not retain some portion of the work mentioned in the EOI where RailTel has competence so that overall proposal becomes most winnable proposal.

#### Purpose of EOI

The intent of this EOI is to invite proposals from the prospective bidders for **Automatic Block Signaling system between Manheru-Bawani Khera in c/w doubling of MHU-BWK & BNW-BNWC section of Bikaner Division of North Western Railway.**

- 3.1 The present proposal seeks the turnkey solution for carrying out CoR needs. It is proposed to provide and maintain services with allied items for the period maintenance at locations as mentioned in EOI. Being turnkey in nature, successful bidder once awarded with the order, has to successfully commission the solution with complete satisfaction of the customer and any item explicitly mentioned or not mentioned, has to be provisioned without any further escalation of the cost to customer of RailTel. An undertaking of end to end no escalation in financial and compliance of technical aspects related responsibility has to be given by successful bidder to RailTel. Any expense/cost escalation during commissioning and Warranty period if any required in turnkey solution commissioning will be the responsibility of the Successful bidder and same will be absorbed by successful bidder, in case customer may not pay for it to RailTel. If CoR may pay such charges then only successful teaming partner will be entitled for such amount. Any financial claim of BA partner in future for successful commissioning and during warrant period, may not be entertained without receipt of money by RailTel from customer in any circumstances.
- 3.2 Solution provider need to offer solution with no single point of failure in hardware and without any downtime in operations at customer premise of CoR. SLA shall be applicable on back to back basis as per the CoR's RFP.
- 3.3 Bidder may submit their response in form of duly signed and stamped and submit techno-commercial bid at the E-nivida portal through Online mode, within the stipulated date and time, as mentioned in this EOI document.

**3.4 Interested partners may note that this is a Single stage Two Packet Bid.**

3.5 Only those bids shall be opened, which have been submitted within the stipulated time as mentioned in this EOI document.

**3.6 Stage-I : Technical Bid contains following :-**

| S.No. | Type                 | Eligibility Criteria  | Documents Required  |
|-------|----------------------|---|---|
| 1     | Existence/<br>Origin | The company/proprietary firm must be registered in India.   | Certificate of Incorporation/proprietary.                         |
| 2     | General              | The company must have:<br>I. Valid PAN card.<br>II. GST Registration.   | I. Copy of PAN Card.<br>II. Copy of GST registration certificate. |
| 3     | Turnover             | The bidder must have cumulative turnover of 150% in the previous five financial years and current financial year up to the date of inviting of EOI for the estimated amount of EOI. | Audited Balance Sheet and CA certificate                          |
| 4     | Net Worth            | The bidder should have positive net worth as on 31-MAR-2024.  | Audited Balance Sheet and CA certificate                          |

| S.No. | Type          | Eligibility Criteria   | Documents Required  |
|-------|---------------|--|---|
| 5     | Experience    | <p>The bidder must have successfully completed any of the following similar nature of work during preceding 3 financial years (i.e. current year and last 03 (three) previous financial years), ending last day of month previous to the one in which EOI is invited, as</p> <ol style="list-style-type: none"> <li>1. One similar work of 35% of estimated amount of EOI.</li> </ol> <p style="text-align: center;">OR</p> <ol style="list-style-type: none"> <li>2. Two similar works each of 20% of estimated amount of EOI.</li> </ol> <p style="text-align: center;">OR</p> <ol style="list-style-type: none"> <li>3. Three similar works each of 15% of estimated amount of EOI.</li> </ol> <p><b>Definition of similar work:</b> Similar work means<br/> “Any Supply/Installation/Design work of Electronic Interlocking for Indoor / Outdoor Signaling work”.</p> <p><b>Note:</b> In case a contract is started prior to 3 years, ending on the date of opening of Bid but completed in last 3 years ending on the date of opening of Bid, the completed works shall be considered for fulfillment of credentials.</p> | <p>Copy of Purchase/ Work Order and completion/ satisfactory performance certificate issued by client.</p> <p>Work experience certificate issued by Govt. Organization or Public listed company (with minimum average annual turnover of Rs.500Cr and listed on National Stock exchange/Bombay stock exchange) shall only be considered.</p> <p><b>For ongoing works:</b> Ongoing works will be considered for value of executed work (minimum 70% work executed) certified by PO issuing authority / customer mentioning completed work value on the certificate along with satisfactory completion certificate for work completed so far.</p> |
| 6     | Empanelment   | All Business Associate empaneled with RailTel.   | Copy of Empanelment letter and Empanelment PBG submitted, if any.   |
| 7     | POA           | The bid should be duly signed and submitted by Authorized Signatory. The bidder has to submit notarized of non-judicial stamp paper of appropriate value Power of Attorney having authorised signatory's nomination along with board resolution in favour of power of attorney   | Bidder has to submit the Power of Attorney of the authorized signatory  |
| 8     | Annexure - 01 | EOI COVER LETTER   |   |
| 9     | Annexure - 02 | Local Content Compliance   | Bidder has to submit the local content % for the proposed solution  |
| 10    | Annexure – 03 | CHECKLIST OF DOCUMENTS FOR BID SUBMISSION  | Bidder has to provide the filled list of checklist.   |
| 11    | Annexure – 04 | Commercial Bid   | Bid sheet ( <b>without price</b> ) to be provided by Bidder in Technical Offer.   |
| 12    | Annexure - 05 | PROFORMA FOR PERFORMANCE BANK GUARANTEE  | Proforma shall be used by the L1 bidder   |
| 13    | Annexure-06   | Non-Disclosure Agreement   | Bidder has to submit the signed   |



| S.No. | Type                          | Eligibility Criteria  | Documents Required  |
|-------|-------------------------------|---|---|
|       |                               |   | copy of NDA along with bid  |
| 14    | Annexure 07                   | Pre-Bid Agreement   | Bidder has to submit the acceptance of the pre-bid agreement however the final signing will be done with L1 bidder on mutual discussion.  |
| 15    | Annexure 08                   | Integrity pact  | Bidder has to submit the signed copy of integrity pact along with bid.  |
| 16    | Annexure 09                   | EMD BANK GUARANTEE FORMAT   | Bidder has to submit the EMD Payment in the format attached, if desire to submit in the form of BG.   |
| 17    | Annexure 10                   | AFFIDAVIT form  | Bidder has to submit notarized affidavit as per the format enclosed along with the bid. In case of Non-submission of Affidavit, BID SHALL BE SUMMARILY REJECTED.  |
| 18    | EMD payment                   | EMD payment   | Bidder has to submit the proof of EMD payment   |
| 19    | Land border sharing           | Compliance to insertion of Rule 144(xi) in the GFR, 2017 vide office OM no. 6/18/2019-PPD dated 23-July-2020 issued by Ministry of Finance, Government of India, including revisions                      | Bidder has to submit undertaking in Organization letter head.   |
| 20    | Non - Black Listing           | Bidder should not be backlisted by any State / Central Government Ministry / Department / Corporation / Autonomous Body on the last date of submission of EOI   | Bidder has to submit an undertaking on letterhead duly signed and stamped by authorized signatory for non-black listing.  |
| 21    | No - arbitration with RailTel | There should not be any ongoing or past, arbitration case(s) between 'RailTel' and 'Interested Bidder' on the last date of submission of EOI  | Bidder has to submit an undertaking on letterhead duly signed and stamped by authorized signatory for no ongoing or past, arbitration case(s) between RailTel and bidder  |
| 22    | Special Technical Compliance  | The successful bidder shall submit an undertaking from RDSO approved EI OEM, before the supply of material, to confirm compliance with extant RDSO guidelines and to meet contract specific requirements. | Bidder has to submit an undertaking on letterhead duly signed and stamped by authorized signatory, that upon RailTel being awarded work in CoR Tender, Bidder shall submit an undertaking from RDSO approved EI OEM, before the supply of material, to confirm compliance with extant RDSO guidelines and to meet contract specific requirements. |

3.7 Based on evaluation of outcome against 3.6, whoever may qualify as per 3.6 and further complying technical requirement with supporting documents of OEM MAF, datasheets (if required by CoR as per SoR of EoI Items), BOQ/BOM may be treated as technically qualified partner for Stage-1.

Bidders selected above will be treated as eligible for financial bid opening.

**3.8. Stage-II: Financial Bid: Annexure 4 and 4A of EOI is for financial quote.**

3.9. For the opened bid as per outcome of Clause 3.12 above, the bidder will be selected on the lowest quote (L-1) basis. The so selected partners will be termed as ‘Commercially Suitable Partner (hereafter referred to as ‘CSP’). Further, RailTel reserves the right to have negotiation with the CSP. In case Customer of RailTel may go for further negotiation, same is applicable on back-to-back basis with Business Associate with due diligence by committee members.

3.10. As of now, EoI response from interested partners is invited considering that the selected partner will be responsible for delivering of ‘Scope of Work’ as mentioned in the EOI document and subsequent corrigendum if any. However, RailTel at its discretion, may take- up a certain portion / percentage of ‘Scope of Work’ by communicating to the CSP at any point of time during the engagement period. (The day at which ‘CSP’ is declared, will mark the start of engagement period. The period will be valid till final outcome of this proposal is announced by CoR. In case, RailTel comes out to be winner of the CoR tender/nomination/proposal, then the engagement period will get auto-extended to the period RailTel serves CoR for the concerned tender, unless terminated earlier by RailTel as per terms and conditions mentioned in this EoI document). In this scenario, commercial engagement with the CSP will be for that portion / percentage only, which has not been taken by RailTel. Accordingly, resultant value of work will be derived on the basis of negotiated (in case) commercial bid of the CSP.

3.11. RailTel on the basis of inputs / factors available to it from various resources, past experiences of its ICT projects and on the basis of negotiated (in case) commercial bid of the CSP, will endeavor to place best techno-commercial bid in response to the pertinent CoR’s requirement. Further relationship with CSP will be based on the outcome of pertinent CoR’s requirement.

**4 Compliance Requirements and Eligibility Criteria for Interested Bidders**

4.1. The interested bidder should be an Empaneled Partner with RailTel on the last date of bid submission of EOI & has to provide relevant documents to qualify as per Clause 3.6.6 of this EOI.

4.2. The interested bidder should submit Earnest Money Deposit (EMD) if applicable, in the format as mentioned in this EOI document along with the bid.

4.3. The interested bidder should be in compliance to insertion of Rule 144(xi) in the GFR, 2017 vide office OM no. 6/18/2019-PPD dated 23-July-2020 issued by Ministry of Finance, Government of India, including revisions.

4.4. The interested bidder should submit an undertaking for maintaining of ‘Local Content Compliance’ and shall submit a certificate mentioning the ‘Local Content Percentage’ duly signed and stamped by statutory auditor or cost auditor or authorized signatory of the interested partner. This will not be a binding clause in cases where end customer has not asked Local Content Clause/Make

in India Clause in their Current RFP or proposal to be submitted to customer as an outcome of this eoi.

**4.5 The bidder has to mandatorily provide all Annexures of EOI and corrigendum(s) thereof, in the name of RailTel Corporation of India Limited addressing the tender issuing authority.**

**4.6.** The interested bidder should not be backlisted by any State / Central Government Ministry / Department / Corporation / Autonomous Body on the last date of submission of EOI.

**4.7.** There should not be any ongoing or past, arbitration case(s) between ‘RailTel or Organizations under Indian Railways’ and ‘Interested Bidder’ on the last date of submission of EOI.

**4.8.** The interested bidder shall not have a conflict of interest with one or more bidding parties. Participation of interested bidder(s) with a conflict-of-interest situation will result in the disqualification of all bids in which it is involved. A bidder may be in a conflict of interest with one or more parties if including but not limited to:

**a.** Have controlling shareholders as his/her family members viz. spouse, son, daughter, father, mother or brother etc. in common or;

**b.** Have a relationship with each other directly or through common third parties that puts them in a position to have access to information about or influence on the bid of another interested partner.

**4.9.** The interested bidder should not be seeking / extending / exploring similar arrangements / engagements with any other organization except RailTel, for the CoR tender.

**4.10.** The interested partner should have a valid Goods and Service Tax Identification Number (GSTIN), as on the last date of submission of EOI.

**4.11.** RailTel is not getting MSME/SME/Start up benefit from end customer and hence no such benefit passed to BA in any circumstances at any point of time.

**4.12.** In addition to above clauses, bid of interested bidder should be in compliance to terms and conditions and technical requirements of the pertinent CoR tender as referred above.

**Note:** The interested bidder should submit duly signed and stamped EOI cover letter as per the format mentioned at Annexure-01 of this EOI document, as unconditional submission of meeting the clauses mentioned above, from **Clause 4.1. to Clause 4.11.**

## **5 Proposal Preparation and Submission Cost**

**5.1.** The interested partner is responsible for all costs incurred in connection with participation in this EOI process, including, but not limited to, cost incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any

additional information required by RailTel to facilitate the evaluation process or all such activities related to the bid process. RailTel will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process. This EOI document does not commit to award a contract or to engage in negotiations.

## **6 Amendment to EOI Document**

6.1. At any time prior to the deadline for submission of bids, RailTel, may, for any reason can modify the EOI document by an amendment. All the amendments made in the document would be informed by displaying on RailTel's ([www.railtelindia.com](http://www.railtelindia.com)) website only. The interested bidders are advised to visit the RailTel website on regular basis for checking necessary updates. RailTel also reserves the rights to amend the dates mentioned in this EOI for bid process. RailTel may, at its discretion, extend the last date for receipt of EOI response.

## **7 Bid Validity Period**

7.1. Bid of Interested partners shall remain valid for the period of 180 days from the last date of submission of EOI, as mentioned in this EOI document.

7.2. RailTel may request for an extension of the period of validity. The validity of the 'EMD', should also be suitably extended if called upon to do so by RailTel. The request and the responses thereto shall be made in writing through e-mail communication only. Further, whenever the bid validity extension is submitted by the interested partner, it should be ensured by interested partner that their PBG related to the empanelment should have minimum validity of **90 days** from the last date of extended bid validity period.

## **8 Right to Terminate the Process**

8.1. RailTel may terminate the EOI process at any time without assigning any reason. RailTel makes no commitments, express or implied, that this process will result in a business transaction with anyone. This EOI does not constitute an offer by RailTel. The interested bidder's participation in this process may result in RailTel selecting the CSP to engage in further discussions and negotiations toward execution of a contract. The commencement of such negotiations does not, however, signify a commitment by RailTel to execute a contract or to continue negotiations. RailTel may terminate negotiations at any time without assigning any reason.

## **9 Language of Bid**

9.1. The bid prepared by the interested partner and all correspondence and documents relating to the bids exchanged by the bidder and RailTel, shall be written in English Language, provided that any

printed literature furnished by the Bidder in another language shall be accompanied by an English translation in which case, for purposes of interpretation of the bid, the English translation shall govern. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the Authorised Signatory of the interested partner.

## **10      Submission of Bid**

10.1. The interested bidder should take into account any Corrigendum to this EOI document that may have been published before submitting their EOI response. The bid is to be submitted in the mode as mentioned in this EOI document. EOI response submitted in any other mode will not be entertained.

10.2. Interested bidders in their own interest are advised to submit the EOI response well in time before the last date and hence to avoid any inconvenience at the last moment.

10.3. An Organization / Interested Bidder can submit only 'One EOI Response'. Submission of multiple EOI Response by interested bidder(s) may lead to rejection of all of its bid.

## **11      Rights to Accept / Reject any or all EOI Response**

11.1. RailTel reserves the right to accept or reject any EOI Response, and to annul the bidding process and reject all Bids at any time prior to award of the Contract, without thereby incurring any liability to the affected interested bidder(s), or any obligation to inform the affected Bidders of the ground for RailTel's action.

## **12      Payment Terms**

12.1. Payment will be on '**back-to-back**' basis and as per the payment terms mentioned in the Scope of Work (Annexure-12). No advance will be payable to BA, if any advance received by RailTel from customer.

12.2. Payment will be released after receiving the invoice for the work / services and after RailTel has received the payment from CoR for the same work / services. Any deduction / Penalties levied by CoR on invoices of RailTel will be carried **back-to-back** and will be deducted from CSP's invoices on actual basis.

12.3. Documents list required at the time of payment/invoice submission by selected bidder shall be: -

- i PO copy issued to selected vendor.
- ii Payment Proof that the end customer has paid to RailTel for the period claimed by selected bidder/vendor against invoices raised by RailTel for such services.
- iii Submission/Declaration of applicable BG amount against PO issued to selected bidder/vendor.

- iv Original Invoice for the period claimed.
- v TDS declaration.
- vi GST submission by Bidder to RailTel.
- vii Photocopy of all documents submitted by RailTel along with their invoice to customer.

### **13 Performance Bank Guarantee (PBG) and Security Deposit**

13.1. In case of successful participation by RailTel in the pertinent CoR's requirement and subsequent engagements with CSP, The CSP shall at its own expense, deposit with department, within fifteen (15) working days of the notification of award (done through issuance of the Purchase Order / Work Order etc.) and communicated through email, an unconditional and irrevocable Performance Bank Guarantee (PBG) from a a Nationalized/ Commercial Scheduled Indian Bank as per the format enclosed in this EOI, payable on demand, for the due performance and fulfilment of the contract by the CSP. This PBG will be for an amount of '5 (%)' of the contract value. The quantum of this 'percentage (%)' will be equal to the PBG % as asked by CoR from RailTel. All charges whatsoever such as premium, commission, etc. with respect to the PBG shall be borne by the CSP. Besides, if the total BG amount comes upto ₹05 Lakhs, then same may be deposited through DD/RTGS/NEFT. Along with submission of PBG, CSP needs to submit PBG issuing bank's SFMS report. The SFMS report is also to be submitted in case of renewal / extension of PBG. However, a penal interest of 12% per annum shall be charged for the delay beyond 21 (Twenty-one) days, i.e., from 22nd day after the date of issue of LOA. If the CSP fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract is liable to be terminated.

13.2. The PBG should have validity for a period of 3 months beyond the contract period including installation timeline. The PBG may be discharged / returned by RailTel upon being satisfied that there has been due performance of the obligations of the CSP under the contract. However, no interest shall be payable on the PBG. In the event, CSP being unable to service the contract for whatsoever reason, RailTel would invoke the PBG at its discern. Notwithstanding and without prejudice to any rights whatsoever of RailTel under the contract in the matter, the proceeds of the PBG shall be payable to RailTel as compensation for any loss resulting from the CSP's failure to complete its obligations under the contract. RailTel shall notify the CSP in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the CSP is in default.

13.3. RailTel shall also be entitled to make recoveries from the CSP's bills, PBG or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion,

misconstruction or misstatement.

13.4. If the service period gets extended by virtue of extension of same by CoR, PBG should also be extended accordingly.

13.5. During the contract period, RailTel may issue Purchase Order(s) for the additional services ordered by CoR (in case) to RailTel. In such scenario(s) also, Clause No. 13.1. to Clause No. 13.4. are to be followed by the CSP.

13.6 In case the CoR has sought PBG of the contract in the terms of Indemnity Bond from RailTel, the selected bidder has to provide the equivalent value PBG from scheduled Bank to RailTel. No Indemnity Bond from Selected Bidder will be accepted in lieu of PBG from Scheduled Bank.

13.7. In case CoR has sought any other types of PBG in this contract at present or in future or else Integrity Pact PBG (presently or in future), same remain applicable on selected Bidder. The Said PBG will be issued by Selected Bidder from Scheduled Bank favoring RailTel Corporation of India Limited. No Indemnity Bond in lieu of such PBG will be accepted by RailTel.

13.8 If **CoR ask for submission of PBG for value more than 5%, same also needs to be submitted by the selected BA.**

**13.9 Security Deposit (SD):** The Security Deposit shall be 5% of the contract value. The Bid Security submitted by the CSP with his tender will be retained/encashed by the RailTel as part of security for the due and faithful fulfillment of the contract by the CSP. In case of non-submission of Security Deposit by CSP, RailTel shall recover the same from the running bills @ 10% till recovery of SD.

## **14 Details of Commercial Bid / Financial Bid**

14.1. Interested partner should submit commercial bid strictly as per the format mentioned by CoR in the pertinent tender document or subsequent corrigendum (if any).

14.2. The commercial bid should only be quoted as (%) Above/Below the schedule of rates both in figures as well as in words. If there is discrepancy in quoted rates in figure and words, then value quoted in words shall be considered. The quoted rates should include all taxes direct or indirect Including Income Tax leviable under Central/State or Local Bodies Act or Rules, Octroies, Tolls, Royalties, Seigniorages, Cess and similar imposts that may be prevailing from time to time in respect of land, structures and all materials supplied in the Performance of this Contract.

14.3. The rates mentioned in the commercial bid of the CSP will form basis of commercial transaction between RailTel and bidder.

14.4. The quantity of 'Line Items' may vary at the time of placing of Purchase Order orduring the Contract Period, as communicated by CoR (in case) to RailTel. In such scenarios, the 'Per Unit' cost will be considered to arrive on contractual amount between RailTel and CSP.

14.5. It is also possible that CoR may surrender / increase, some or all of the quantities of service items ordered to RailTel during the contract period and accordingly the contractual amount between RailTel and CSP shall be considered, at sole discern of RailTel.

14.6. It is also possible that during the contract period, CoR may raise Purchase Order to RailTel for the line items (and respective quantities) which are not mentioned in the pertinent tender of CoR. In such scenario, RailTel at its sole discretion, may extend the scope of the contract with CSP by placing order to CoR, **on back-to-back basis**.

14.7. In addition to the Payment Terms, all other Contractual Terms will also be on '**back-to-back**' basis between RailTel and CSP, as mentioned in the pertinent CoR's tender. MAF (Manufacturer's Authorization Form) in the name of RailTel from the OEMs, whose product is mentioned in commercial bid format, should also be ensured by the partner. The MAF format and required content should be in-line with CoR's tender, if specifically asked by CoR in a particular format.

## **15 Duration of the Contract Period and Completion Period**

The Contract duration shall be same as of CoR's contract duration with RailTel until otherwise terminated earlier. **Indicative Completion period for the project is 12 months with Maintenance period of six months from date of completion, subject to successful participation of RailTel in the pertinent CoR's tender.** The contract duration can be renewed /extended by RailTel at its discern, in case CoR extends / renews services with RailTel by virtue of extending / renewing / new issuance of one or more Purchase Order(s) placed by CoR to RailTel.

## **16 Restrictions on 'Transfer of Agreement'**

16.1. The CSP shall not assign or transfer its right in any manner whatsoever under the contract / agreement to a third party or enter into any agreement for sub-contracting and/or partnership relating to any subject matter of the contract / agreement to any third party either in whole or in any part i.e., no sub-contracting / partnership / third party interest shall be created.

## **17 Suspension, Revocation or Termination of Contract / Agreement**

17.1. RailTel reserves the right to suspend the operation of the contract / agreement, at any time, due to change in its own license conditions or upon directions from the competent government authorities, in such a situation, RailTel shall not be responsible for any damage or loss caused or arisen out of aforesaid action. Further, the suspension of the contract / agreement will not be a cause or ground for extension of the period



of the contract / agreement and suspension period will be taken as period spent. During this period, no charges for the use of the facility of the CSP shall be payable by RailTel.

17.2. RailTel may, without prejudice to any other remedy available for the breach of any conditions of agreements, by a written notice of one (01) month or as per CoR tender condition whichever is earlier issued to the CSP, terminate/or suspend the contract /agreement under any of the following circumstances:

- a) The CSP failing to perform any obligation(s) under the contract / agreement.
- b) The CSP failing to rectify, within the time prescribed, any defect as may be pointed out by RailTel.
- c) Non adherence to Service Level Agreements (SLA) which RailTel has committed to CoR for the pertinent tender.
- d) The CSP going into liquidation or ordered to be wound up by competent authority.
- e) If the CSP is wound up or goes into liquidation, it shall immediately (and not more than a week) inform about occurrence of such event to RailTel in writing. In that case, the written notice can be modified by RailTel as deemed fit under the circumstances. RailTel may either decide to issue a termination notice or to continue the agreement by suitably modifying the conditions, as deemed fit under the circumstances.
- f) It shall be the responsibility of the CSP to maintain the agreed Quality of Service, even during the period when the notice for surrender/termination of contract / agreement is pending and if the Quality of Performance of Solution is not maintained, during the said notice period, it shall be treated as material breach liable for termination at risk and consequent of which CSP's PBG related to contract / agreement along with PBG related to the Empanelment Agreement with RailTel shall be forfeited, without any further notice.
- g) Breach of non-fulfillment of contract / agreement conditions may come to the notice of RailTel through complaints or as a result of the regular monitoring. Wherever considered appropriate RailTel may conduct an inquiry either Suo- moto or on complaint to determine whether there has been any breach in compliance of the terms and conditions of the agreement by the successful bidder or not. The CSP shall extend all reasonable facilities and shall endeavor to remove the hindrance of every type upon such inquiry. In case of default by the CSP in successful implementation and thereafter maintenance of services / works as per the conditions mentioned in this EOI document, the PBG(s) of CSP available with RailTel can be forfeited.

## **18      **Dispute Settlement****

18.1. In case of any dispute concerning the contract / agreement, both the CSP and RailTel shall try

to settle the same amicably through mutual discussion / negotiations. Any unsettled dispute shall be settled in terms of Indian Act of Arbitration and Conciliation 1996 or any amendment thereof. Place of Arbitration shall be New Delhi.

18.2. The arbitral tribunal shall consist of the Sole Arbitrator. The arbitrator shall be appointed by the Chairman & Managing Director (CMD) of RailTel Corporation of India Ltd.

18.3. All arbitration proceedings shall be conducted in English.

## **19      Governing Laws**

19.1. The contract shall be interpreted in accordance with the laws of India. The courts at New Delhi shall have exclusive jurisdiction to entertain and try all matters arising out of this contract.

## **20      Statutory Compliance**

20.1. During the tenure of this Contract nothing shall be done by CSP in contravention of any law, act and/ or rules/regulations, there under or any amendment thereof and shall keep RailTel indemnified in this regard.

20.2. The Bidder shall comply and ensure strict compliance by his/her employees and agents of all applicable Central, State, Municipal and Local laws and Regulations and undertake to indemnify RailTel, from and against all levies, damages, penalties and payments whatsoever as may be imposed by reason of any breach or violation of any law, rule, including but not limited to the claims against RailTel or its Customer under Employees Compensation Act, 1923, The Employees Provident Fund and Miscellaneous Provisions Act, 1952, The Contract Labour (Abolition and Regulation) Act 1970, Factories Act, 1948, Minimum Wages Act and Regulations, Shop and Establishment Act and Labour Laws which would be amended/modified or any new act if it comes in force whatsoever, and all actions claim and demand arising therefrom and/or related thereto.

## **21      Intellectual Property Rights**

21.1. Each party i.e., RailTel and CSP, acknowledges and agree that the other party retains exclusive ownership and rights in its trade secrets, inventions, copyrights, and other intellectual property and any hardware provided by such party in relation to this contract / agreement.

21.2. Neither party shall remove or misuse or modify any copyright, trade mark or any other proprietary right of the other party which is known by virtue of this EoI and subsequent contract in any circumstances.

## **22 Severability**

22.1. In the event any provision of this EOI and subsequent contract with CSP is held invalid or not enforceable by a court of competent jurisdiction, such provision shall be considered separately and such determination shall not invalidate the other provisions of the contract and Annexure/s which will be in full force and effect.

## **23 Force Majeure**

23.1. If during the contract period, the performance in whole or in part, by other party, of any obligation under this is prevented or delayed by reason beyond the control of the parties including war, hostility, acts of the public enemy, civic commotion, sabotage, Act of State or direction from Statutory Authority, explosion, epidemic, quarantine restriction, strikes and lockouts (as are not limited to the establishments and facilities of the parties), fire, floods, earthquakes, natural calamities or any act of GOD (hereinafter referred to as EVENT) , provided notice of happenings of any such event is given by the affected party to the other, within twenty one (21) days from the date of occurrence thereof, neither party shall have any such claims for damages against the other, in respect of such non-performance or delay in performance. Provided service under this contract shall be resumed as soon as practicable, after such EVENT comes to an end or ceases to exist.

23.2. In the event of a Force Majeure, the affected party will be excused from performance during the existence of the force Majeure. When a Force Majeure occurs, the affected party after notifying the other party will attempt to mitigate the effect of the Force Majeure as much as possible. If such delaying cause shall continue for more than sixty (60) days from the date of the notice stated above, the party injured by the inability of the other to perform shall have the right, upon written notice of thirty (30) days to the other party, to terminate this contract. Neither party shall be liable for any breach, claims, and damages against the other, in respect of non-performance or delay in performance as a result of Force Majeure leading to such termination.

## **24 Indemnity**

24.1. The CSP agrees to indemnify and hold harmless RailTel, its officers, employees and agents (each an "Indemnified Party") promptly upon demand at any time and from time to time, from and against any and all losses, claims, damages, liabilities, costs (including reasonable attorney's fees and disbursements) and expenses (collectively, "Losses") to which the Indemnified party may become subject, in so far as such losses directly arise out of, in any way relate to, or result from:

- a) Any mis-statement or any breach of any representation or warranty made by CSP or
- b) The failure by the CSP to fulfill any covenant or condition contained in this contract by any

employee or agent of the Bidder. Against all losses or damages arising from claims by third Parties that any Deliverables (or the access, use or other rights thereto), created by CSP pursuant to this contract, or any equipment, software, information, methods of operation or other intellectual property created by CSP pursuant to this contract, or the SLAs (i) infringes a copyright, trade mark, trade design enforceable in India, (ii) infringes a patent issued in India, or (iii) constitutes misappropriation or unlawful disclosure or use of another Party's trade secrets under the laws of India (collectively, "Infringement Claims"); or

- c) Any compensation / claim or proceeding by any third party against RailTel arising out of any act, deed or omission by the CSP or
- d) Claim filed by a workman or employee engaged by the CSP for carrying out work related to this agreement. For the avoidance of doubt, indemnification of Losses pursuant to this section shall be made in an amount or amounts sufficient to restore each of the Indemnified Party to the financial position it would have been in had the losses not occurred.

24.2. Any payment made under this contract to an indemnity or claim for breach of any provision of this contract shall include applicable taxes.

## **25      Limitation of Liability towards RailTel**

25.1. The CSP liability under the contract shall be determined as per the Law in force for the time being. The CSP shall be liable to RailTel for loss or damage occurred or caused or likely to occur on account of any act of omission on the part of the CSP and its employees (direct or indirect), including loss caused to RailTel on account of defect in goods or deficiency in services on the part of CSP or his agents or any person / persons claiming through under said CSP, However, such liability of the CSP shall not exceed the total value of the contract.

25.2. This limit shall not apply to damages for bodily injury (including death) and damage to real estate property and tangible personal property for which the CSP is legally liable.

## **26      Confidentiality cum Non-disclosure**

26.1. The Receiving Party agrees that it will not disclose to third party/parties any information belonging to the Disclosing Party which is provided to it by the Disclosing Party before, during and after the execution of this contract. All such information belonging to the Disclosing Party and provided to the Receiving Party shall be considered Confidential Information. Confidential Information includes prices, quotations, negotiated issues made before the execution of the contract, design and other related information. All information provided by Disclosing Party to the Receiving Party shall be considered

confidential even if it is not conspicuously marked as confidential.

26.2. Notwithstanding the foregoing, neither Party shall have any obligations regarding non-use or non-disclosure of any confidential information which:

- a) Is already known to the receiving Party at the time of disclosure;
- b) Is or becomes part of the public domain without violation of the terms hereof;
- c) Is shown by conclusive documentary evidence to have been developed independently by the Receiving Party without violation of the terms hereof;
- d) Is received from a third party without similar restrictions and without violation of this or a similar contract.

26.3. The terms and conditions of this contract, and all annexes, attachments and amendments hereto and thereto shall be considered Confidential Information. No news release, public announcement, advertisement or publicity concerning this contract and/or its contents herein shall be made by either Party without the prior written approval of the other Party unless such disclosure or public announcement is required by applicable law's

26.4. Notwithstanding the above, information may be transmitted to governmental, judicial, regulatory authorities, if so, required by law. In such an event, the Disclosing Party shall inform the other party about the same within 30 (thirty) Days of such disclosure.

26.5. This Confidentiality and Non- Disclosure clause shall survive even after the expiry or termination of this contract.

## **27      Assignment**

27.1. Neither this contract nor any of the rights, interests or obligations under this contract shall be assigned, in whole or in part, by operation of law or otherwise by any of the Parties without the prior written consent of each of the other Parties. Any purported assignment without such consent shall be void. Subject to the preceding sentences, this contract will be binding upon, inure to the benefit of, and be enforceable by, the Parties and their respective successors and assigns.

## **28      Insurance**

The CSP agrees to take insurances to cover all the elements of the project under this EOI including but not limited to Manpower, Hardware, Software etc. as per CoR tender specified terms. Project insurance covering all aspects of the project needs to be taken by the CSP.

## **29      Exit Management**

### **29.1. Exit Management Purpose**

- a) This clause sets out the provision, which will apply during Exit Management period. The

parties shall ensure that their respective associated entities carry out their respective obligation set out in this Exit Management Clause.

- b) The exit management period starts, in case of expiry of contract, at least 03 months prior to the date when the contract comes to an end or in case of termination contract, on the date when the notice of termination is sent to the CSP. The exit management period ends on the date agreed upon by RailTel or Three (03) months after the beginning of the exit management period, whichever is earlier.

**29.2. Confidential Information, Security and Data:** CSP will promptly, on the commencement of the exit management period, supply to RailTel or its nominated agencies the following (if asked by RailTel in writing):

- a) Information relating to the current services rendered and performance data relating to the performance of the services; documentation relating to the project, project's customized source code (if any); any other data and confidential information created as part of or is related to this contract;
- b) All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable RailTel and its nominated agencies, or its replacing vendor to carry out due diligence in order to transition the provision of the services to RailTel or its nominated agencies, or its replacing vendor (as the case may be).

**29.3. Employees :** Promptly on reasonable request at any time during the exit management period, the CSP shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide RailTel a list of all employees (with job titles and communication address), dedicated to providing the services at the commencement of the exit management period; To the extent that any Transfer Regulation does not apply to any employee of the CSP, RailTel or the replacing vendor may make an offer of contract for services to such employees of the CSP and the CSP shall not enforce or impose any contractual provision that would prevent any such employee from being hired by RailTel or any replacing vendor.

**29.4. Rights of Access to Information:** Besides during the contract period, during the exit management period also, if asked by RailTel in writing, the CSP shall be obliged to provide an access of information to RailTel and / or any Replacing Vendor in order to make an inventory of the Assets (including hardware / software / active / passive), documentations, manuals, catalogues, archive data, Live data, policy documents or any other related material.

**Note:** RailTel at its sole discern may not enforce any or all clauses / sub-clauses under the 'Exit Management' clause due to administrative convenience or any other reasons as deemed fit.

**30 Changes in Contract Agreement, Variation in Quantity and Shramik Kalyan Portal**

30.1. No modification of the terms and conditions of the Contract Agreement shall be made except by written amendments signed by the both CSP and RailTel.

30.2. **Variation in Quantity:** Variation shall be applicable as per the requirement of Customer of RailTel

30.3. **Updation of Labour data on Railway's Shramik kalyan Portal-** All terms & conditions are applicable same as per CoR tender.

30.4. All terms and conditions shall be applicable on back to back basis as per the final acceptance/negotiation with the customer of RailTel.

**31 Liquidated Damage (LD):**

Liquidation Damages (LD) shall be governed by the end customer RFP / tender terms and shall be applicable on bidder as per actual on back-to-back basis. Any deduction in payment on grounds of LD shall be carried to bidder as per figures actually charged by end customer on back-to-back basis..

**32 Waiver**

Except as otherwise specifically provided in the contract, no failure to exercise or delay in exercising, any right, power or privilege set forth in the contract will operate as a waiver of any right, power or privilege.

**EOI COVER LETTER** (On Organization Letter Head)

EoI Ref No.:

Date:

To,  
Executive Director (Mktg) & TM Jaipur,  
RailTel Corporation of India Limited.

Dear Sir/Madam,

1. I, the undersigned, on behalf of M/s ....., having carefully examined the referred EOI offer to participate in the same, in full conformity with the said EOI and all the terms and conditions thereof including corrigendum issued till last date of submission of EOI. It is also undertaken and submitted that we are in abidance of Clause 4 (from Clause 4.1 to Clause 4.11) of EOI.
2. I agree to abide by this Proposal, consisting of this letter, our Pre-qualification, Technical and Commercial Proposals, for a period of 180 days from the date fixed for submission of Proposals as stipulated in the EOI and modifications resulting from contract negotiations, and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.
3. I acknowledge that the Authority will be relying on the information provided in the Proposal and the documents accompanying the Proposal for selection of the Commercially Suitable Partner (CSP) for the aforesaid Service, and we certify that all information provided therein is true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying the Proposal are true copies of their respective originals.
4. I undertake, if our Bid is accepted, to commence our services as per scope of work as specified in the contract document.
5. Until a formal Purchase Order or Contract is prepared and executed, this Bid and supplement / additional documents submitted (if any), together with your written acceptance thereof in your notification of award shall constitute a binding contract between us.
6. I hereby undertake and give unconditional acceptance for compliance of all terms & conditions against this EOI based on customer's requirement. I understand that all clauses of customer RFP are applicable on back-to-back basis and SLA/Penalty/LD deducted by customer will be applicable on our payments on back-to-back basis.
7. I hereby undertake that there will be no deviation from the Terms and Conditions of EOI.

Signature of Authorized Signatory

Name

Designation



**Local Content Compliance**  
(On Organization Letter Head)

EoI Ref No.:

Date:

To,  
Executive Director (Mktg) & TM Jaipur,  
RailTel Corporation of India Limited.

Dear Sir/Ma'am,

I, the undersigned, on behalf of M/s ....., hereby submits that our technical solution for the 'Scope of Work' mentioned under the EoI document is in compliance of local content requirement and makes us equivalent to 'Class-I local supplier' / 'Class-II local supplier' (mention whichever is applicable) for the EoI under reference, as defined under the order No. P-45021/2/2017-PP(BE-II) dt. 04-June-2020 issued by Ministry of Commerce and Industry, Govt. of India.

I hereby certify that M/s ..... fulfills all requirements in this regard and is eligible to be considered and for the submitted bid Local Content Percentage is % (write in figures as well as in words).

I hereby acknowledge that in the event of acceptance of bid of M/s ..... on above certificate and if the certificate is found to be false at any stage, the false certificate would be a ground for immediate termination of contract and further legal action in accordance with the Law, including but not limited to the encashment of Bank Guarantee related to Empanelment and Performance Bank Guarantee (PBG), as available with RailTel, related to this EoI.

Signature of Authorised Signatory

Name

Designation

**CHECKLIST OF DOCUMENTS FOR BID SUBMISSION**

| <b>S. No.</b> | <b>Document</b>   | <b>Document Enclosed (Yes/No)</b> | <b>Pg.No.</b> |
|---------------|---|-----------------------------------|---------------|
| 1             | Proof of submission of Tender Processing Fee and EMD.   |                                   |               |
| 2             | Authorization Letter/ POA and all Annexures/ Appendices given in the EOI documents.   |                                   |               |
| 3             | All undertakings on company letter head as required/ stated in the EOI document duly signed and stamped by the authorised signatory.            |                                   |               |
| 4             | The copy of EOI and subsequent addendum/ corrigendum duly Signed and Stamped by the Authorised Signatory of Bidder                              |                                   |               |
| 5             | All Annexure/ Appendices/Formats/ Declarations as per <b>CoR's RFP for tender ref. no: _____</b> addressing to RailTel's EOI issuing Authority. |                                   |               |
| 6             | Compliance of eligibility criteria related documents as per Clause 3 and supporting documents.  |                                   |               |
| 7             | Any relevant document found suitable by bidder  |                                   |               |
| 8             | Empanelment certificate issued by RailTel to BA.  |                                   |               |

Note:

1. The technical bid should have a 'Index' at the starting and all pages of bid should be Serially numbered and should be traceable as per the 'Index'.
2. All the submitted documents should be duly stamped and signed by the Authorized Signatory at each page.
3. The above checklist is indicative only. RailTel may ask for additional documents from the bidders, as per the requirement.

**Commercial Bid**

(On Organization Letter Head) TO BE UPLOADED IN FINANCIAL OFFER

EoI Ref No.:

Date:

To,

Executive Director (Mktg) & TM Jaipur,  
RailTel Corporation of India Limited.**1. NIT HEADER**

|                     |  |
|---------------------|--|
| <b>Name of Work</b> | <b>Part supply of material and execution of indoor-outdoor work related to provision of Electronic interlocking and MSDAC based Automatic Block Signalling system between Manheru- Bawani Khera in c/w doubling of MHU-BWK &amp; BNW-BNWC sections of Bikaner Division of North Western Railway. The work involves provision of new Electronic Interlockings at MANHERU, BHIWANI Junction (In Second Phase), BAWANI KHERA, BHIWANI BYE PASS JUNCTION CABIN Stations and at Five Auto Signalling Huts (ALH) to control mid -section auto signals and 7 Nos of mid-section LC gates. The work includes modification in M/s Kyosan Make existing EI of BHIWANI Junction (in first phase) to suit patch doubling in MHU-BNW Section. The work also includes provision of dual MSDAC in Auto Section and single MSDAC in BNW Yard along with associated works like trenching &amp; laying of signalling and Telecom cables in pre-fabricated ducts/DWC/GI pipes, supply- installation of point machines, Apparatus cases, Electric Lifting Barrier Gate, Signals, Track circuit equipment, Earthing material, Data loggers, ELD, FACS, AFDAS, IoT based RDPMS, Passenger Amenity Telecom Items etc.</b> |
|---------------------|--|

**2. Schedule**

| Schedule A-SOR ITEMS   |         |  |         |     |          |           |
|--|---------|--|---------|-----|----------|-----------|
| CHAPTER-1: Electronic Interlocking, Design of circuits and drawings. |         |  |         |     |          |           |
| SN   | Item No | Description of Item  | Unit    | Qty | Rate     | Amount    |
| 1  | 1010500 | Installation, wiring, testing and commissioning of EI System with 'Hot Standby' architecture as supplied upto 6 (six) line station. It includes transportation of material from consignee's depot to the site, erection and grouting of EI Relay Racks, fixing and wiring of all the interfacing relays (Vital & Non-Vital), installation and wiring of Microprocessor equipments, interface equipments, power supply equipments and all other associated accessories to make complete EI system to be functional. Note: (i) Technical Requirements are attached with tender document (ii) Contractor has to arrange simulator/simulation testing panel for testing and commissioning by Selection Table and Square Sheet for each Signalling function.(iii) Installation, wiring, testing and commissioning of EI system will be done by OEM after following all the guidelines/directives issued by RDSO from time to time. Inspection: Consignee Inspection charges: None Payment terms: 100% after commissioning | Station | 3   | 557295.3 | 1671885.9 |
| 2  | 1010900 | Supply of work station note book as per Technical Specifications . It also includes supply of Laser Printer (Only branded). The workstation should be capable of reconfiguring the system in case of any alteration in yard interlocking in future. Technical Specifications should be attached with the tender document by Tendering authority. Inspection: Consignee Inspection charges: None Payment  | Station | 7   | 77515.27 | 542606.87 |

|   |         |  |          |    |          |           |
|---|---------|--|----------|----|----------|-----------|
|   |         | terms: 100% after supply   |          |    |          |           |
| 3 | 1011100 | <p>Supply of Instruments and Tool Kits required for Trouble Shooting and repair of hardware and software for EI system should be supplied for stations . (This includes tools required for EI maintenance sorts of crimping, insertion, removal, general purpose tools like screw drivers, spanners, PCB extractor, temp. controlled soldering iron, wire cutter, nose pliers etc. &amp; measuring instruments with carrying case/ holders/ cabinet for technicians/ J.E. for testing, Maintenance and repair at site). Each set comprises of the following :-</p> <ul style="list-style-type: none"> <li>* Crimping tool for all types of special cable assembly used in EI system.</li> <li>* Insertion tool for all types of special cable assembly used in EI system.</li> <li>* Removal tool for all types of special cable assembly used in EI system.</li> <li>* Digital multimeter (Fluke 111 or better)</li> <li>* Steel cabinet/ Almira, Size: 1980mm height, 915 mm width and 485 mm depth (Godrej Make/Jalaram) of good quality to store tool, spare cards and documents.</li> <li>* Steel Book rack Size: 1850mm height, 900 mm width and 316 mm depth for keeping documents. (Godrej Make/Jalaram)</li> <li>* Clamp Earth Tester.(as per specs mentioned in tender document.)</li> <li>* Clamp Current Meter (fluke 362 or superior)</li> </ul> <p>Inspection: Consignee Inspection charges: None Payment terms: 100% after supply</p> | Set      | 3  | 112177.9 | 336533.62 |
| 4 | 1011200 | <p>Training of Technician/ Jr. Engineer for installation, Commissioning, Testing, Repairs &amp; Troubleshooting of EI system. (Hard copies of training material/ course modules to be given to each participant). Inspection: Consignee Inspection charges: None Payment terms: 100% after execution</p>   | Man-Days | 28 | 986.8457 | 27631.678 |
| 5 | 1011300 | <p>Design, preparation &amp; supply of drawings in computer print copies and original tracing in AUTO CAD FORMAT for Electronic Interlocking at each station. After completion of the work, the completion drawings incorporating completion details are to be supplied as per Technical Specifications given in tender document (upto 6 Line). The technical specifications are as per ANNEXURE 1.13 of SOR. Inspection: Consignee Inspection charges: None Payment terms: 100% after execution</p>   | Station  | 3  | 156977   | 470930.86 |
| 6 | 1011400 | <p>Training of Officers for installation, Commissioning, Testing, Repairs &amp; Troubleshooting of EI system.(Hard copies of training material/ course modules to be given to each participant). Inspection: Consignee Inspection charges: None Payment terms: 100% after execution</p>  | Man-Days | 10 | 978.7277 | 9787.2773 |
| 7 | 1011600 | <p>Installation, wiring, testing and commissioning of embedded fanless PC based VDU control terminal as per RDSO spec. No. RDSO/SPN/192/2019 Ver. 2 or latest &amp; RDSO TAN No. - STS/E/TAN/3007 version 1 dated:02.11.12 . Note: (i) Technical requirements shall be mentioned in the tender document by tendering authority. Inspection: Consignee Inspection charges: None Payment terms:100% after commissioning.</p>   | Numbers  | 8  | 91402.34 | 731218.71 |

|    |         |   |         |    |          |           |
|----|---------|---|---------|----|----------|-----------|
| 8  | 1011700 | Supply of embedded fanless PC based Maintenance terminal as per RDSO spec. No. RDSO/SPN/192/2019 Ver. 2 or latest & RDSO TAN No. - STS/E/TAN/3007 version 1 dated:02.11.12 . The size of VDU shall be minimum 42 inch. Note: (i) Technical requirements shall be mentioned in the tender document by tendering authority. (ii) One table of suitable size alongwith revolving chair should be supplied with Maintenance terminal. Inspection: RDSO Inspection charges: Borne by Railways Payment terms:100% after supply                          | Numbers | 8  | 344141.7 | 2753133.3 |
| 9  | 1011800 | Installation, wiring, testing and commissioning of embedded fanless PC based Maintenance terminal as per RDSO spec. No. RDSO/SPN/192/2019 Ver. 2 or latest & RDSO TAN No. - STS/E/TAN/3007 version 1 dated:02.11.12 . Note: (i) Technical requirements shall be mentioned in the tender document. Inspection: Consignee Inspection charges: None Payment terms:100% after commissioning.  | Numbers | 11 | 86035.42 | 946389.57 |
| 10 | 1011900 | Supply of offline domestic sine wave type inverter of 1000VA or above with suitable rating tubular batteries and UPS make of Su-KAM, Luminous, Microtek or other reputed brand for the backup of VDUs of EI. Inspection: Consignee Inspection charges: None Payment terms:100% after Supply.  | Numbers | 11 | 18606.26 | 204668.81 |
| 11 | 1012000 | Installation, testing and commissioning of offline domestic sine wave type inverter of 1000VA or above with suitable rating tubular batteries and UPS make of Su-KAM, Luminous, Microtek or other reputed brand for the backup of VDUs of EI. Inspection: Consignee Inspection charges: None Payment terms:100% after commissioning.  | Numbers | 11 | 4651.564 | 51167.202 |
| 12 | 1012100 | Preparation of SWR literature in english alongwith associated mid-section interlocked gate with all corrections as per approved SWRD & approved SIP. For this all technical corrections, editing, grammatical correction etc. are to be carried out and one rough print to be given to railways for approval before printing, as required for final processing of CRS sanction. This also includes preparation of maintenance cards in format provided by Rly. Inspection: Consignee Inspection charges: None Payment terms:100% after execution. | Station | 5  | 3210.257 | 16051.285 |
| 13 | 1012200 | Translation of Station Working Rules from english to hindi and framing out in DIGLOT form (or similar software )as per extant Rly practice. The required SWR in english will be provided by the contractor and has been covered separately in item no. 1.21 of Chapter 1 of this SOR. Inspection: Consignee Inspection charges: None Payment terms:100% after execution.  | Station | 5  | 3994.895 | 19974.474 |
| 14 | 1012300 | Making photocopies & binding of the SWR literature in English/hindi/Diglot form as per Railway practice. Inspection: Consignee Inspection charges: None Payment terms:100% after execution.   | Set     | 40 | 159.2541 | 6370.1649 |
| 15 | 1012400 | Supply of maintainer's furniture of godrej make or superior and each set consist of(i) executive revolving bearing series low back-floating chair with normal arms cushioned chair-01 Nos. (ii) Executive table size 1650x900x728 mm with 3 drawers one side locker- 01 no .(iii) visitor chair seat & back cushion with high density foam with plastic pvc handle capsule type painted back-03 nos. Inspection: Consignee Inspection charges: None Payment terms:100% after supply.  | Set     | 15 | 20506.14 | 307592.04 |

|    |         |  |           |     |          |           |
|----|---------|--|-----------|-----|----------|-----------|
| 16 | 1012600 | <p>Design of circuits and plans to suit layout given in the signalling plan of IBS/ABS/LC GATE. All plans and wiring diagram shall be prepared on Auto cad Drawing and supplied with CD. This will include supply of Control cum Indication panel diagram, Route section plan, square sheet, wiring diagrams, Relay rack/Relay arrangements, Bus bar details, Fuse analysis, contact analysis, Relay room tag block analysis, panel tag block analysis, Power panel diagram, IPS wiring diagram, Auto change over diagram, Power equipment arrangement with program switch, Block circuit wiring diagram, Digital Axle counter wiring diagram and all other relevant drawings. NOTE: The contractor shall initially supply 2 sets of documents (Paper Prints) for approval of Railways. Railway will return one set to the contractor duly approved with alterations/corrections, if any. The contractor shall incorporate Railways' alterations/ corrections/ comments, if any, in the tracing &amp; CD without any deviation and submit all the tracings and Final CD complete with all respect for Approval of Railways. After Approval of Railways on the tracings, the contractor shall submit 3 sets of final approved diagrams to the Railways within 15 days. He shall ensure the each sheet has a block for signature of railway official as well as a block for signature of firm, duly signed by the authorized signatory of the firm. The name of the work as given by Railways shall be written on every sheet under the work column. All the drawing shall be supplied in a good quality folder for each IBS/ABS/LC Gate. Inspection: Consignee Inspection charges: None Payment terms:100% after execution.</p> | Lot       | 7   | 12827.13 | 89789.904 |
| 17 | 1012800 | <p>Preparation and supply of laminated one set of all the completion plans including circuit diagrams and indoor as well as outdoor completion documents on standard 75-micron polyester film for station in Auto CAD. 6 (Six) sets xerox copies will also be provided for each of the documents mentioned below: Cable Route Plan, Cable Core Chart, Location details plan for all the locations, Cable termination details, Signalling Plan, SWR Diagram, Wiring Diagrams, Selection table, Locking table, Contact analysis, Fuse and Tag Block analysis of Relay Rack, CT rack, Control cum Indication Panel/VDU Diagram, Power Panel Diagram, Track circuit plan, rack erection plan and Junction Box details etc. Inspection: Consignee Inspection charges: None Payment terms:100% after execution.</p>  | Sheet     | 700 | 143.6873 | 100581.13 |
| 18 | 1013000 | <p>Addition/alteration in existing relay room wiring. It includes supply of PVC insulated indoor Railway signalling cable @40&lt;45@Core/40-Core) of (1/0.6) sqmm as per RDSO Spec.No.IRS/S-76/89 (Amnd.2 or latest) for wiring between relay room and SM's/Panel room &amp; Relay room to DP in SM office for block working. This also includes supply of PVC insulated jumper wires of multi strand 16/2 mm, tinned in all colours as per RDSO Specn.No.IRS-S-76/89(Amnd.2 or latest). This item will include bringing all the power supplies from power room to respective bus bars on relay racks by using 10/6 sqmm copper flexible wire as per instructions of engineer incharge. This will include wiring between control panel and relay room if required. All wiring will be done as per standard practice of North Western Railway with neat dressing &amp; threading. The item includes supply &amp; wiring of tag block, fuse with bases(G- Type and ND Type) and all other related material required for complete indoor wiring in relay room. Inspection:</p>  | Per Relay | 120 | 467.5391 | 56104.695 |

|         |   | Consignee Inspection charges: None Payment terms:100% after commissioning.  |         |     |          |          |
|---------|---|---|---------|-----|----------|----------|
| 19      | 1013100   | Complete Indoor wiring at Mid Section Interlocked LC Gate (OSL). It includes supply of PVC insulated indoor Railway signalling cable @40<45@Core/40-Core) of (1 / 0.6) sqmm as per RDSO Speen.No.IRS/S-76/89 (Amnd.2 or latest) for wiring between relay room and SM's/Panel room & Relay room to DP in SM office for block working. This also includes supply of PVC insulated jumper wires of multi strand 16/.2 mm, tinned in all colours as per RDSO Speen.No.IRS-S-76/89 (Amnd. 2 or latest). This item will include bringing all the power supplies from power room to respective bus bars on relay racks by using 10/6 sqmm copper flexible wire as per instructions of engineer incharge. This will also include wiring between control panel and relay room if required. All wiring will be done as per standard practice of North Western Railway with neat dressing & threading. The item includes supply & wiring of tag block, fuse with bases(G- Type and ND-Type) and all other related material required for complete indoor relay room wiring at mid section interlocked LC Gate. Inspection: Consignee Inspection charges: None Payment terms:100% after commissioning. | LC Gate | 7   | 8582.184 | 60075.29 |
|         |   |   |         |     |          |          |
| Item- 2 | CHAPTER-2: DATA Logger, RTU, FEP, CMU, FAS and Networking accessories |   |         |     |          |          |
| S No.   | Item No   | Description of Item   | Unit    | Qty | Rate     | Amount   |

|   |         |   |         |   |          |           |
|---|---------|---|---------|---|----------|-----------|
| 1 | 2010200 | Supply of Micro Processor based Data Logger System with 1280 digital and 32 analog inputs as per RDSO Spec. No. IRS (S) 99/2006 or latest with laser printer 22 ppm (Only branded HP/Brother/Canon). It includes supply of all the items required for complete indoor relay room wiring from data logger to relay rack tag blocks, drawing/extension of power supply upto Data Logger. It includes relay room door lock checking arrangement, commercial power supply monitoring arrangement & monitoring of DG sets, ELD , IPS, UFSBI, BI ,interlinking and networking of Data logger. It also includes supply of leased line MODEM , suitable online UPS (minnum 6 hours backup) and other interfacing cards, if required for networking of Data Logger.This also includes supply of one no. composite computer and printer table (Godrej work station table or similar) for keeping processor module and one number Godrej operator chair Model PCH7001 or similar. Note: Total numbers of relays and other signalling functions/gears required to be wired as per list circulated vide RDSO Letter No.STS/E/Data logger dtd.12.09.2011 or latest g u i d e l i n e s . Inspection: RDSO Inspection charges: Borne by Railways Payment terms:100% after supply   | Numbers | 4 | 433537.4 | 1734149.6 |
| 2 | 2010300 | Installation, wiring, testing & commissioning of Micro Processor based Data Logger System with 1280/ 4096 digital and 32 analog inputs as per RDSO Spec. No. IRS (S) 99/2006 or latest It cover complete indoor relay room wiring from data logger to relay rack tag blocks, drawing/extension of power supply upto Data Logger. It includes relay room door lock checking arrangement, commercial power supply monitoring arrangement & DG sets,ELD , IPS,UFSBI, BI interlinking and networking of Data logger. All material required for wiring, networking, power supply monitoring, door- locking arrangement etc will be supplied by contractor.. Note: Total numbers of relays and other signalling functions/gears required to be wired as per list circulated vide RDSO Letter No.STS/E/Data logger dtd.12.09.2011 or latest guidelines. Networking of data logger includes extraction of data report from test room. For networking, required communication channel(Quad/ OFC cable) will be arranged/provided by Rly in SM/ASM's room or in OFC Porta Cabin and it will be extended by contractor upto location of data logger by using CAT-5/6 telecom cable with proper casing and capping. The contractor will supply all the material like CAT-5/6 telecom cable, casing & capping, nuts, bolts etc. The final commissioning will be done after filling up of Pre- Commissioning checklist (circulated by RDSO) with the OEM representative. Inspection: Consignee, Inspection charges: None Payment terms:100% after commissioning | Numbers | 4 | 108384.3 | 433537.39 |
| 3 | 2011000 | Supply of Failure Analysis & Fault Diagnostic software for data logger upto 4096 digital inputs at a station. Inspection: Consignee, Inspection charges: None Payment terms:100% after supply.  | Set     | 4 | 34900.33 | 139601.31 |
| 4 | 2011100 | Installation and commissioning of Failure Analysis & Fault Diagnostic software for data lo g g e r upto 4096 digital inputs. Inspection: Consignee, Inspection charges: None Payment terms:100% after commissioning   | Set     | 4 | 8725.078 | 34900.311 |



|         |   |   |         |     |          |           |
|---------|---|---|---------|-----|----------|-----------|
| 5       | 2011400   | Supply of Failure Analysis System (FAS) as per Technical Specifications. The specification of FAS should be got approved from the Engineer in charge before supply. Note: The Specification of FAS shall be as per technical specification given in contract Agreement or higher version as approved by Engineer In-Charge.(Technical specification shall be provided in tender documents.) Inspection: Consignee Inspection charges: Borne by Railways Payment terms:100% after supply                             | Numbers | 4   | 146264.9 | 585059.5  |
| 6       | 2011500   | Installation, testing and commissioning of Failure Analysis System (FAS) as per Technical Specifications. The specification of FAS should be got approved from the Engineer in charge before supply. Note: The Specification of FAS shall be as per technical specification given in contract Agreement or higher version as approved by Engineer In-Charge.(Technical specification shall be provided in tender documents.) Inspection: Consignee, Inspection charges: None Payment terms:100% after commissioning | Numbers | 4   | 36566.22 | 146264.87 |
| 7       | 2011800   | Supply of T-Networking equipments suitable for Networking to the existing Data Logger equipments. This includes supply of all equipment / accessories required for the purpose  | Set     | 2   | 21748.03 | 43496.054 |
|         |   | e.g. modems and network accessories. Inspection: Consignee, Inspection charges: None  |         |     | 0        | 0         |
|         |   | Payment terms:100% after supply   |         |     | 0        | 0         |
| 8       | 2011900   | Commissioning of T-Networking suitable for Networking to the existing Data Logger equipments. This includes supply of all equipment / accessories required for the purpose. Inspection: Consignee, Inspection charges: None Payment terms:100 % after commissioning   | Set     | 2   | 5437.005 | 10874.009 |
|         |   |   |         |     |          |           |
|         |   |   |         |     |          |           |
| Item- 3 | CHAPTER-3: Indoor Relays, Timers, Flasher, KLCR |   |         |     |          |           |
| S No.   | Item No   | Description of Item   | Unit    | Qty |          |           |
| 1       | 3010200   | Supply of Relay fail safe electronic time delay device with fixed timing (0 -120) seconds and conforming to RDSO Specn.No.IRS:S-61/2000 with Amnd.1 or latest mounted on Q-series relay base & covered complete with connectors, retaining clip etc.The interlocking code for this unit shall be ""AFGKY"". Inspection authority:- RDSO Inspection charges:- Borne by Railways Payment Terms:- 100% after supply.   | Numbers | 36  | 1638.457 | 58984.437 |
| 2       | 3011400   | Supply of Sealing wire used for sealing of signaling relays & equipments. Inspection authority:- Consignee Inspection charges:-None Payment Terms:- 100% after supply.  | Kg      | 5   | 156.3549 | 781.77431 |
| 3       | 3012500   | Supply of Key Lock Checking Relay (KLCR) working on 24V DC, AC Immunized with different ward combinations and contact configuration 4F/4B with 2 extra ward plates and with case, RDSO spec no. RDSO/SPN/219/2016 ver 1.0 or latest, confirming to IRS S-23, S-34 & S@45<44@ IRS S:46. Inspection authority:- For bare relay - RDSO, for key lock housing- consignee Inspection charges:-Bornee by Railways Payment Terms:- 100% after supply.  | Numbers | 80  | 8421.235 | 673698.82 |
|         |   |   |         |     |          |           |
|         |   |   |         |     |          |           |

| Item- 4 | CHAPTER-4: Relay racks, CT racks, Tag Blocks, Terminal, Fuses, Indoor cables and Jumper wires |   |           |     |          |           |
|---------|---|---|-----------|-----|----------|-----------|
| S No.   | Item No   | Description of Item   | Unit      | Qty |          |           |
| 1       | 4010700   | Supply of wiring material in relay room for potential free relay contacts for digital & analog inputs (1280 digital inputs and 32 analog inputs). It includes supply of PVC insulated indoor Railway Signalling cable (1/0.6 sqmm dia), 60- Core/40- Core/Single Core as per RDSO Specn.No.IRS:S-76/89(Amnd.3) or latest, PVC insulated jumper wires multi strand, tinned in all colours as per RDSO Specn.No. IRS: S-76/89 (Amnd.3) or latest. The item also includes supply & wiring of Modular disconnect terminals /Tag Blocks as per RDSO Specn.No.IRS:S-77/2006 (Rev.1) or latest and RDSO Drg.No.SA-24751 or latest. The wiring for getting potential free contacts of relays for complete PI/RR/El installation including points, tracks, signals, panel, power supply, IPS, SSDAC, TLBI, LC Gates, crank handle control etc will be done by contractor. All material will be supplied by contractor except the relays. The Relays will be supplied by Railway. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Installation & commissioning | Station   | 4   | 34016.93 | 136067.71 |
| 2       | 4010800   | Supply of indoor PVC jumper wire (1x 0.6 mm) of all colours as per RDSO Specn.No.IRS:S-76/89 (Amnd.3) or latest. Note: wires colours will be specified/decided by site Engineer incharge. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply   | Kilometre | 2   | 2152.785 | 4305.5706 |
| 3       | 4011100   | Supply of Powder Coated Relay Racks as per Drg.No.CSTE/ NWR/SOR/01 with scaffolding and suitable grouting arrangements. The relay racks shall be supplied & completed with scaffolding, bus bars, fuse strips, fuses (G/NDT), fuse bases, resistors, capacitors, insulators and 200-Way tag blocks with poly carbonate covers, grouting bolts, tripods etc. It includes supply of Tag Blocks as per RDSO Specn.No.IRS:S-77/2006 (Rev.1) or latest and RDSO Drg.No.SA-24751. The top of relay racks will be supported through an angle iron with one side fixed on supporting wall. Inspection: (i) RITES if value of item in work more than 5 lakhs (ii) Consignee Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply   | Numbers   | 18  | 41387.2  | 744969.51 |

|   |         |  |         |       |          |           |
|---|---------|--|---------|-------|----------|-----------|
| 4 | 4011200 | Erection of Powder Coated Relay Racks as per Drg.No.CSTE/ NWR/SOR/01 with scaffolding and suitable grouting arrangements. The relay racks shall be completed with scaffolding, bus bars, fuse strips, fuses (G/NDT), fuse bases, resistors, capacitors, insulators and 200-Way tag blocks with poly carbonate covers, grouting bolts, tripods etc. It includes fixing of Tag Blocks as per RDSO Specn.No.IRS:S-77/2006 (Rev.1) or latest and RDSO Drg.No.SA-24751. The top of relay racks will be supported through an angle iron with one side fixed on supporting wall. After installation of relay racks, one coat of paint will be done by contractor before fixing the fuses. Scaffolding should include 1 relay rack position as spare at every Station/ Level Crossing Gate for future expansion. Inspection: Consignee Inspection Charges: None Payment Terms: 100% on execution | Numbers | 18    | 10346.8  | 186242.38 |
| 5 | 4011300 | Supply of Cable Termination(CT) racks as per Drg.No.CSTE/NWR/ SOR/02 complete along with fitting arrangements and also with arrangement for fixing four 8-way terminal strips/ Screw less terminals/ ARA terminals on each row having 16 such rows. Supply of 8 way terminal strips/ Screw less terminals / ARA terminals not covered under this item. Cable termination rack shall be Powder Coated. Inspection: (i) RITES if value of item in work more than 5 lakhs (ii) Consignee if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply   | Numbers | 39    | 20279.13 | 790886    |
| 6 | 4011400 | Installation of Cable Termination Racks Assembly complete including wall supports, scaffolding and suitable grouting arrangements with installation of 8 way/ARA terminals /Screw less connectors, Tag blocks & other necessary accessories etc. The work shall be done as per approved plan, extant practice on N W R & the instruction of Rly engineer at site. Inspection: Consignee Inspection Charges: None Payment Terms: 100% on commissioning.   | Numbers | 39    | 7749.606 | 302234.63 |
| 7 | 4011500 | Supply of ARA Terminal Block (M-6) made of PBT/Poly Carbonate as per RDSO Specn.No.IRS:S-75/2006 (Rev.2) or latest and RDSO Drg.No. SA-23741A(Alt. 4) or latest. Inspection: RDSO. Inspection Charges: Borne by Railways. Payment Terms: 100% on supply.   | Numbers | 37900 | 77.97671 | 2955317.4 |
| 8 | 4011600 | Supply of Cartridge Fuse Block made of PBT and as per RDSO Drg. No. SA-23748 (Alt. 4) or latest and RDSO Specn.No.IRS:S-75/2006 (Rev.2) or latest. Inspection: RDSO. Inspection Charges: Borne by Railways. Payment Terms: 100% on supply.   | Numbers | 3280  | 136.4704 | 447622.91 |
| 9 | 4011900 | Supply of round head type non-deteriorating type low voltage cartridge fuse as per RDSO Specn.No.IRS:S-78/92 or latest and Capacity - 2/4/6/10A/16A/20A Amp. (material will be supplied only from approved vendors of RDSO). Inspection: Consignee Inspection Charges: Borne by Railways. Payment Terms: 100% on supply.   | Numbers | 3630  | 48.74325 | 176938    |
|   |         | Supply of Disconnect Terminal Block, Screw less type, as per RDSO Spec. No. RDSO/SPN/189/2004(Modular Terminal Blocks, Fuse Terminal Blocks & Miniature fuse link of international standard for Railway signaling) With latest amendments. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by  |         |       | 0        | 0         |

|    |         |   |          |       |          |           |
|----|---------|---|----------|-------|----------|-----------|
|    |         | <b>Railways (ii) None Payment Terms: 100% on Supply</b>   |          |       |          |           |
| 10 | 4012801 | Supply of Disconnect Terminal Block, Screw less type, 4-wire front entry (Two in-put & Two out- put) The colour will be decided by Engineer - in - Charge. (Preferably In Blue, Red & Grey Colors in the ratio of 1:2:3)  | Numbers  | 28300 | 48.73433 | 1379181.6 |
| 11 | 4012802 | Supply of End plate for item 4.28(i) of Chapter 4 of revised SOR 2.5mm/0.091 in thick as per site requirement.  | Numbers  | 28300 | 9.134899 | 258517.65 |
| 12 | 4012803 | Supply of End Stopper for item 4.28(i) of Chapter 4 of revised SOR 10mm/0.0394 in width as per site requirement.  | Numbers  | 970   | 9.134899 | 8860.8522 |
| 13 | 4012804 | Supply of Carrier Rails for item 4.28(i) of Chapter 4 of revised SOR 35mm x 7.5mm, 1mm/0.039 in thickness un-slotted type as per site requirement.  | Metre    | 390   | 95.43472 | 37219.54  |
| 14 | 4012805 | Supply of Markers strip for item 4.28(ii) of Chapter 4 of revised SOR   | Numbers  | 28300 | 14.21083 | 402166.61 |
| 15 | 4013400 | Supply of Fuse auto changeover system for Railway Signaling System as per RDSO/SPN/209/2012 rev.1 with latest amendments. One Automatic changeover Unit comprise 32 nos. of external Non Deteriorating Type or 'G' type fuses from 0.6 Amp to 4 Amp capacities which are in signaling circuits. System shall have 8 cards with monitoring arrangement of 4 fuses in one card. Inspection:(i) RDSO/RITES: if value of item in work more than 5 lakhs (ii) Consignee: subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs or as per extant policy. Inspection charges:(i)Borne by Railways (ii) None Payment Terms: 100% after supply.(Per Unit should be read as Per Module)  | Per Unit | 74    | 26117.98 | 1932730.5 |
| 16 | 4013500 | Supply of Fuse auto changeover system for Railway Signaling System as per RDSO/SPN/209/2012 rev.1 with latest amendments. One Automatic changeover Unit comprise 24 nos. of external Non Deteriorating Type or 'G' type fuses from 4 Amp to 10 Amp capacities which are in signaling circuits. System shall have 6 cards with monitoring arrangement of 4 fuses in one card. Inspection: (i) RDSO/RITES: if value of item in work more than 5 lakhs (ii) Consignee: subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs or as per extant policy. Inspection charges: (i)Borne by Railways (ii) None Payment Terms: 100% after supply.(Per Unit should be read as Per Module) | Per Unit | 28    | 43074.11 | 1206075.1 |
| 17 | 4013600 | Installation wiring testing and commissioning of Fuse change over system (FACS). This includes provision of common Buzzer & indication at ASM Room & ESM Duty Room and painting of fuse details. This also includes fabrication of frame for installation of FACS at Station/ LC gate where installation of relay racks not feasible. Inspection: Consignee Inspection charges: None Payment Terms: 100% on commissioning(Per Unit should be read as Per Module)  | Per Unit | 102   | 789.8833 | 80568.098 |
|    |         |   |          |       |          |           |
|    |         |   |          |       |          |           |

| Item- 5 | CHAPTER-5: Power Supply Equipments, Batteries, Surge protection, Program Switches, DG sets |   |         |     |          |           |
|---------|--|---|---------|-----|----------|-----------|
| S No.   | Item No  | Description of Item   | Unit    | Qty |          |           |
|         |  | Installation, Wiring and testing of Integrated Power Supply System. This includes power distribution connection to bus bars and relay racks in the room with contractor's own wiring materials and fabrication and fixing of AC/DC power distribution board made on 10mm thick Phenolic hylam sheets or any standard make with connections suitable for 32 A. Wiring to be done considering site requirement, depending upon the load with suitable wires, lugs & glands as per instructions of Engineer-in-charge. The work includes installation of Thermo flasher relay, ELD's, fixing & wiring of change over switch (program switch) for selection of DG set supply (DG1 & DG2) and wiring of change over switch (program switch) for selection of mains or DG supply. This item also includes supply & fixing of ladder along the wall for carrying power supply wires/cables from IPS room to Relay room/power room etc. Any masonry work required will be carried out by contactors own material. It includes transportation of IPS from consignee depot to work site/station/ LC gate. Inspection: Consignee Inspection Charges: None<br>Payment Terms: 100% after execution |         |     | 0        | 0         |
| 1       | 5011401  | For Station   | Numbers | 5   | 92285.57 | 461427.84 |
| 2       | 5011402  | For LC gate/IBS/ ALH Hut/ Portacabin  | Numbers | 7   | 32643.16 | 228502.13 |
| 3       | 5011500  | Supply of DC to DC Converter, 110V DC/24V DC,10 Amp as per RDSO Specn.No.S-96/2000 or latest. Inspection: RDSO Inspection Charges: Borne by Railways Payment Terms: 100% on Supply  | Numbers | 6   | 14417.03 | 86502.179 |
| 4       | 5011600  | Supply of DC to DC Converter, 110V DC/24V DC,5 Amp as per RDSO Specn.No.S-96/2000 or latest. Inspection: RDSO Inspection Charges: Borne by Railways Payment Terms: 100% on Supply   | Numbers | 8   | 13673.63 | 109389.06 |
| 5       | 5012400  | Supply of Self Regulating Type Battery Charger,230V AC/110V DC, 50 Amps as per RDSO Specn.No.IRS:S-86/2000 (Amnd.4) or latest. Inspection: RDSO Inspection Charges: Borne by Railways Payment Terms: 100% on Supply   | Numbers | 12  | 109142.7 | 1309712.1 |
|         |  | Supply of uncharged Low Maintenance Lead Acid (LMLA) secondary cell, shelf mounting type conforming to RDSO Specn.No.IRS:S-88/2004 or latest with inter cell connectors, nuts and bolts etc. Inspection: RDSO Inspection Charges: Borne by Railways Payment Terms: 100% after Supply.   |         |     | 0        | 0         |
| 6       | 5012601  | 2V, 80 AH   | Numbers | 560 | 1844.759 | 1033065   |
| 7       | 5012602  | 2 V, 200 AH   | Numbers | 60  | 5054.044 | 303242.61 |
| 8       | 5012603  | 2V, 300AH   | Numbers | 240 | 6297.692 | 1511446.1 |
|         |  | Charging of Lead Acid Batteries with contractors own battery grade sulphuric acid and distilled water with minimum two charge - discharge cycles, installation of charged batteries in groups & their connection & wiring. The work shall be done as per extant practice of N.W.Rly & instruction of Engineer-in-charge. Detailed measurements of initial charging shall be recorded jointly by contractor & Rly's site-in- charge. Inspection: Consignee Inspection Charges: None<br>Payment Terms: 100% after Execution.  |         |     | 0        | 0         |

|    |         |  |         |     |          |           |
|----|---------|--|---------|-----|----------|-----------|
| 9  | 5012701 | 2V 80AH  | Numbers | 507 | 330.9795 | 167806.62 |
| 10 | 5012702 | 2V 200AH   | Numbers | 420 | 879.2251 | 369274.55 |
| 11 | 5012703 | 2V 300AH/ 500 AH   | Numbers | 360 | 880.2421 | 316887.16 |
| 12 | 5014500 | Supply of Class 'C' Type lightening cum Surge protection safety device with visual indication and potential free contacts output suitable for 110V AC application as per RDSO/SPN/172/2001 or latest. It also include transparent enclosed box. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Supply.   | Numbers | 28  | 2045.78  | 57281.848 |
| 13 | 5014600 | Supply of Class 'D' Type lightening cum Surge protection safety device with visual indication and potential free contacts output suitable for 110V DC application as per RDSO/SPN/172/2001 or latest. It also include transparent enclosed box. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Supply.   | Numbers | 28  | 4315.937 | 120846.22 |
| 14 | 5014800 | Supply of Class 'D' Type lightening cum Surge protection safety device with visual indication and potential free contacts output suitable for 24V DC application as per RDSO/SPN/172/2001 or latest. It also include transparent enclosed box. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Supply.  | Numbers | 28  | 4829.668 | 135230.69 |
| 15 | 5015000 | Installation and commissioning of various classes of lightening cum surge protection device as decided by site engineer. This include supply and fixing of any other material required to complete the installation & commissioning of lightening cum surge protection device. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after execution.   | Numbers | 84  | 219.3    | 18421.202 |
| 16 | 5015700 | Supply of maintenance stand for relay room / battery room as per samples as per samples /drawings approved by the site engineer incharge. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after supply.   | Numbers | 15  | 2132.642 | 31989.632 |
| 17 | 5015800 | Supply of active lightening arrester of Class A for building protection as per standard NFC-17-102. It shall work on early streamer emission principle & shall be made of stainless steel with a T of 60 microseconds. Non resettable type counter shall also be supplied to count the number of lightening occurrences. It also includes supply of electrolytic copper tape of 25mmX2mm or better for connecting class A device to the earth pit. This include installation, testing and commissioning of Class A device on the top of the building. This device shall be installed at suitable height on the roof of the building using a GI mast as per instructions of Railway engineer at Site. The device shall be connected to earth pit using a copper tape of 25mm x 2mm or better. This copper tape shall be run firmly only the site of the mast with the help of spacers. It shall also be ensured that the down conductor shall not touch the building throughout. the down conductor shall be connected to the earth electrode using exothermic welding. A counter shall be installed at appropriate space to count the number of occurrence. All the accessories like spacers, welding material etc. required for installation shall be arranged by the contractor. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after commissioning. | Numbers | 13  | 59762.31 | 776910.06 |
|    |         |  |         |     |          |           |
|    |         |  |         |     |          |           |

| Item- 6 | CHAPTER-6: Points Machine |  |         |     |          |           |
|---------|---------------------------|--|---------|-----|----------|-----------|
| S No.   | Item No                   | Description of Item  | Unit    | Qty |          |           |
| 1       | 6010200                   | <p>Supply of ELECTRIC POINT MACHINE 143 MM STROKE AC IMMUNITY 400V AC COMPLETE WITH LOCK DETECTOR AND SLIDES FOR LOCK DETECTOR NON -TRILABLE TO OPERATE ON 110 V DC ROTARY LOCKING WITH CRANK HANDLE UNIVERSAL TPE AS PER RDSO SPECN. NO. IRS:S-24/2002 (AMND 1) RDSO DRG. NO S-10800 (ALT.5) WITH JUNCTION BOX TELESCOPIC. THE MOTOR WILL BE AS PER RDSO SPECN. NO. IRS: S- 37/82 (AMND. 3) WITH RDSO DRG. NO. S-10910.</p> <p>This includes supply of Set of tools as per para20.1 &amp; 20.2 of RDSO SPECN. NO. IRS:S-24/2002 (AMND 1) 20.1 The following set of tools in a suitable tool box shall be supplied along with every set of eight point machines or less. i). Hand operated square drive socket wrenches of 12.5 mm driving square (short type) as per IS: 7381 for M8, M10, M12 &amp; M18 threads. (One 250 mm long 12.5 mm square extension bar as per IS: 7991 alongwith compatible Tee handle Square drive as per IS: 7975 suitable for above socket wrenches shall also be provided.) ii). Open jaw wrenches (spanners) for M10, M12, M20, M24 &amp; M33 threads as per IS: 2028. iii). Adjustable wrench. iv). Screw driver 300 mm long. 20.2 Junction box and two numbers of telescopic pipes of approved type shall be supplied as an integral part of the point machine. Inspection: RDSO Inspection Charges: Borne by Railways Payment Terms: 100% after Supply.</p>  | Numbers | 21  | 64631.2  | 1357255.1 |
| 2       | 6010300                   | <p>Fixing, wiring, testing and commissioning of Electrical Point Machine on the extended sleepers at points as per std. practice and as per RDSO Drg No. SA 9151-52 or 9710 or 9161 or 10800 or 11000 as per section of rails used. Item includes fixing switch extension bracket, providing insulation for switch extension bracket, fixing ground connection, adjusting opening of the switches and adjusting the point machine with crank handle. The item also includes : (i) Complete material for installation like ground- connections, switch extension brackets, point insulation material, l pipes, wiring materials, various fixing nuts &amp; bolts including castle nuts, spring washers (ii) All smithy &amp; fitting works required at site for complete installation. (iii) Installation of gauge tie plate &amp; providing insulation for gauge tie plate (Insulation in William Stretcher Bar will be Provide by Railways). (iv) Wiring inside the point machine, insertion and termination of tail cable in point machine and junction boxes / location box /cable hut as per extent practice on NWR and the instruction of Railway Engineer at site. (v) Supply and fixing of suitable size GI pipes with flange for taking cable into point machine. Note ; The ground connections shall be suitable to the Point Machines as specified by Engineer-in-charge and shall be suitable to the point lay out i.e. 60 Kg. / 52 Kg / 90R as per yard layout. Electrical Point Machine and M-6 / Screw less terminals will be supplied by Railways / covered in Schedule separately Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning.</p> | Numbers | 16  | 24608.93 | 393742.84 |

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|---|---------|--|-----|----|----------|-----------|
| 3 | 6010400 | <p>Supply of Point insulation Complete set as per RDSO/SPN/168/2005 for 1.Switch bracket'D' bracket insulation for IRS point machine - One set comprises of (a)Side plate LH to Drg.No.S- 3266 - 1 No. (b) Side plate RH to Drg.No.S-3265 - 1 No. (c)Insulating bush to Drg.No.S-3199 - 4 Nos. (d) Insulating washer to Drg.No.S-8640 - 4 Nos., 2. Split-Stretcher bar 2.1 Insulation for Leading stretcher bars(BG) each set comprising of (a) Insulating plate for leading insulated stretcher bars BG as per RDSO Drg.No.T-10384 - 2 Nos. (b) Insulating bushing for leading insulated stretcher bars for BG as per RDSO Drg.No.T-10535- 4 Nos. (c) Insulating Washer for insulated stretcher bar BG as per RDSO drg.No.T-10371 - 6 Nos. 2.2 Insulation for following stretcher bars BG. Each set comprising of: (a) Insulating side plate for insulated stretcher bars BG as per RDSO Drg.No.T-10367 - 3 No. (b) Insulating bushing for insulated stretcher bars BG as per RDSO Drg.No..T-10368 - 6 Nos. (c)Insulating washer for insulated stretcher bars BG as per RDSO Drg.No.T10371 - 12 Nos&amp; 3. Gauge tie plates (52 Kg/60Kg as per site requirement) Insulation for (BG) complete with insulating bush and washer each set comprising of: (a) Insulating plate for insulated tie plate BG as per RDSO Drg.No.T-10372-1 No. (b) Insulating bushing for insulated stretcher bar BG as per RDSO Drg.No.T10368 - 3 Nos. (c) Insulating Washer for insulated stretcher bar BG to IRS 40/84 as perRDSO drg.No.T-10371 - 6 Nos. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply</p> | Set | 16 | 1151.327 | 18421.238 |
| 4 | 6010500 | <p>Supply of Gauge Tie plate insulation as per RDSO/SPN/168/2005 as per RDSO drg No: T- 10372Alt2, T- 10368, T- 10371Alt2, T- 15083/88/Alt2 &amp; T-11690/Alt2 and as per RDSO/SPN/168/2005 with latest amendments as applicable. Gauge tie plates (52 Kg/60Kg as per site requirement) Insulation for (BG) complete with insulating bush and washer each set comprising of: (a) Insulating plate for insulated tie plate BG as per RDSO Drg.No.T-10372-1 No. (b) Insulating bushing for insulated stretcher bar BG as per RDSO Drg.No.T10368 - 3 Nos. (c) Insulating Washer for insulated stretcher bar BG to IRS 40/84 as perRDSO drg.No.T-10371 - 6 Nos. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply</p>  | Set | 16 | 1031.521 | 16504.336 |



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|---|---------|---|----------|----|----------|-----------|
| 5 | 6010800 | <p>Supply of ELECTRIC POINT MACHINE ROTARY LOCKING TYPE HIGH THRUST OF 220 MM THROW, AC IMMUNITY 160 VOLT AC, NON - TRAILABLE TO OPERATE ON 110 V DC COMPLETE WITH LOCK AND DETECTOR SLIDES AND CABLE TERMINATION BOX, AS PER RDSO SPECIFICATION NO. IRS : S- 24/2002 AMENDMENT - 1 OR LATEST AS PER DRAWING.NO. RDSO/S-11000 WITH EXTERNAL CLAMP POINT LOCK AS PER DRG. NO. RDSO/S-3395 AND WITH COMPLETE SET OF GROUND CONNECTIONS WITH NYLON INSULATIONS AS PER DRG. NO. RDSO/S-3454 FOR 60Kg RAILS. THICK WEB SWITCH. LATEST ALTERATIONS IF ANY ARE APPLICABLE TO BOTH DRAWINGS.</p> <p>This includes supply of Set of tools as per para20.1 &amp; 20.2 of RDSO SPECN. NO. IRS:S-24/2002 (AMND 1) or latest 20.1 The following set of tools in a suitable tool box shall be supplied along with every set of eight point machines or less. i). Hand operated square drive socket wrenches of 12.5 mm driving square (short type) as per IS: 7381 for M8, M10, M12 &amp; M18 threads. (One 250 mm long 12.5 mm square extension bar as per IS: 7991 alongwith compatible Tee handle Square drive as per IS: 7975 suitable for above socket wrenches shall also be provided.) ii). Open jaw wrenches (spanners) for M10, M12, M20, M24 &amp; M33 threads as per IS: 2028. iii). Adjustable wrench. iv). Screw driver 300 mm long. 20.2 Junction box and two numbers of telescopic pipes of approved type shall be supplied as an integral part of the point machine. Inspection: RDSO Inspection Charges: Borne by Railways Payment Terms: 100% after Supply.</p> | Numbers  | 75 | 101349.2 | 7601190.7 |
| 6 | 6010900 | <p>Refixing of electrical point machine, ground connection during phase working (Non interlocked working) after removing the existing fitting if any, adjustment if necessary, cable termination, wiring , testing and commissioning of electrically operated point, fixing and connecting point indicator on derail switch if necessary. The work shall be done as per extant practice on NWR &amp; the instruction of Railway Engineer at site. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution. (the unit is Per turn-out)</p>   | Turn-out | 9  | 2290.46  | 20614.14  |
| 7 | 6011400 | <p>Supply of William Stretcher Insulation Set (complete) as per RDSO/SPN/168/2005 with insulating bush and washer to suit point layout and conforming to RDSO Drg.No.T-10372 or latest, T-10368 or latest and T-10371 or latest.1.1 Insulation for Leading stretcher bars(BG) each set comprising of (a) Insulating plate for leading insulated stretcher bars BG as per RDSO Drg.No.T-10384 - 2 Nos. (b) Insulating bushing for leadingg insulated stretcher bars for BG as per RDSO Drg.No.T-10535- 4 Nos. (c) Insulating Washer for insulated stretcher bar BG as per RDSO drg.No.T-10371 - 6 Nos. 1.2 Insulation for following stretcher bars BG. Each set comprising of: (a) Insulating side plate for insulated stretcher bars BG as per RDSO Drg.No.T-10367 - 3 No.(b) Insulating bushing for insulated stretcher bars BG as per RDSO Drg.No..T-10368 - 6 Nos. (c)Insulating washer for insulated stretcher bars BG as per RDSO Drg.No.T10371 - 12 Nos Inspection: (i) RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by</p>   | Set      | 16 | 344.4589 | 5511.3416 |

|                |   |   |                          |            |                 |                  |
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|                |   | <b>Railways (ii) None Payment Terms: 100% on Supply</b>   |                          |            |                 |                  |
| <b>8</b>       | <b>6011600</b>  | <b>Removal of existing point motor and installation of immunised motor. Note: Supply of motor is not included in this item. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after execution.</b>   | <b>Numbers</b>           | <b>4</b>   | <b>2612.519</b> | <b>10450.075</b> |
|                |   |   |                          |            |                 |                  |
|                |   |   |                          |            |                 |                  |
| <b>Item- 7</b> | <b>CHAPTER-7: Track Circuit equipments, HASSDAC, MSDAC etc.</b> |   |                          |            |                 |                  |
| <b>S No.</b>   | <b>Item No</b>  | <b>Description of Item</b>  | <b>Unit</b>              | <b>Qty</b> |                 |                  |
| <b>1</b>       | <b>7010100</b>  | <b>Supply of Track feed Battery Charger as per RDSO Specn. No.IRS: S-89/2013 Ver.1.0 or latest. Charging Capacity Rating 10 Amps for Charging 80 AH Battery. Inspection: RDSO Inspection Charges: Borne by Railways Payment Terms: 100% after Supply.</b>   | <b>Numbers</b>           | <b>188</b> | <b>4018.927</b> | <b>755558.36</b> |
| <b>2</b>       | <b>7010200</b>  | <b>Supply of Adjustable Track Feed Resistance 30 Ohms (Disc Type) as per RDSO Drg. No.SA- 20161-66/M or latest. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Supply.</b>  | <b>Numbers</b>           | <b>188</b> | <b>1283.855</b> | <b>241364.7</b>  |
| <b>3</b>       | <b>7010300</b>  | <b>Fixing and wiring of DC track circuit equipments i.e. track feed charger, resistance, track relay, battery, B type choke etc., in the Apparatus Case and battery box as per standard practice. Termination of tail cable on M 6 / Screw less terminals WAGO or FINOLEX or similar approved make teminals/ fuse blocks / HRC fuse. Item includes testing /commissioning of track circuit. Complete wiring material will be supplied by contractor. (Supply of Track feed battery charger, track feed battery, resistances &amp; 'B' type choke &amp; Track relays, ARA terminal/Modular terminals wago/phoenix contact type will be supplied by Railways / covered in Schedule separately). Inspection: Consignee Inspection Charges: None Payment Terms: 100% after execution.</b> | <b>Per Track Circuit</b> | <b>169</b> | <b>5668.285</b> | <b>957940.21</b> |

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| 4 | 7010400 | <p>Installation of DC track circuits covering all types of Track circuits including points zones also. The item includes provision of doubled continuity GI wire bonds on rail joints after drilling bond-hole of 7.0/7.2mm dia, skimming of fish plate, insertion of insulated block joint( if required), fixing of TLJB (separate for positive &amp; negative rails) with angle iron for track feed/jumper/track relay ends of track circuits and also for fixing jumper cables as per approved Track Circuit Plan, making rail connections through suitable insulated sleeves from TLJB at TF, jumper &amp; TR end with GI wire, rail clips for fixing bond wire on the TLJB as per standard practice, termination of tail cables on TLJB terminals etc. TF/TR wiring shall be fixed on the suitable arrangement on PRC sleepers with the help of Hooks. In case Engineer at site desires that jumpering from TLJBs is to be done using signalling cable 2 coreX 2.5 sqmm , contractor shall provide the jumpering cable using 2 X 2.5 sqmm signalling cable. The signalling cable will be supplied by Railways. Hooks shall be provided on PRC sleepers with the help of suitable steel bracket. This item also includes fixing &amp; supply of channel pins, Hooks etc. The item does not include includes supply of TLJB as per RDSO Drg.No.RST-11509 or latest as per technical specs Installation of of Track Lead Junction Box(TLJB) as per Drg.No.RST- 11509 or latest made from FRP material including brass bolts and hylam board sheet with terminals etc. (a) Installation and commissioning of TLJB complete with cover to be in black/red having approximate weight of 4.0 Kg with L- 262mm W-212mm and H 90 mm and all the holes required for mounting on FRP stump (vertical two for each FRP angle) HDPE pipe , cable etc. (b) Installation and commissioning of Each TLJB having two bakelite terminal block fitted horizontally : each bakelite terminal block shall have two nickel chrome plate M10 brass terminal, 50mm long. Alongwith each TLJB , nickel chrome plated brass links(two nos. of adequate strength for vertical linking of the terminals to be wired and fixed properly. (c) Installation of HDPE pipe of size 32/35mm , 380 mm long alongwith two nuts for fixing on the TLJB hole . (d) Installation of the FRP stump for mounting the TLJB to be made of one meter long 30mm X30mmX 4mm angle(2 nos.) and 300mm long 30mm X30mmX 4mm angle(1 no.) fixed at 50 mm from the bottom using galvanised nuts and bolts. The TLJB and the angles for stump should be fixed in given holes on them for fixing using galvanised nuts and bolts .</p> <p>Inspection: Consignee Inspection Charges: None<br/>Payment Terms: 100% after execution.</p> | Per Track Circuit | 169 | 7094.623 | 1198991.3 |
|---|---------|---|-------------------|-----|----------|-----------|

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|----|---------|---|---------|-----|----------|-----------|
| 5  | 7010500 | Supply of Track Lead Junction Box(TLJB) as per Drg.No.RST-11509 or latest made from FRP material including brass bolts and hylam board sheet with terminals etc. The technical specifications are as follows: (a) TLJB complete with cover to be in black/red having approximate weight of 4.0 Kg with L-262mm W-212mm and H 90 mm and all the holes required for mounting on FRP stump (vertical two for each FRP angle) HDPE pipe , cable etc. (b) Each TLJB shall have two bakelite terminal block fitted horizontally : each bakelite terminal block shall have two nickel chrome plate M10 brass terminal, 50mm long. Along with each TLJB , nickel chrome plated brass links (two nos. of adequate strength for vertical linking of the terminals to be supplied. (c) HDPE pipe of size 32/35mm , 380 mm long along with two nuts for fixing on the TLJB hole . (d) The FRP stump for mounting the TLJB to be made of one meter long 30mm X30mmX 4mm angle (2 nos.) and 300mm long 30mm X30mmX 4mm angle (1 no.) fixed at 50 mm from the bottom using galvanised nuts and bolts. The TLJB and the angles for stump should come along with holes on them for fixing using galvanised nuts and bolts of adequate strength to be supplied along with TLJB drawing no. 11509. Inspection: (i) RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i) Borne by Railways (ii) None Payment Terms: 100% on Supply | Numbers | 950 | 1586.475 | 1507151.3 |
| 6  | 7010700 | Supply of B Type Choke as per RDSO Specn.No.IRS:S-65/83 (Amnd. 1) or latest. Inspection: RDSO Inspection Charges: Borne by Railways. Payment Terms: 100% after supply.  | Numbers | 374 | 3656.582 | 1367561.8 |
| 7  | 7011100 | Supply of Hydrometer, Exide make or similar for measuring specific gravity of Battery Graded acid with mounting stand in location Boxes. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Supply.   | Numbers | 90  | 229.4519 | 20650.671 |
|    |         | Supply of Tools Kit for High frequency Digital Axle Counter Multi section   |         |     | 0        | 0         |
| 8  | 7012301 | Supply of Service test panel including meter for test of track equipment, tools for mounting and adjustment of track equipment and standard jig for drilling holes in rail. It should be as per Principal manufacturers (OEM) recommended list adequate for installation, day to day maintenance, and adjustment of indoor and outdoor gears. This shall also include kit for making and drilling of holes on rail. Detail Specification of tools kit are provided in tender document. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Supply.   | Set     | 1   | 93066.31 | 93066.308 |
| 9  | 7012302 | Supply of Portable operator console for onsite programming of Axle Counters as per technical requirement given in tender document. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Supply.   | Set     | 3   | 78723.51 | 236170.53 |
|    |         | Supply of spares for High frequency Digital Axle Counter Multi section  |         |     | 0        | 0         |
| 10 | 7012401 | Supply of Control card for evaluators of Multi Section DAC along with power supply card or Equivalent. Inspection: (i) RDSO if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i) Borne by Railways (ii) None   | Numbers | 1   | 180294.8 | 180294.78 |

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|    |         | Payment Terms: 100% on Supply  |         |   |          |           |
| 11 | 7012402 | Supply of Input / Output card for Evaluators for ""detection Point"" or Equivalent. Inspection: (i) RDSO if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on supply,   | Numbers | 2 | 63172.52 | 126345.04 |
| 12 | 7012403 | Supply of Input / Output card for Evaluators for relay driver and final track clearance relay or Equivalent. Inspection: (i) RDSO if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply   | Numbers | 2 | 63172.52 | 126345.04 |
| 13 | 7012404 | Supply of Double Rail contact assembly with track side EJB for MSDAC. Each set shall consist of track side Electronic unit, Double rail contact with cable and mounting accessories. Inspection: (i) RDSO if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply.  | Set     | 2 | 233031.3 | 466062.56 |
| 14 | 7012600 | Installation testing & commissioning of High Availability Single Section digital axle counter (HASSDAC) single section type system complete with track devices and other associated accessories. This include fixing of device, relays, wiring, lacing /dressing, cable termination with lug eyelet, drilling holes in rails, Installation of track devices and make it functional along with existing UFSBI/blockinstrument. Material required other then supply item of HASSDAC in item no. 7.25 of SOR shall be arranged by contactor to make it functional. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning. | Set     | 5 | 17841.45 | 89207.242 |
| 15 | 7013000 | Supply of Standard Tool kits, Test and Measuring instruments required for Installation, testing, commissioning & maintenance of HASSDAC. Kit will includes all tools & measuring instruments as per ANNEXURE (Annexure shall be attached with Tender Document) Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.   | Set     | 1 | 113176.9 | 113176.91 |
| 16 | 7013500 | Installation, Testing & commissioning of Block proving by Axle Counter (BPAC) including UFSBI equipment as per standard practice & directive of engineer in charge and as per OEM guidelines. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning.   | Set     | 4 | 108423.4 | 433693.54 |
| 17 | 7014100 | Supply of hand operated track drilling machine for bonding hole. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after supply.   | Numbers | 4 | 7182.261 | 28729.044 |
|    |         |  |         |   |          |           |
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| Item- 8 | CHAPTER-8: LEDMain & Subsidiary signals, CLS units, Route Indicators & foundation etc. |   |         |     |          |           |
| S No.   | Item No  | Description of Item   | Unit    | Qty |          |           |
| 1       | 8010400  | Installation of LED signals lamps for auxiliary/subsidiary signals/main signals (i.e. route, shunt , calling on, Red , Yellow, Green) as per instructions given by engineer incharge. The contractor will supply all materials required for installation. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning.  | Numbers | 780 | 159.5842 | 124475.67 |
| 2       | 8010500  | Supply of Colour Light Signal Complete. This includes: - (1). Post Tubular 140 mm Dia, as per IRS: S-6/81 or Latest & RDSO Drg. No. SA- 24625 (Advance). (2). CI Base (As per IRS S-10 & RDSO Drg. No. 2011/M with latest assembly). (3). Number plate to Drawing No. S 23149 Alt.1 =1 No , Number plate clamps to Drawing No. S 23148 Alt.1 =2 no (4). Ladder Assembly, as per RDSO Drg. No. SA-23156, with Base, Ladder Guard rail (complete) to Drawing No. SA 23138 Alt.1(1No), Platform to Drawing No. SA 23134 Alt.1(1 No), Front Maintenance Platform, MS Supporting bracket to Support Ladder.Ladder stay (small) to Drawing No. S 23159 Alt. 1 (2 Nos.) , Ladder stay (large) to Drawing No. S 23160 Alt. 1 (2 Nos.) , Ladder section to Drawing No. SA 23157 Alt. 1(1 Nos.)Stay clamp to Drawing No. SA 2062/M (2 no), Rail Clamp to Drawing No. S 2066/M (1 No.) (5). Signal Front Staging Complete Assembly for CLS Unit. (6). Signal back staging as per extent NWR Practice. Note: Note: Height of the Post shall be 5.5 Long. Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply | Numbers | 131 | 9626.846 | 1261116.8 |
| 3       | 8010600  | Supply of Offset brackets for Main Signal, made of tubular steel, outer diameter 140 mm, thickness of pipe 4.5 mm. horizontal length of pipe 545 mm & vertical length of pipe 324 mm with fixing arrangement on Main Signal post as per Drawing No SW/554/G/R Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply  | Numbers | 18  | 3980.898 | 71656.165 |
|         |  | Erection of CLS Post with base and signal unit on top or on OFFset Bracket, fixing of front and back staging, ladder and guards, signal name plates / boards if any with contractor's own brackets and fixing materials. This also includes erection of auxiliary signals like calling on, shunt signal if any. The work shall be done as per instructions of Rly engineer at site. It also includes provision & fixing of maintenance platform as per design given by Engineer -In- Charge at site. The Item includes cutting of Signal post if required by Site In charge. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning.   |         |     | 0        | 0         |
| 4       | 8010801  | 2/3/4 aspect signal unit mounted on offset bracket with junction type route indicator 1/2/3/4/5/6 or multilamp lamp route indicators/Stencil type rout indicator mounted on signal post.  | Numbers | 18  | 2879.322 | 51827.796 |

|    |         |  |         |     |          |           |
|----|---------|--|---------|-----|----------|-----------|
| 5  | 8010802 | 2/3/4 aspect signal unit mounted mounted directly on signal post.  | Numbers | 113 | 1951.363 | 220503.97 |
| 6  | 8010900 | Supply of Non Metallic (FRP) colour light signal housing multi unit type for railway signaling suitable for RE area TWO Aspects. Complete without lenses, lamps and signal transformer as per RDSO DRG. No. SA 23001/A/M Adv. Alt- S and as per SPEC. No. RDSO/SPN/194/2006 (Rev 2.0) or latest and FRP material as per RDSO SPEC. No. RDSO/SPN/151/1997 or latest. Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply   | Numbers | 21  | 23879.3  | 501465.21 |
| 7  | 8011000 | Supply of Non Metallic (FRP) colour light signal housing multi unit type for railway signaling suitable for RE area THREE Aspects. Complete without lenses, lamps and signal transformer as per RDSO DRG. No. SA 23001/A/M Adv. Alt- S and as per SPEC. No. RDSO/SPN/194/2006 (Rev 2.0) or latest and FRP material as per RDSO SPEC. No. RDSO/SPN/151/1997 or latest. Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply | Numbers | 27  | 25016.4  | 675442.89 |
| 8  | 8011100 | Supply of Non Metallic (FRP) colour light signal housing multi unit type for railway signalling suitable for RE area FOUR Aspects. Complete without lenses, lamps and signal transformer as per RDSO DRG. No. SA 23001/A/M Adv. Alt- S and as per SPEC. No. RDSO/SPN/194/2006 (Rev 2.0) or latest and FRP material as per RDSO SPEC. No. RDSO/SPN/151/1997 or latest. Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply | Numbers | 84  | 26722.07 | 2244653.8 |
| 9  | 8011200 | Supply of Position Light Shunt Signal Unit Complete with Post(made of GI Pipe of 80 mm Diameter Medium Class IS Spec. No. IS: 1239 Pt. 1/1990, Base, Hood, Cover etc as per Drg. No. SA-23840 suitable for LED Signal Lighting Unit.(Supply of LED Unit is not covered in this item) Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply  | Set     | 27  | 3833.687 | 103509.55 |
| 10 | 8011300 | Erection of Position Light Shunt signal with Base, Post, Signal unit and fixing of Number Plates. The work shall be done as per instructions of Rly engineer at site. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning.   | Numbers | 27  | 1587.893 | 42873.124 |

|    |         |  |         |    |          |           |
|----|---------|--|---------|----|----------|-----------|
| 11 | 8011400 | Supply of Position Light Shunt Signal Unit Complete, with offset bracket, hood, Cover etc as per Drg. No. SA-23840 suitable for LED Signal Lighting Unit.(Supply of LED Unit is not covered in this item)Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply                          | Numbers | 24 | 2996.077 | 71905.859 |
| 12 | 8011500 | Erection of Position Light shunt signal on Offset bracket on main signal. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning.   | Numbers | 24 | 1755.408 | 42129.798 |
| 13 | 8011600 | Supply of Junction route indicator unit 1 way (Without Lenses & Holder) as per Drg. No. RDSO SA 23401 suitable for LED Signal Lighting Unit & as IRS:S-66/84 amndt-1 or latest.(Supply of LED Unit is not covered in this item) Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply   | Numbers | 11 | 17695.25 | 194647.7  |
| 14 | 8011700 | Supply of Junction route indicator unit 2 way (Without Lenses & Holder) as per Drg. No. RDSO SA 23402 suitable for LED Signal Lighting Unit & as IRS:S-66/84 amndt-1 or latest.(Supply of LED Unit is not covered in this item) Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply.  | Numbers | 3  | 18279.03 | 54837.094 |
| 15 | 8011800 | Supply of Junction route indicator unit 3 ways (Without Lenses & Holder) as per Drg. No. RDSO SA 23403 suitable for LED Signal Lighting Unit & as IRS:S-66/84 amndt-1 or latest.(Supply of LED Unit is not covered in this item) Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply  | Numbers | 3  | 21455.84 | 64367.506 |
| 16 | 8011900 | Supply of Junction route indicator unit 4 way (Without Lenses & Holder) as per Drg. No. RDSO SA 23403 suitable for LED Signal Lighting Unit & as IRS: S-66/84 amndt-1 or latest. (Supply of LED Unit is not covered in this item) Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply | Numbers | 1  | 24632.63 | 24632.63  |
| 17 | 8012300 | Fixing of Junction type Route Indication 1-Way/2-Way/3-Way/4-Way/5-Way/6-Way on the top of the signal post. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning.   | Numbers | 18 | 526.9249 | 9484.6481 |



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|----|---------|---|---------|----|----------|-----------|
| 18 | 8012400 | Supply of Calling ON Signal Unit with Brackets & Fixing accessories. Calling On Signal Unit shall conform to RDSO Drg no 24351(Adv) Alt1 suitable to LED Signal Lighting Unit. Inspection: (i)RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply | Numbers | 11 | 2275.232 | 25027.554 |
| 19 | 8012500 | Supply of A -sign / AG - Sign Unit with Brackets & Fixing accessories. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Numbers | 43 | 2257.97  | 97092.729 |
| 20 | 8012600 | Fixing of Calling-on Signal/A-Sign/AG-Sign unit on signal post. The item includes fixing of Co- On signal /'A' sign/ 'AG' sign unit on signal post with bracket, hood etc. Item includes supply of bracket & fixing materials etc. by the contractor. The item also includes termination of cables & wiring inside Co- On signal /'A' sign/ 'AG' sign unit as per standard practice. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning.                       | Numbers | 54 | 2074.211 | 112007.39 |
| 21 | 8012700 | Supply of Stop Board as per RDSO Drg No 7235/B / Block Section Limit Board/Shunting Limit Board as per RDSO Drg. No. SA2375 (Adv.) . This includes Painting and retro reflective arrangement should be as per SEM. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Numbers | 6  | 1912.78  | 11476.681 |
| 22 | 8012800 | Supply of Different warning Boards / Calling on Board used for Railway Signalling system as per RDSO Drg. No. SA2380 (Adv). This includes Painting and retro reflective arrangement should be as per SEM. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.   | Numbers | 14 | 4137.253 | 57921.541 |
| 23 | 8012900 | Fixing of Stop Board, Block section limit Board, Shunting Limit Board, goods warning board , Calling on Board with contractors own material. This excludes supply of Stop Board / Block section limit Board / Goods warning board/Calling on board. The work shall be done as per instruction of Rly Engineer at site. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after installation.  | Numbers | 20 | 298.49   | 5969.7994 |
| 24 | 8013000 | Supply, Fabrication and fixing of Signal Number Plate( CSTE Drg No CSTE/6186) , 'A' Marker (Drg No. CSTE/6180), 'AG' Marker (Drg No. CSTE/6181), 'P' Marker (Drg No. CSTE/6182),Arrow Marker (Drg No. CSTE/6183), 'G' Marker (Drg No. CSTE/6184), 'C' Marker (Drg No. CSTE/6185). marker disk on signals as per standard practice All material required for this work shall be supplied by Contractor. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after installation.      | Numbers | 62 | 1091.424 | 67668.3   |
| 25 | 8013100 | Supply and fixing of protective screen of expanded metal 12 SWG of size 1200 x 1500 mm on signals as per std. practice in RE Area. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after installation.  | Numbers | 19 | 4538.591 | 86233.225 |

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| 26      | 8013200   | Casting of CC Foundation for Signal Post in the ratio of 1:3:6 as per Drg.No.CSTE/NWR/SOR/21/A using standard size of foundation/galvanized holding down bolts required for erection of colour light signal post. Item includes excavation, ramming of CC using vibrator, curing and plastering with 1:4 cement- sand mixture (aggregate will not exceed 3.8 cm). Aggregate, cement, sand and holding down bolts will be supplied by contractor. Any machines & tools, if required for execution of this item, will be arranged/provided by contractor. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after installation.  | Numbers | 131 | 8351.207 | 1094008.1 |
| 27      | 8013300   | Casting of C.C. Foundation for Position Light Shunt Signal/ Indicator/SPI as per Drg.No.CSTE/NWR/SOR/ 22 in ratio 1:3:6 by using standard size of galvanized holding down/foundation bolts. Item includes excavation, ramming of CC using vibrator, curing and plastering with 1:4 cement sand mixture. Aggregate cement, sand and holding down bolts, will be supplied by contractor. Any machines and tools, if required for execution of this item, will be arranged/provided by contractor. Note: As per available site conditions, if sizes of foundations are required to be decreased/ increased and same has been approved/agreed by engineer incharge then variation in CC work will be calculated on volumetric basis as per rates of these items. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after installation. ."  | Numbers | 27  | 5629.257 | 151989.93 |
|         |   |  |         |     |          |           |
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| Item- 9 | CHAPTER-9: Level Crossing Gates, Interlocking of LC gates, ELBs, Accessories etc. |  |         |     |          |           |
| S No.   | Item No   | Description of Item  | Unit    | Qty |          |           |
| 1       | 9010100   | Supply of Electrically Operated Lifting Barrier complete set suitable for 110VDC/24V DC (option to be specified in tender specifically of either 110 V DC or 24V DC)supply without hand generator back up & motorized boom locking arrangements as per RDSO Spec. SPN/208/2012 with latest amendment. One set consisting 02 Nos of Barriers of length 09.76 Mtrs. along with Spares & tool kit mentioned in RDSO Spec. SPN/208/2012 clause 10.1 & 10.2 as below 10.1 Following spares shall be supplied alongwith each set (02 nos.) of Electric lifting barrier as per requirement of the purchaser i) GI boom - 1 no. complete. ii) Belt - 1 no. iii) Crank handle - 1 no. iv) Motor Contactor - 1 no. v) Motor protection MCB- 1 no. vi) Push button complete- 2 nos. vii) Limit switch - 3 nos. (1 lever type and 2 top roller type) viii) Fuses used - 2 sets 10.2 Tool kit consisting of standard sizes of wrinch/ spanner and Allen keys should also be supplied with each set (02 nos.) of Electric Lifting barrier. Inspection: RDSO Inspection Charges: Borne by Railways. Payment Terms: 100% after Supply. | Set     | 12  | 386716.7 | 4640600.3 |

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|----|---------|---|---------|----|----------|-----------|
| 2  | 9010200 | Installation, testing and commissioning of electrically operated lifting barrier, complete with Casting of cement concrete foundation for pedestal and boom rest post, cabling, power supply connection & wiring with complete outdoor work as per approved drawing, wiring etc. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning  | LC Gate | 12 | 41695.36 | 500344.37 |
| 3  | 9010300 | Supply of Yellow Retro reflective sheet for LC Boom prismatic grade reflective sheets of size 305 x 290 mm one set consist 18 pieces. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% on Supply   | Set     | 7  | 1522.914 | 10660.401 |
| 4  | 9010400 | Supply of Dual Tone Bell /Buzzer with Flasher arrangement and 20 Watt horn working on 24 V DC/ 110 V AC for warning road users at LC gates. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply  | Set     | 36 | 4628.932 | 166641.54 |
| 5  | 9010500 | Supply of (02) nos. electrical lifting barrier booms of 9.76 meter each as per DRG RDSO/S 11600 . The material will be as per RDSO Specn.No.RDSO/SPN/208/2012/Ver.2.0 and Amendment 1 or latest. Inspection: Consignee subject to procurement from RDSO approved supplier. Inspection Charges: None. Payment Terms: 100% after Supply   | Set     | 12 | 22417.02 | 269004.19 |
| 6  | 9010600 | Supply of Sliding type mechanical Boom barrier assembly 11 to 12 Meter Long, movement drive mechanism, resetting & supporting stand suitable for Mechanical/Electrical level crossing gate as an emergency arrangements as per Drg. mentioned in the tender document. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after supply  | Set     | 12 | 122008.8 | 1464105.5 |
| 7  | 9010700 | Installation & commissioning of Sliding booms with E type lock and KLCR. This includes wiring of KLCR, running of cables, necessary painting & transportation of materials from store to site. All material required to commissioning of slide booms on gate will be supplied by the contractor. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Commissioning  | LC Gate | 12 | 13656.48 | 163877.74 |
| 8  | 9010800 | Casting of CC foundations in the ratio of 1:3:6 for sliding boom as per Drg. Minimum 10 Nos of foundation per set shall be cast using standard size holding down bolts & nuts for erection. Item include excavation, ramming, curing and plastering 1:4 cement and sand mixture. Aggregate, cement, sand and holding down bolts & nuts to be supplied by the contractor. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after installation                                 | LC Gate | 12 | 26216.46 | 314597.58 |
| 9  | 9011200 | Supply of LED type control-cum indication panel complete with prewired Tag- Blocks, Wires MS angles etc. for LC gate , depicting the yard layout Signal, Point, Track circuit, Operating / emergency Push Button, counter with sealing arrangements, house in a Steel metal cabinet. This shall be consist 15 x 10 exchangeable Domino Unit as per Spec. SPN/186/2004 ver. 1 or latest amendment Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply               | Set     | 7  | 51981.13 | 363867.89 |
| 10 | 9011300 | Installation and complete wiring of of operating cum indication panel for LC gate as per technical specification and site requirement. The indoor wiring inside panel shall be terminated on tag block as per instructions of Engineer-in-charge. The wiring on panel tag blocks shall be repeated on tag blocks located in relay room. This includes laying & termination of cable, if any from Panel Room to Relay Room in HDPE pipe. Inspection: Consignee Inspection Charges: None. Payment | Numbers | 7  | 6272.375 | 43906.625 |

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|          |  | Terms: 100% after installation   |         |     |          |           |
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|          |  |  |         |     |          |           |
| Item- 10 | CHAPTER-10 : Panel room equipments, VDUs(Video Display Units), Fire alarm equipments, Furnitures |  |         |     |          |           |
| S No.    | Item No  | Description of Item  | Unit    | Qty |          |           |
| 1        | 10011400   | Supply of Steel Plain Almirah with 4 adjustable slavesSize: 1980mm height, 915 mm width and 485 mm depth.Make: Godrej Storewel Plain Large or Similar of reputed brand. Inspection: Consignee Inspection Charges:None Payment Terms: 100% after Supply.  | Numbers | 19  | 14515.41 | 275792.76 |
| 2        | 10011700   | Supply of Microprocessor based Networkable Analogue Addressable up to 64 nodes 1 Loop Fire Alarm Control panel with LCD display, the panel should be equipped with sufficient nos. of loop as per RDSO Specification No. RDSO/SPN/217/2018 ver 2.0 or latest. Each loop shall have capacity of 127 analogue addressable devices in 1 loop, the panel shall have sufficient nos. of programmable relay control for controlling AHU's, pressurisation fans, ventilation fans at fire pump room, monitoring of fire sprinkler & sealed lead acid batteries sufficient for 24 Hours normal working & then capable of operating the system for 24 Hours during Emergency conditions as required. The panel shall have provision of connectivity of BACNET/ MODBUS/ LONWOK/TCP-IP. The panel shall have dedicated RS232 serial port for direct PC or MODEM connection, optional remote printer as per RDSO Specification No. RDSO/SPN/217/2018 ver 2.0 or latest Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply. | Numbers | 14  | 44752.4  | 626533.57 |
| 3        | 10011800   | Installation ,Testing and Commissioning of Microprocessor based Networkable Analogue Addressable up to 64 nodes 1 Loop Fire Alarm Control panel with LCD display, the panel should be equipped with sufficient nos. of loop as per RDSO Specification No. RDSO/SPN/217/2018 ver 2.0 or latest. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after commissioning.   | Numbers | 13  | 11188.1  | 145445.32 |
| 4        | 10011900   | Supply of Probe type bimetallic Heat Sensor/Fixed cum ROR 90 degree with required module to be communicated with main fire Alarm Panel as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply.  | Numbers | 4   | 4788.052 | 19152.208 |
| 5        | 10012000   | Installation ,Testing and Commissioning of Probe type bimetallic Heat Sensor/Fixed cum ROR 90 degree with required module to be communicated with main fire Alarm Panel as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: Consignee Inspection Charges: None Payment Terms: 100% after commissioning  | Numbers | 4   | 1197.011 | 4788.0431 |

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| 6  | 10012100 | Supply of intelligent Analogue Addressable Multi-Sensor type smoke detector with inbuilt fault isolator and integral response indicator with 360 degree viewing angle. Detector shall communicate 3 danger levels for differentiated alarm activation and high tolerance to dust, dirt, temperature fluctuations and air current. Detector should have unique address for communication and assigned through panel with mounting base as required with the protection category of IP 40. All items as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest. Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply. | Numbers | 166  | 2442.024 | 405376.05 |
| 7  | 10012200 | Installation, testing and commissioning of intelligent Analogue Addressable Multi-Sensor type smoke detector with inbuilt fault isolator and integral response indicator with 360 degree viewing angle as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest. Inspection: Consignee Inspection Charges:Borne by Railways Payment Terms: 100% after commissioning  | Numbers | 162  | 610.5039 | 98901.627 |
| 8  | 10012300 | Supply of Analogue Addressable Manual Call Point with integral short circuit isolator, Analogue addressable protocol having status LED for alarming & standby mode, Electronically addressed) as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply.   | Numbers | 19   | 2556.202 | 48567.833 |
| 9  | 10012400 | Installation ,Testing and Commissioning of Analogue Addressable Manual Call Point with integral short circuit isolator, Analogue addressable protocol having status LED for alarming & standby mode, Electronically addressed) as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: Consignee Inspection Charges: None Payment Terms: 100% after commissioning   | Numbers | 17   | 639.0504 | 10863.857 |
| 10 | 10012500 | Supply of UV/IR Type Flame detector with required module to communicate on main fire alarm panel as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest. Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply.   | Numbers | 4    | 47820.23 | 191280.94 |
| 11 | 10012600 | Installation ,Testing and Commissioning of UV/IR Type Flame detector with required module to communicate on main fire alarm panel as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after commissioning   | Numbers | 4    | 11955.06 | 47820.234 |
| 12 | 10012700 | Supply of Linear Heat Sensing (LHS) cable as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply.   | Metre   | 1400 | 534.5879 | 748423.01 |
| 13 | 10012800 | Installation of Linear Heat sensing (LHS) cable as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: Consignee Inspection Charges: None Payment Terms: 100% after execution.   | Metre   | 1400 | 133.6514 | 187112    |
| 14 | 10012900 | Supply of LHS interface module as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest. Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply.   | Numbers | 15   | 22471.35 | 337070.29 |
| 15 | 10013000 | Installation of LHS interface module as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after execution.   | Numbers | 13   | 5617.838 | 73031.896 |

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| 16       | 10013100  | Supply of Air Sampling Type detector shall use LASER type. This type of detector shall use piping or tubing distribution network that shall run from the detector to the area as to be protected. It should be supplied with required module & Power supply unit complete as a system with all accessories like pipes, Sampling points etc as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply. | Set     | 14  | 102799.6 | 1439193.7 |
| 17       | 10013200  | Installation ,Testing and Commissioning of Air Sampling Type detector (it shall use LASER type) as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after commissioning  | Set     | 13  | 25699.89 | 334098.55 |
| 18       | 10013300  | Supply of intelligent Addressable Loop Powered Sounder cum beacon with base inbuilt fault isolator with protection category of IP42 and duly approved as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply.  | Numbers | 19  | 5741.356 | 109085.75 |
| 19       | 10013400  | Installation, testing and commissioning of intelligent Addressable Loop Powered Sounder cum beacon with base inbuilt fault isolator with protection category of IP42 and duly approved as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: Consignee Inspection Charges:None Payment Terms: 100% after commissioning.  | Numbers | 17  | 1435.339 | 24400.761 |
| 20       | 10013500  | Supply of FRLS unarmoured/armoured cable(2Cx1.5 sq.mm) with all accessories for connection of all Fire Alarm devices as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply.   | Lot     | 13  | 24375.52 | 316881.7  |
| 21       | 10013600  | Installation ,Testing and Commissioning of FRLS unarmoured/armoured cable(2Cx1.5 sq.mm) with all accessories for connection of all Fire Alarm devices as per RDSO Specification No. RDSO/ SPN/ 217/ 2018 ver 2.0 or latest Inspection: Consignee Inspection Charges: None Payment Terms: 100% after commissioning.  | Lot     | 13  | 6093.879 | 79220.424 |
| 22       | 10013700  | Supply of CO2 type fire extinguisher capacity 4.5 Kg capacity ISI Mark IS: 15683 operating temperature (-30) ° to (50) ° for class 13 B type of fire with 1 mtr. Hose pipe fitted with PVC bend horn complete in all respect. Inspection: (i) RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee if value of whole item in work less than 5 lakhs or as per extant policy Inspection Charges:(i) Borne by Railways (ii) None Payment Terms: 100% after Supply.     | Numbers | 60  | 4729.541 | 283772.43 |
|          |   |   |         |     |          |           |
|          |   |   |         |     |          |           |
| Item- 11 | CHAPTER-11: Apparatus case, Outdoor installation, Fuses, ARA Terminal, Hylam Sheet, Phenolic Laminated sheets |   |         |     |          |           |
| S No.    | Item No   | Description of Item   | Unit    | Qty |          |           |

|   |          |   |         |     |          |           |
|---|----------|---|---------|-----|----------|-----------|
| 1 | 11010100 | Supply of Apparatus Case Single(Large) NE Rly Type as per Drg. No. CSTE/6088 fitted with two nos of E Type lock (ward No will be specified by Engineer-in Charge) as per RDSO Drg. No. SA 3376 and Key to Drg. No. 3377 as per RDSO drawing No. RDSO/S-11500. Note: This item includes the supply of 2 Nos E Type Lock fitted on both doors, along with two Keys. Inspection: (i) RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee subject to procurement from RECOMMENDED LIST OF FIRMS FOR MECHANICAL SIGNALLING ITEMS if value of whole item in work less than 5 lakhs or as per extant policy Inspection Charges:(i) Borne by Railways (ii) None Payment Terms: 100% after Supply. | Numbers | 385 | 13332.61 | 5133054.2 |
| 2 | 11010200 | Installation of Apparatus Cases Single(Large) with 'E' type lock on CC foundation. This includes filling of location foundations with river bed sand and plastering on top of the sand. Supply of 'E' Type lock has been covered in supply of Apparatus case separately. It covers fixing of lamp holder , switch and lamp etc. in Apparatus Case. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after installation.   | Numbers | 385 | 926.9514 | 356876.29 |
| 3 | 11010300 | Supply of Apparatus Case half (Medium) NE Rly Type as per Drg. No. CSTE/6088 fitted with two nos of E Type lock (ward No will be specified by Engineer-in Charge) as per RDSO Drg. No. SA 3376 and Key to Drg. No. 3377 as per RDSO drawing No. RDSO/S-11507. Note: This item includes the supply of 2 Nos E Type Lock fitted on both doors, along with two Keys. Inspection: (i) RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee subject to procurement from RECOMMENDED LIST OF FIRMS FOR MECHANICAL SIGNALLING ITEMS if value of whole item in work less than 5 lakhs or as per extant policy Inspection Charges:(i) Borne by Railways (ii) None Payment Terms: 100% after Supply. | Numbers | 176 | 8420.7   | 1482043.2 |
| 4 | 11010400 | Installation of Apparatus Cases Half (Medium) with 'E' type lock on CC foundation. This includes filling of location foundations with river bed sand and plastering on top of the sand. Supply of 'E' Type lock has been covered in supply of Apparatus case separately. It covers fixing of Location lamp holder , switch and lamp etc. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after installation.   | Numbers | 176 | 564.4904 | 99350.307 |
|   |          | Excavation and Casting of Apparatus Case foundation in ratio 1:3:6 with contractor's own materials including cement and galvanized anchor bolts of standard size. The required scaffolding Ferma etc for Casting of foundation will have to be brought by the contractor at his own cost.The item also includes additional masonry work as well as earthwork if required on bank where there will be possibilities of foundation sinked, fallen or tilted. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after installation.   |         |     | 0        | 0         |
| 5 | 11010801 | Single (Large) Case Apparatus case / SS location box as per Drg No. CSTE/5074   | Numbers | 385 | 6145.468 | 2366005.1 |
| 6 | 11010802 | Half (Medium) Case Apparatus case / SS location box as per Drg No CSTE/5074   | Numbers | 176 | 4691.591 | 825720.1  |
| 7 | 11010900 | Supply of Phenolic laminated Sheet, grade P3 in standard size of 1220 X 1220 x 20 mm as per spec. No IS 2036 of 1995 or latest. Test report of manufacture to be supplied. Inspection: (i) RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee Inspection Charges:(i)   | Numbers | 183 | 8531.362 | 1561239.3 |

|          |  |  |         |     |          |           |
|----------|--|--|---------|-----|----------|-----------|
|          |  | Borne by Railways (ii) None Payment Terms: 100% after Supply.  |         |     |          |           |
| 8        | 11011000   | Supply of Phenolic laminated Sheet, grade P3 in standard size of 1220 X 1220 x 12 mm as per spec. No IS 2036 of 1995 or latest. Test report of manufacture to be supplied. Inspection: (i) RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee Inspection Charges:(i) Borne by Railways (ii) None Payment Terms: 100% after Supply.  | Numbers | 243 | 4331.164 | 1052472.9 |
|          |  | Fabrication and fixing of phenolic laminated sheet of size 10/12/20 mm thick in location box by providing all fixtures as per Railway Drawing including fixing of PVC coated string rods at the back side for cable support with contractor's own materials. The work shall be done as per instructions of Rly engineer at site. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after installation.  |         |     | 0        | 0         |
| 9        | 11011201   | Single Case (Large Case)   | Numbers | 385 | 2091.473 | 805216.97 |
| 10       | 11011202   | Half Case (Medium Case)  | Numbers | 176 | 610.1827 | 107392.16 |
| 11       | 11011700   | Supply of Tic-tac Piano type Switches , 5A (ISI mark of reputed make) Inspection: Consignee Inspection Charges: None Payment Terms: 100% after supply  | Numbers | 553 | 26.39665 | 14597.346 |
| 12       | 11011800   | Supply of two pin Lamp holder Bakelite type for Apparatus Cases (ISI mark of reputed make) Inspection: Consignee Inspection Charges: None Payment Terms: 100% after supply   | Numbers | 553 | 39.59943 | 21898.485 |
| 13       | 11012000   | Fixing of KLCR relays in field in half location boxes if Gate lodge is not provided or at any other location as decided by engineer in charge. Item includes supply and fixing of MS sheet and wiring of KLCR relays, push buttons and LEDs for KLCR circuit. The KLCR relays, push buttons, LEDs will be fixed on a MS sheet of min. 3mm in the half location box. The MS sheet will cover full length and breadth of the half location box and divided in two pieces of approx. 48cm x 46cm and 80cm x 46cm. The first piece to be fitted on top and will contain the KLCR relays, LEDs and push buttons. The second piece to be fitted below the first piece. (Supply of KLCR relays covered in separate item of SOR). Inspection: Consignee Inspection Charges: None Payment Terms: 100% after installation. | Numbers | 43  | 1956.51  | 84129.924 |
|          |  |  |         |     |          |           |
|          |  |  |         |     |          |           |
| Item- 12 | CHAPTER-12: Cable laying material, Cable protection, Cable execution, Jointing Kits items etc. |  |         |     |          |           |
| S No.    | Item No  | Description of Item  | Unit    | Qty |          |           |
|          |  | Supply of Rapid Joint LS3, suitable for cable Jointing of Signalling cable of various size, having dielectric strength > 20KV/mm, Non Toxic, low viscosity, Flamability point more than 200 C, Re-entrable, Long storage life Make RAYTECH or Similar. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply  |         |     | 0        | 0         |



|   |          |  |         |      |          |           |
|---|----------|--|---------|------|----------|-----------|
| 1 | 12010101 | Cable Size 6C x 1.5 Sq. mm.  | Numbers | 50   | 3128.07  | 156403.48 |
| 2 | 12010102 | Cable Size 12C x 1.5 Sq. mm.   | Numbers | 90   | 4352.485 | 391723.66 |
| 3 | 12010104 | Tools for installation of Rapid Cable Joint kit.   | Numbers | 4    | 4639.815 | 18559.261 |
| 4 | 12010200 | Supply of Medium class GI pipes 100 mm dia(4.5 mm thickness) as per IS 1239 ( Part 1 ) : 2004 with coupling on culverts bridges as per Drg.No.CSTE/NWR/SOR/06 to 12 or at any other locations as decided by Site Engineer. It includes supply of all material required for fixing arrangement. Contractor will also supply flexible/corrugated HDPE pipe at the end of GI pipe to protect the cables from sharp edges and sudden bends. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Metre   | 1000 | 678.5696 | 678569.57 |
| 5 | 12010300 | Fixing of Medium class GI pipes 100 mm dia(4.5 mm thickness) as per IS 1239 ( Part 1 ) : 2004 with coupling on culverts bridges as per Drg.No.CSTE/NWR/SOR/06 to 12 or at any other locations as decided by Site Engineer. It includes installation of all material required for fixing arrangement. Contractor will install flexible/corrugated HDPE pipe at the end of GI pipe along with any masonry work(if required) to protect the cables from sharp edges and sudden bends. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after installation. | Metre   | 1000 | 169.6469 | 169646.85 |
| 6 | 12010400 | Supply of Medium class GI pipes 50 mm dia(3.6 mm thickness) as per IS 1239 ( Part 1 ) : 2004 for use in ASM room and at any other location as decided by Site Engineer. It includes supply of all material required for fixing arrangement. At the ends of GI pipe, flexible/corrugated HDPE pipe will be provided by contractor to protect cables from sharp edges and sudden bends. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Metre   | 140  | 348.3751 | 48772.511 |
| 7 | 12010500 | Fixing of Medium class GI pipes 50 mm dia(3.6 mm thickness) as per IS 1239 ( Part 1 ) : 2004 for use in ASM room and at any other location as decided by Site Engineer. It includes installation of all material required for fixing arrangement. At the ends of GI pipe, flexible/corrugated HDPE pipe along with any masonry work(if required) will be provided by contractor to protect cables from sharp edges and sudden bends. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Installation.   | Metre   | 140  | 87.09377 | 12193.128 |
|   |          | Supplying and placing of one layer of standard size of B grade quality bricks of the local make spreading on cables laid.(minimum size of brick 200mm X 100mm X 70mm) Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Installation.  |         |      | 0        | 0         |
| 8 | 12010601 | Lengthwise (up to 2 cables).(Unit is per RM Running Meter)   | Metre   | 800  | 13.20278 | 10562.227 |
| 9 | 12010602 | widthwise ( more than 2 cables).(Unit is per RM Running Meter)   | Metre   | 800  | 28.43059 | 22744.472 |

|    |          |   |         |       |          |           |
|----|----------|---|---------|-------|----------|-----------|
| 10 | 12010700 | Supply of Double Walled Corrugated (DWC) HDPE Pipe/duct with associated collars etc. as per RDSO Specification No. RDSO/SPN/204/2011 or latest anti-rodent & anti-oxidant and non flame propagating type in 6 meters straight length and of size 120 mm outer dia, & 103.5 mm inner dia. (The manufacturers, suppliers must produce valid IS license and should be certified under ISO 9000 and shall submit copy of certificate). One of the following coupling arrangements should also be supplied with each pipe as per the site requirement. 1) Suitable snap fit coupler with rubber O-Ring 2) Spacers 3) Tees 4) Bend, 5) End-cap (The total quantity of above items is equal to no. of pipes supplied.) DWC pipe shall be marked at every 1 mtr length in such a way that manufacturer's name, vendor name and year of manufacture can be easily identified. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs or as per extant policy Inspection Charges: (i) Borne by Railways (ii) None Payment Terms: 100% after Supply | Numbers | 1667  | 1604.138 | 2674098.5 |
| 11 | 12010800 | Supply of Double Walled Corrugated (DWC) HDPE Pipe/duct with associated collars etc. as per RDSO Specification No. RDSO/SPN/204/2011 or latest anti-rodent & anti-oxidant and non flame propagating type in 6 meters straight length and of size 50 mm outer dia, & 38 mm inner dia. (The manufacturers, suppliers must produce valid IS license and should be certified under ISO 9000 and shall submit copy of certificate). One of the following coupling arrangements should also be supplied with each pipe as per the site requirement. 1) Suitable snap fit coupler with rubber 'O-Ring 2) Spacers 3) Tees 4) Bend, 5) End-cap (The total quantity of above items is equal to no. of pipes supplied.) DWC pipe shall be marked at every 1 mtr length in such a way that manufacturer's name, vendor name and year of manufacture can be easily identified. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs or as per extant policy Inspection Charges: (i) Borne by Railways (ii) None Payment Terms: 100% after Supply    | Numbers | 850   | 321.8446 | 273567.93 |
| 12 | 12010900 | Supply of Double Wall Corrugated (DWC)-HDPE pipe/duct of size 200 mm outer dia, & 175 mm inner dia. It includes supply of Double Wall Corrugated -HDPE pipe/duct as per RDSO Specn.No. RDSO/SPN/ 204/2011 (version 1.1) or latest and conforming to ISI Spec. No.IS:14930, Part- I I . (The manufacturers, suppliers must produce valid IS license and should be certified under ISO 9000 and shall submit copy of certificate). One of the following coupling arrangements should also be supplied with each pipe as per the site requirement. 1) Suitable snap fit coupler with rubber O-Ring 2) Spacers 3) Tees 4) Bend, 5) End-cap DWC pipe shall be marked at every 1 mtr length in such a way that manufacturer's name, vendor name and year of manufacture can be easily identified. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs or as per extant policy Inspection Charges:   | Metre   | 67500 | 342.0859 | 23090799  |

|    |          |   |         |       |          |           |
|----|----------|---|---------|-------|----------|-----------|
|    |          | (i)Borne by Railways (ii) None Payment Terms: 100% after Supply   |         |       |          |           |
| 13 | 12011600 | Placing of DWC HDPE/RCC/GI pipes along with collars in trenches at places near track and road, crossings, platform cuttings etc. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution(Unit is RM running meter.)   | Metre   | 82602 | 26.39665 | 2180415.9 |
| 14 | 12012000 | Supply of Thermo shrink Universal Jointing kit for Quad Cable (for straight joints) as per RDSO spec IRS/TC-77/2012 revision 3 With latest Amd. Inspection: RDSO Inspection Charges: Borne by Railways Payment Terms: 100% after Supply   | Numbers | 137   | 1916.839 | 262606.95 |
| 15 | 12012100 | Jointing of 4 / 6 quad /Signaling cable with Heat Shrinkable straight through Jointing Kit. All the material required for the work are to be arranged by contractor himself at his own cost except Thermo shrinkable Joint Kit/Rapid Joint kit. After jointing the cable through test such as insulation test, continuity cable losses etc. to be carried out jointly with Railway Engineer. If any defect or any damage is observed during jointing, the contractor has to redo the joint free of cost. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution  | Numbers | 277   | 1032.538 | 286013.02 |
| 16 | 12012200 | Horizontal direction drilling/boring without damage of surface road /track using Auger Machine(HDD machine). The bore shall be upto 200 mm dia & shall be done at the depth of minimum 1200 mm from the ground level. The ground level shall be considered ignoring the bank height of the bank of the road. The length of the bore shall be minimum 4 Mtrs long. This include insertion of different dia DWC-HDPE pipe/ GI pipes coupling etc. as per direction of Engineer In charge. Note:- Pipe Supply is not covered under this item. Contactor shall provide all material required for boring and adequate nos. of labours for proper laying of cables into the bore. Cable shall be laid cautiously so that it should not get damage due to rough handling & pressure on cable. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution. | Metre   | 4538  | 1073.145 | 4869934.2 |
| 17 | 12012500 | Supply of RCC cable route marker engraved and painted on both side along the route at every 50 meter and route diversion as per Drg. No 4014/00/CC4 or latest/ Stone marker. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply   | Numbers | 1760  | 293.2089 | 516047.58 |
| 18 | 12012600 | Transportation at site and Installation of RCC cable route marker engraved and painted on both side along the route at every 50 meter and route diversion as per Drg. No 4014/00/CC4 or latest/ Stone marker. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after   | Numbers | 1760  | 73.30221 | 129011.9  |

|    |          | Execution   |           |       |          |           |
|----|----------|---|-----------|-------|----------|-----------|
| 19 | 12013200 | <p>Transferring of Signaling/Telecom cables from existing Location box to New Location box . The work include breaking/ Dismantling of Existing foundation of locations, excavating and removing / segregating coils of 2C/6C/12C/19C/24C/30C/Quad cables which may be about 10 mtrs. in length. These cables are to be disconnected and removed from the existing location one by one as per the instruction and under the supervision of Railway staff present at site. The cable is then to be inserted and terminated in new location box. The item includes neatly dressing of cable, making wiring tree etc.The material required to dressing /lacing will be arranged by contactor. The work is required to be done systematically and with due precaution during the block or disconnection within the time that may be allowed. The excavation work to be done carefully without damaging the cable to avoid undue failure. (Termination charges will be given separately). Note: Proportionate payment will be made if cable of other length. One No unit = One cable of 10 m length) Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution</p> | Numbers   | 50    | 322.8616 | 16143.08  |
| 20 | 12013300 | <p>Shifting of Exposed cables. The item includes Removal of exposed cable from existing trench &amp; laying the same in new trenches. Digging, Placing of capping/Half round RCC pipe covered separately. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution</p>   | Kilometre | 10    | 6120.088 | 61200.881 |
| 21 | 12013700 | <p>Excavation of cable trench as per cable route plan, 1.2 Mtr. deep and of 0.3 Mtr. to 0.6 Mtr. wide at bottom as per RDSO sketch No. SDO/CABLE LAYING/003 or latest alongside the track in normal (all type) soil/strata, conforming to distances as per cable route plan and refilling. This work includes clearing of route from bushes etc, covering of cable laid in trench by loose soil for a layer of 50mm thickness approximately before covering by bricks. The work shall be done as per the extant practice on North Western Railway and instructions of Railway Engineer at site. In case 1.2m depth of trench is not achievable due to site conditions, specific approval of JA grade officer will be required for each site where trench depth of 1.2m is not possible. Without the approval of JA Grade officer, no payment for trenching will be made for trench depth less than 1.2m. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution( Unit is Cubic Meter)</p>  | cum       | 25606 | 244.6797 | 6265268.5 |
| 22 | 12013800 | <p>Digging of trench 1.2 Mtrs. deep from rail flange/ road level and 0.3 Mtrs to 0.6 Mtrs wide and back filling after placing of DWC/ RCC/GI pipe. (Placing of DWC/RCC/GI pipe covered separately).The ballast disturbed be screened and dressed as required by Engineer-in-charge or his representatives and road tarred immediately. For track crossing, Drg. No.CSTE/3644 Pg.7 of 11 and for Road Crossing, Drg. No. CSTE/3644 Pg. 5 of 11 are to be followed. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution( Unit is Cubic Meter)</p>   | cum       | 450   | 244.6797 | 110105.87 |

|    |          |   |         |       |          |           |
|----|----------|---|---------|-------|----------|-----------|
| 23 | 12013900 | Digging of cable trench 0.3 Mtrs. Deep and 0.3 Mtrs. Wide on Asphalted Platform / Road / Hard rocky area. Refilling with earth leveling of trenches & restoring the original surface of trenches. The sharp edges will be smoothened out in bottom of the chase and will be leveled properly. In hard rocky ground area, cables will be laid normally on layer of shifted earth of 0.05 mtrs thickness previously deposited at bottom of the trench and cables will be covered with layer of sand or shifted earth of 0.1 mtr thickness. In case sharp edges of rocky ground can not be protected from shifted earth then GI/ CI /PVC /DWC/ HDPE pipes will be used, if numbers of cables is small. In case number of cables are large RCC duct will be used. In isolated cases, it can be given smooth surface by using either masonry bricks or cement concrete. A row of bricks shall then be placed length wise on the top and jointed with cement mortar and layer of concrete with cement plaster shall be provided on top of the same. Note: This item in hard rocky area will be operated only where normal depth i.e. 1.2 mtr is not possible and it will be decided by site engineer/unit officer incharge of work. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution (Unit is Cubic Meter) | cum     | 270   | 448.7519 | 121163.02 |
| 24 | 12014000 | Digging of cable pit (min 2x2x1m) as per instruction of Site Engineer, supplying and filling of sand before and after coiling the cables, covering top of the cable pit with stones and providing brick masonry on all four sides of the cable pit and plastering thereafter. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution   | Numbers | 20    | 11156.87 | 223137.4  |
| 25 | 12014100 | Laying of S&T Cables of various cores/ pairs/ quads in trenches/ GI pipes/ RCC pipes/ DWC pipes/ Trunking. This also includes laying of cables in track crossings & road crossings. Item includes provision of labels of coloured plastic adhesive tapes or any other identifiable material on each cable to give the cable number at each Gantry Post/hectometer post. (Cables will be meggered before and after its laying by contractor under supervision of Railway Representative and he will submit the meggering report of each testing). Length of the cable laid includes the length of the cable coiled for termination purposes. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution (unit is RM running meter)  | Metre   | ##### | 8.117928 | 5268535.3 |
| 26 | 12014200 | Cement concrete work for miscellaneous items in the ratio 1 : 3 : 6 . Item includes excavation, ramming, curing and plastering with cement & sand mixture (aggregate not exceeding 3.8 cm.) (Aggregate cement & sand to be supplied by the contractor). Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution (Unit is cubic meter)   | cum     | 11    | 3236.698 | 35603.68  |
| 27 | 12014300 | Providing brick masonry in ratio 1:6 cement and mortar including plastering with 1:4 cement and sand mixture both sides, 20 mm thick each with contractor's owned class II bricks, including excavation, curing, grouting, bolting etc. wherever required. Bricks sand and cement to be supplied by the contractor. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution (Unit is cubic meter)   | cum     | 11    | 1775.721 | 19532.93  |
|    |          |   |         |       |          |           |
|    |          |   |         |       |          |           |

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|----------|---|---|---------|-----|----------|-----------|
| Item- 13 | CHAPTER-13: Earthing, Measuring Instruments, Multimeter, Earth Tester, Clamp meters, Fault Locators, ELD(Earth Leakage Detector) etc. |   |         |     |          |           |
| S No.    | Item No   | Description of Item   | Unit    | Qty |          |           |
| 1        | 13010100  | Supply of Earth Leakage Detector (ELD) 12 Channels as per RDSO Specn.RDSO/SPN/256/2002 or latest. Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply.   | Numbers | 12  | 141344   | 1696128.3 |
| 2        | 13010200  | Wiring, installation, testing and commissioning of Earth Leakage Detector (ELD) 12 Channels as per RDSO Specn.RDSO/SPN/256/2002 or latest. This includes supply of fuse terminal strip for incoming power supply wires. On job training at site will be given by OEM engineer for installation and maintenance of ELD. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after commissioning.  | Numbers | 12  | 35336.01 | 424032.14 |
| 3        | 13010300  | Supply of basic material to construct unit maintenance free earth as per RDSO Specs. No RDSO/SPN/197/2008 or latest and conforming to RDSO Drg.No.SDO/ RDSO/E&B/001dtd.19.09.08 . It consist of following: (a) Copper bonded steel electrode of 3.0 m long, 17.2 mm dia with copper bonding thickness of minimum macrons and UL listed and marked = 1 no. (b) Earth enhancement material supplied in sealed bags of minimum 10 kg = 3 nos. © Copper strip of 150x25x6 mm, to terminate earth rod = 1 no. (d) Copper strip of 300x25x6 mm (MEEB) = 1 no. (e) Copper strip of 150x25x6mm (SEEB) = 1 no. (ii) Supply of 35 sq. mm multi strand single core PVC insulated copper cable as per IS: 694 for connecting main earth electrode to MEEB in the equipment room in duplicate.(minimum 10 meter) (iii) Supply of 16 sq. mm multi strand single core PVC insulated copper cable as per IS: 694 for connecting MEEB to SEEB and SPD to MEEB (minimum 10 meter ) (iv) Supply of 10 sq. mm multi strand single core PVC insulated copper cable as per IS: 694 for connecting various equipments to SEEB (v) Supply of copper lug sleeve for 3/16 cable Inspection: RDSO Inspection Charges:Borne by Railways Payment Terms: 100% after Supply. | Lot     | 45  | 15638.81 | 703746.61 |

|   |          |   |         |    |          |           |
|---|----------|---|---------|----|----------|-----------|
| 4 | 13010400 | <p>Installation of Unit Maintenance Free Earth as supplied under item no. 13.3 of Chapter 13 of SOR . It includes ( i ) Digging the earth to the required depth. (ii) Insertion of electrode. (iii) Filling of earth enhancing compound (Approx.30 Kg) (iv) Provision of exothermic weld connections to copper tape of 25 mm x 6 mm x 150 mm to the earth electrodes. All material tools and features required for weld will be arranged by contractor. (v) This also includes CC cover 1.5 ft x 1.5 ft. 1 ft wall thickness 2 inch with cover 3 inch thickness. Cables 35 Sq mm/ 16 Sq mm/10 sq mm for connecting earth to busbar, busbar to busbar and busbars to various equipments. Earth electrode of 17.20 mm dia and 3.00 meter long high tensile low carbon steel circular rods molecularly bonded with copper and outer surface (minimum copper bonding thickness of 250 microns to made requirement of under writer's laboratories (UL) 467-2007 or latest. Copper strips of 150 mm x 25 mm x 6 mm to be welded with each earth electrode, copper strips of 300 mm x 25 mm x 6 mm for main equip- potential busbar, copper strips of 150 mm x 25 mm x 6 mm sub equip-potential busbar in relay room, power room and panel room. GI strip 25 mm x 2 mm for ring formation of earth pits Earth enhancement material in bags for each Earth Electrode. Inspection chamber of size 300 mm x 300 mm x 300 mm (Inside dimension) of approximate 50 mm thick with pulling hooks to cover the earth pits. Note: The installation of this item shall be carried out by the contractor as per RDSO Specn.No.RDSO/SPN/ 197/2008 or latest and conforming to RDSO Drg.No.S DO/RDSO/E&amp;B/001 or latest. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after execution and testing.</p> | Set     | 45 | 7013.247 | 315596.14 |
| 5 | 13010700 | <p>Provision of Ring Earth for EI system which includes supply of all components of earthing &amp; bonding system like earth electrode, earth enhancement material, earth pit, equi- potential earth busbar, connecting cables and tape/strips and other associated accessories in accordance with RDSO Spec.No.RDSO/SPN /197/2008 or latest consisting minimum 8 Nos. of earth pits connected in a ring to achieve less than 1 Ohms earth resistance for connecting EI equipments, relay racks, panel, power equipments as per Signal Engineering Practice. Diagram of ring earth should be supplied to Railway for Approval before execution. All related material as recommended by RDSO in Specn. No.RDSO/SPN /197/2008 or latest, will be supplied by the contractor. basic material for one earth pit is given below: (a) Copper bonded steel electrode of 3.0 m long, 17.2 mm dia with copper bonding thickness of minimum macrons and UL listed and marked = 1 no. (b) Earth enhancement material supplied in sealed bags of minimum 10 kg = 3 nos. © Copper strip of 150x25x6 mm, to terminate earth rod = 1 no. (d) Copper strip of 300x25x6 mm (MEEB) = 1 no. (e) Copper strip of 150x25x6mm (SEEB) = 1 no. (f) Supply of 35 sq. mm multi strand single core PVC insulated copper cable as per IS: 694 for connecting main earth electrode to MEEB in the equipment room in duplicate.(minimum 10 meter) (g) Supply of 16 sq. mm multi strand single core PVC insulated copper cable as per IS: 694 for connecting MEEB to SEEB and SPD to MEEB (minimum 10 meter ) (h) Supply of 10 sq. mm multi strand single core PVC insulated copper cable as per IS: 694 for connecting various equipments to</p>  | Station | 13 | 135589.9 | 1762668.6 |

|  |  |   |  |  |  |  |
|--|--|---|--|--|--|--|
|  |  | <b>SEEB (i) Supply of copper lug sleeve for 3/16 cable</b><br><b>Note:Earthing arrangement for EI must be as per</b><br><b>RDSO guidelines issued by RDSO vide RDSO TAN</b><br><b>no. STS/E//TAN/3006 dated 02.11.2012 or latest.</b><br><b>Inspection: Consignee Inspection Charges:None</b><br><b>Payment Terms: 100% after Supply.</b> |  |  |  |  |
|--|--|---|--|--|--|--|



|   |          |  |         |    |          |           |
|---|----------|--|---------|----|----------|-----------|
| 6 | 13010800 | <p>Installation, testing and commissioning of Ring Earth for EI system which includes installation of all components of earthing &amp; bonding system like earth electrode, earth enhancement material, earth pit, equip- potential earth busbar, connecting cables and tape/strips and other associated accessories in accordance with RDSO Spec.No.RDSO/SPN /197/2008 or latest consisting minimum 8 Nos. of earth pits connected in a ring to achieve less than 1 Ohms earth resistance for connecting EI equipments, relay racks, panel, power equipments as per Signal Engineering Practice. Diagram of ring earth should be supplied to Railway for Approval before execution. Installation of one earth pit includes ( i ) Digging the earth to the required depth. (ii) Insertion of electrode. (iii) Filling of earth enhancing compound (Approx.30 Kg) (iv) Provision of exothermic weld connections to copper tape of 25 mm x 6 mm x 150 mm to the earth electrodes. All material tools and features required for weld will be arranged by contractor.(v) This also includes CC cover 1.5 ft x 1.5 ft. 1 ft wall thickness 2 inch with cover 3 inch thickness. Cables 35 Sq mm/ 16 Sq mm/10 sq mm for connecting earth to busbar, busbar to busbar and busbars to various equipments. Earth electrode of 17.20 mm dia and 3.00 meter long high tensile low carbon steel circular rods molecularly bonded with copper and outer surface (minimum copper bonding thickness of 250 microns to made requirement of under writer's laboratories (UL) 467-2007 or latest. Copper strips of 150 mm x 25 mm x 6 mm to be welded with each earth electrode, copper strips of 300 mm x 25 mm x 6 mm for main equip- potential busbar, copper strips of 150 mm x 25 mm x 6 mm sub equip-potential busbar in relay room, power room and panel room. GI strip 25 mm x 2 mm for ring formation of earth pits Earth enhancement material in bags for each Earth Electrode. Inspection chamber of size 300 mm x 300 mm x 300 mm (Inside dimension) of approximate 50 mm thick with pulling hooks to cover the earth pits. Note:Earthing arrangement for EI must be as per RDSO guidelines issued by RDSO vide RDSO TAN no. STS/E//TAN/3006 dated 02.11.2012 or latest. Inspection: Consignee Inspection Charges:None Payment Terms: 100% after commissioning.</p> | Station | 13 | 33897.47 | 440667.11 |
| 7 | 13011500 | Supply of Digital Cable Insulation Tester for measurement of cable insulation resistance with auto range 0-500 V DC. Motwani or from any reputed make. Inspection: Consignee Inspection Charges:None Payment Terms: 100% after Supply.   | Numbers | 3  | 7751.658 | 23254.973 |
| 8 | 13011700 | Supply of Cable Fault Locator to localize the faults of underground cables. Aplab make (Model No.3049) OR C Scope Stanley make( Model TS- 90) or superior from any reputed make. It also includes supply of all accessories required to localize faults of underground cables. Inspection: Consignee Inspection Charges:None Payment Terms: 100% after Supply.   | Numbers | 5  | 51054.16 | 255270.79 |
|   |          |  |         |    | 0        | 0         |
| 9 | 13011800 | Supply of Digital Earth Resistance Tester for measurement of earth resistance with 3.5 digital LCD, 12.5 mm screen segment and Range -0.5 Ohms to 500 Ohms. WACO or from any repudiated make. Inspection: Consignee Inspection Charges:None Payment Terms: 100% after Supply.  | Numbers | 5  | 7813.193 | 39065.967 |

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|----------|---|--|---------|-----|----------|-----------|
| 10       | 13011900  | Supply and Installation of RFID based Electronic /Pipe marker for S&T Cable with programmable memory for saving the user specific data which can be buried up to depth of 1.5 Meter.make Stanley/3M or Similar Inspection: Consignee Inspection Charges:None Payment Terms:100% after installation.  | Numbers | 500 | 2281.941 | 1140970.3 |
| 11       | 13012000  | Supply of RFID marker locator with built in GPS module/system , 1.5 M depth range.make Stanley/3M or Similar Inspection: Consignee Inspection Charges:None Payment Terms: 100% after Supply.   | Numbers | 1   | 339294.4 | 339294.41 |
|          |   |  |         |     |          |           |
|          |   |  |         |     |          |           |
| Item- 14 | CHAPTER-14: Miscellaneous Signalling items, Painting, lettering |  |         |     |          |           |
| S No.    | Item No   | Description of Item  | Unit    | Qty |          |           |
| 1        | 14010200  | Supply of seal plier as per sample got approved from site engineer incharge. Inspection:Consignee Inspection Charges: None Payment Terms: 100% after Supply  | Numbers | 8   | 939.2086 | 7513.6687 |
| 2        | 14010300  | Supply of Vacuum Cleaner, Eureka Forbes or from any reputed make only as per specification given below:-Voltage-230V AC,50Hz, Input Power(IEC)-1000 Watt, Suction of the motor 1700 mm of water column , Airflow-30 litres/second, Dust collection capacity-61(dry), 81(wet), Variable power option-2 Speed, Blower function, Air filtration-2 Stage, Hepa filter, Dust collection type-Washable dust bag, On board accessory storage. Inspection:Consignee Inspection Charges: None Payment Terms: 100% after Supply  | Numbers | 2   | 19933.5  | 39867.002 |
| 3        | 14010400  | Supply of Safety lock Godrej or Navtal make size as approved by site engineer. Inspection:Consignee Inspection Charges: None Payment Terms: 100% after Supply  | Numbers | 121 | 99.85944 | 12082.992 |
| 4        | 14010500  | Supply of hand cuff lock Godrej or Navtal make size as approved by site engineer. Inspection:Consignee Inspection Charges: None Payment Terms: 100% after Supply   | Numbers | 385 | 307.1788 | 118263.85 |
| 5        | 14010600  | Supply of Obstruction test piece 3mm/5mm as per sample approved by Engineer incharge. Inspection:Consignee Inspection Charges: None Payment Terms: 100% after Supply   | Numbers | 8   | 2194.767 | 17558.133 |
|          |   | Painting of two coats of synthetic enamel paint over one coat of primer on the following after scraping & cleaning surface wherever necessary with contractor's own supply of paints. Wherever required contractor shall apply coating of epoxy paint also as per instructions of site-in-charge. Epoxy paint will be supplied by Railways.NOTE:- The paint and primer should be from Asian Paints/ Nerolac / Dulux / Berger. The primer / enamel paints (Aluminum synthetic, black enamel, brilliant white and yellow) will be as per (IS 5660 of 1970) / (IS 2932 of 1974).Inspection:Consignee Inspection Charges: None Payment Terms: 100% after Execution |         |     | 0        | 0         |
| 6        | 14010801  | Apparatus Case Full Size. (Outside & inside)   | Numbers | 108 | 226.4099 | 24452.27  |
| 7        | 14010802  | Apparatus case Half Size. (Outside & inside)   | Numbers | 91  | 205.0892 | 18663.116 |
| 8        | 14010804  | Main Signal Post with Signal Units, Surface base and complete fittings as per North Western Railways standard practice.  | Numbers | 68  | 312.7008 | 21263.655 |

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| 9  | 14010809 | Painting & Lettering of power operated lifting barriers (ELB) includes Operating console, Aluminum Lifting barriers of 24 ft long, 2 pedestal driving & driven mechanism, 2 Electric motors, 2 stop boards, 2 Nos Boom light, 2 Nos of Boom rest & Boom locking arrangements etc. (All Items at one LC gate to be taken as one LOT)   | Numbers | 7   | 2888.457 | 20219.198 |
|    |          | Lettering / Numbering Termination particulars, equipments names etc., legibly and neatly inside location boxes. This includes supply of paints of Asian Paints/ Nerolac / Dulux / Berger make. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Execution   |         |     |          |           |
| 10 | 14011001 | Full Case.  | Numbers | 108 | 106.6036 | 11513.184 |
| 11 | 14011002 | Half Case   | Numbers | 91  | 73.09704 | 6651.8302 |
| 12 | 14011100 | Dismantling of existing interlocked mid section LC gate (OSL) and other associated S&T gears. All the released material will be transported to the place/location as decided by site engineer. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Execution   | Numbers | 5   | 4589.957 | 22949.784 |
| 13 | 14011300 | Dismantling of existing lever frames/signal fittings/point fittings/lifting barriers (within station limit)/indoor and outdoor equipment and all other released material of S&T at way side station (3/4 Line). All the released material will be transported to the place/location as decided by site engineer. The item includes i). Mechanical Signalling gears like levers, down rods, locking trough, Rodding, wire transmission, signal posts and hoods etc. ii). Electrical Signalling gears like relays, batteries, indicators, SM slide control and all released wire transmission for slot, telephone, selector control and their related items etc. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Execution   | Station | 3   | 47504.79 | 142514.38 |
| 14 | 14011600 | Complete painting and varnishing work at a station (3/4 Line). This includes painting of signal posts and fittings, apparatus cases, point machines, junction boxes, rail post etc. This also includes varnishing, letter writing on relays, terminal Nos., apparatus cases, point machine, Signal Nos. and other details as per Signal Engineering Manual and instructions of Engineer at site. The item includes painting of distances of main cable run from G.P nearest to cable run and painting of distances of signals from nearest line on the signals base. At least two coats of paint is to be applied besides primary coating of red oxide. This includes supply of paints, varnishes and all other material required for complete painting work at a station. This includes painting on existing functional units also. The painting shall consist of initial red oxide / base paint followed by at least two coat of the paint as per standard painting scheme. This item also includes painting of interlocked gate attached to the station. Location box no. shall be painted on both sides. Inspection: Consignee Inspection Charges: None Payment Terms: 100% after Execution | Station | 1   | 32957.82 | 32957.815 |

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| 15       | 14011700  | Complete painting and varnishing work at a station (5/6 or more Line). This includes painting of signal posts and fittings, apparatus cases, point machines, junction boxes, rail post etc. This also includes varnishing, letter writing on relays, terminal Nos., apparatus cases, point machine, Signal Nos. and other details as per Signal Engineering Manual and instructions of Engineer at site. The item includes painting of distances of main cable run from G.P nearest to cable run and painting of distances of signals from nearest line on the signals base. At least two coats of paint is to be applied besides primary coating of red oxide. This includes supply of paints, varnishes and all other material required for complete painting work at a station. This includes painting on existing functional units also. The painting shall consist of initial red oxide / base paint followed by at least two coat of the paint as per standard painting scheme. This item also includes painting of interlocked gate attached to the station. Location box no. shall be painted on both sides.<br>Inspection:Consignee Inspection Charges: None<br>Payment Terms: 100% after Execution | Station | 2   | 45163.06 | 90326.115 |
| 16       | 14011900  | Hiring of JCB machine(in good condition) for levelling and dressing ground/ dismantling structures including disposal of debris through dumpers etc with contractors labour , JCB machine , machine operator, fuel etc. The contractor shall arrange for road permit for all the states for operation as per instructions of engineer incharge and vehicle shall not be more than 3 years old . Payment shall be made for actual working hrs at site. Inspection:Consignee Inspection Charges: None<br>Payment Terms: 100% after Execution   | Hour    | 80  | 972.8935 | 77831.482 |
| 17       | 14012700  | Supply & fixing of Crank Handle Box & SM's key box of size 450 mm x 250 mm x150 mm and made of 12 mm thick teakwood with a glass front, lock and sealing arrangement. All material like lock, teakwood, handles, hinges, glass sheet of 3 mm thick will be supplied by the contractor. Box will be polished and description will be written as per instructions of Engineer in charge.<br>Inspection:Consignee Inspection Charges: None<br>Payment Terms: 100 % after Execution  | Numbers | 22  | 1633.327 | 35933.196 |
| 18       | 14012800  | Supply & fixing of KLCR boxes & fixing of KLCR Relays in ASM office. It includes supply of any minor bracket, nuts, bolts, teakwood, sun mica, lock, drilling hole etc as directed by engineer at site. It also includes supply and wiring of push buttons along with LEDs for KLCR circuit. Rly will supply only KLCR relays and contractor has to wire KLCR relays. It includes supply of all the related wiring material. Inspection:Consignee Inspection Charges: None<br>Payment Terms: 100 % after Execution   | Numbers | 21  | 1536.581 | 32268.202 |
|          |   |  |         |     |          |           |
|          |   |  |         |     |          |           |
| Item- 15 | CHAPTER-15: Telecom items(Conference system, IPIS, OFC equipments, Control equipments, LC gate phones etc.) |  |         |     |          |           |
| S No.    | Item No   | Description of Item  | Unit    | Qty |          |           |
| 1        | 15010100  | Supply of UTP CAT-6 cable in a roll of 305 meter and make Siemen/ Systemax / Panduit/ Tyco/ Krone/ AMP. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Metre   | 915 | 16.71758 | 15296.585 |

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|----|----------|--|-----------|-----|----------|-----------|
| 2  | 15010200 | Supply of 4/2 wire combined Portable Light Weight Emergency control telephones of metal body with 6-pin plug as per IRS-TC-75/99 (Amnd 4) or latest. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.   | Numbers   | 10  | 2958.788 | 29587.885 |
| 3  | 15010300 | Supply of KRONE Punching tool, Krone or any reputed make only. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after supply.   | Numbers   | 2   | 1250.161 | 2500.3218 |
| 4  | 15010500 | Supply of patch chord cable (10 meter long) with FC/PC connectors compatible with SDH equipments as per TEC Specn.No.GR/OFJ- 02/01 May 2004 with latest Amendment. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after supply.   | Numbers   | 12  | 844.8979 | 10138.775 |
| 5  | 15011100 | Supply of Pre-lubricated HDPE duct, 40 mm OD,33 ID as per RDSO specification No. RDSO/SPN/TC/45/2013 Rev. 2.0 or latest. The item also includes supply of all the accessories of HDPE duct like end caps, collars, bends, couplers etc. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% on Supply  | Kilometre | 162 | 43099.29 | 6982085.5 |
| 6  | 15011200 | Laying of Pre-lubricated HDPE duct, 40 mm OD,33 ID as per RDSO specification No. RDSO/SPN/TC/45/2013 Rev. 2.0 or latest. The item also includes installation of all the accessories of HDPE duct like end caps, collars, bends, couplers etc. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution.   | Kilometre | 162 | 10774.82 | 1745520.6 |
| 7  | 15011300 | Blowing/drawing of OFC cables in the HDPE duct along with all the protective work as per instructions of engineer incharge at site. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution.   | Kilometre | 165 | 9638.719 | 1590388.7 |
| 8  | 15011400 | Construction of brick chamber of optical fibre cable straight through joint as per Drg. No. CSTE/NWR/ SOR/23. It also includes supply and provision of all the material required for this item like bricks, sand, cement etc. The cement and sand should be in ratio 1:6. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution.   | Numbers   | 55  | 4695.793 | 258268.62 |
| 9  | 15011500 | Supply, installation and complete indoor wiring of 19 inch covered Rack of size 2035 mm x 600 mm x 600 mm (Approx.) as per Drg. No. CSTE/NWR/SOR/24. The rack shall be complete with all fittings for housing SDH equipments, Primary MUXES, DDF, MDF using crone modules and other equipments like runway ladders etc completely wired and equipped with integrated protection modules for all channels as per technical specifications and other stipulations of tender document. It should be possible to lock all the equipments with only order wire telephone remaining outside the rack. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution. | Numbers   | 13  | 32753.98 | 425801.68 |
| 10 | 15011700 | Supply & Installation of Professional 19" Equipment Racks 12U for housing of network equipment. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution.   | Numbers   | 13  | 6564.531 | 85338.906 |

|    |          |   |                   |    |          |           |
|----|----------|---|-------------------|----|----------|-----------|
| 11 | 15012000 | Supply of SMPS based Battery Chargers as per RDSO Spec for Telecom use 48 volts, 25 Amps in 2+1 configuration modules of 25 Amps with ultimate expandable capacity 50 Amps, automatic switching between the modules as per RDSO Spec No. RDSO/SPN/TC/23/1999 version 4 or latest along with two potential free contacts. Inspection: (i) RDSO if value of item in work more than 5 lakhs (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs as per extant instructions by Railway Board. Inspection Charges: (i) Borne by Railways (ii) None Payment Terms: 100% on Supply | Numbers           | 3  | 113752.8 | 341258.44 |
| 12 | 15012100 | Installation of Battery chargers, Power distribution Board along with MCBs of suitable ratings and wiring and commissioning of External alarm contacts through EMS. The work includes supply of battery rack, MCBs, battery cable and battery lugs and other accessories required for installation of power plant. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution.   | Numbers           | 3  | 3270.901 | 9812.7016 |
| 13 | 15012300 | Supply of 48Volt/200AH maintenance free VRLA Batteries duly charged as per IRS Spec. No. S-93/96(A) with amendments-1 or latest Inspection: RDSO Inspection Charges: Borne by Railways. Payment Terms: 100% after Supply.   | Numbers           | 3  | 68715.11 | 206145.33 |
| 14 | 15012400 | Installation, wiring, testing & commissioning of 48Volt/200AH maintenance free VRLA Batteries duly charged as per IRS Spec. No. S-93/96(A) with amendments-1 or latest. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution.  | Numbers           | 3  | 17178.78 | 51536.327 |
| 15 | 15012600 | Supply of Universal 2/4 wire way station control Telephone with PSU as per RDSO spec. no. IRS: TC:82: 2005) (with Amd. 1 or latest) Inspection: RDSO Inspection Charges: Borne by Railways Payment Terms: 100% after Supply."   | Numbers           | 5  | 18073.83 | 90369.131 |
| 16 | 15012700 | End to end testing of all the fibers of the optical fiber cable & all the conductors of 6-Quad cable between stations/cable hut in presence of railway engineer. All equipment accessories required for the above job are to be arranged by the contractor's representative and railway's site Engineer in-charge. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution.   | Per Block Section | 33 | 19019.89 | 627656.53 |
| 17 | 15013000 | Video recording of trenching. It includes the man power and all required arrangement for video recording at site. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Execution.  | Kilometre         | 60 | 272.0844 | 16325.064 |
| 18 | 15013100 | Supply of LC/PC -LC/PC patch cord (5 meter) (3M, TE connectivity, R&M make or superior) Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.   | Numbers           | 25 | 131.6978 | 3292.4443 |
| 19 | 15013200 | Supply of SC/APC -LC/PC patch cord (5 meter) (3M, TE connectivity, R&M make or superior) Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Numbers           | 25 | 130.8592 | 3271.4804 |
| 20 | 15013300 | Supply of SC-APC/SC-APC patch cord (1 meter) (3M, TE connectivity, R&M make or superior) Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Numbers           | 25 | 106.6392 | 2665.9811 |

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|----|----------|---|-----------|----|----------|-----------|
| 21 | 15015100 | Final location joint survey of proposed cable route plan(Quad/OFC Cable) and submission for approval of Railway. The details instruction/guidelines regarding joint survey and preparation of cable route plan are enclosed in Tender document. Contractor will submit two copies of prints with soft copy for checking by Railways. If alterations are suggested by Railways, then again two copies of prints will be provided for advance approval after carrying out all the alterations as submission of final cable route plan on 75 micron standard polyester film which includes details of entire section in which Quad /OFC Cables are laid. Once Railway has approved/signed tracings for cable route plan then contractor will submit 6 (Six) sets of xerox copies for cable route plan in proper binding form. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after execution. | Kilometre | 74 | 879.127  | 65055.398 |
| 22 | 15016300 | Supply of Electronic LC gate telephone system in 1+6 configuration with inbuilt voice recorder . It includes supply of 'surge protection and line connection unit /circuit' and centralised power supply system with battery as per RDSO Spec no. RDSO/SPN/TC/51/2011Revision 3.0 amendment 1.0 or latest. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs or as per extant policy Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% after Supply  | Numbers   | 6  | 58434.42 | 350606.55 |
| 23 | 15016400 | Installation of Electronic LC gate telephone system in 1+6 configuration with inbuilt voice recorder . It includes installation of 'surge protection and line connection unit /circuit' and centralised power supply system with battery as per RDSO Spec no. RDSO/SPN/TC/51/2011Revision 3.0 amendment 1.0 or latest. All the material required for fixing and installation of station telephone unit and gate telephone(slave telephone) will be supplied by the contractor. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after execution.   | Numbers   | 6  | 16351.07 | 98106.409 |
| 24 | 15016600 | Supply of Emergency Socket Box made of FRP material as per RDSO Specification No. RDSO/SPN/TC/44/2002Version 2.0 Amendment No. 3 or latest. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.   | Numbers   | 50 | 3893.769 | 194688.43 |
| 25 | 15016700 | Fabrication and erection of emergency rail post along the side of Rly track as per the location given by site engineer. It includes supply, fixing and wiring of socket box on emergency rail post. It includes supply of all the items except the Rails and Cable which will be arranged/provided by Railway. The contractor will complete all related work along with excavation if required for erection/installation of emergency rail post. 6-Pin emergency socket will be supplied as per RDSO Spen.No.IRS:TC42/87. Each socket box should have inbuilt universal lock facility with key as per sample approved by site engineer. Note: Contractor will supply the emergency socket box only after sample got approved from site engineer. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after execution.   | Numbers   | 40 | 2006.654 | 80266.147 |

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|----|----------|---|---------|----|----------|-----------|
| 26 | 15016800 | Supply and provision of thermo-shrink splice filling jelly jointing kit as per RDSO Specn.No.RDSO/SPN/TC/57 2015 (Rev.1) Amnd.1 or latest suitable for PIJF cable for straight through joints. It includes supply of all the accessories as recommended by RDSO. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Numbers | 10 | 1381.752 | 13817.516 |
| 27 | 15016900 | Painting of emergency post and sockets in sections as per instructions of the site engineer in charge. This shall include all material, labour and transportation required for painting of emergency post and sockets in section. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after execution.  | Numbers | 40 | 221.8603 | 8874.4118 |
| 28 | 15017000 | Supply of VF Transformers (2T/3T), 1120/470 Ohms as per RDSO Spec. No. IRS: TC-76-2000 with Amnd. 1 or latest for emergency joints in 6- Quad Cable. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Numbers | 70 | 823.5058 | 57645.407 |
| 29 | 15017200 | Shifting and installation of control and other telecom equipments like control phone, magneto phone, auto phone, VHF sets, VF Repeaters etc from old station building to new station building as per instructions of site engineer. All the material required for fixing and installation will be supplied by the contractor. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after execution.  | Station | 3  | 7950.413 | 23851.24  |
| 30 | 15017300 | Supply of 8 port Gigabit Lite Managed PoE Layer 2 Switch supports 8 nos 10/100/1000BASE-T ports, along with 2 Gigabit SFP ports, green- saving technologies, make model DG- GS1510HPL DIGISOL / CISCO/JUNIPER or superior. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Numbers | 10 | 24301.69 | 243016.87 |
| 31 | 15017400 | Supply of 24 port Layer3 network switches with 4 Nos. 10/100/ 1000 Base-T/1000 Base-X SFP ports make model DG-GS4628SE DIGISOL /CISCO/JUNIPER or superior. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Numbers | 3  | 87721.88 | 263165.65 |
| 32 | 15017500 | Supply of Single Mode Single Fiber Optical Media Driver 20KM 10/100/1000(Giga) RJ-45 with inbuilt power supply 230VAC/-48VDC model Techroutes TD-FMC-20KM or superior. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.  | Numbers | 11 | 3968.347 | 43651.812 |
| 33 | 15019100 | Supply of Double side Digital Clock suitable for platform area with GPS Synchronization in standalone mode as per Clause 5 of RDSO SPN TC 62/2008, (Rev 3.0) Amnd. 2 or latest with all required accessories. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs or as per extant policy Inspection Charges: (i)Borne by Railways (ii) None Payment Terms: 100% after Supply | Numbers | 10 | 49623.76 | 496237.61 |
| 34 | 15019200 | Installation & commissioning of Double side Digital Clock suitable for platform area with GPS Synchronization in standalone mode as per instruction of site incharge with all required accessories and fixing arrangements to commissioning the item. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after commissioning.  | Numbers | 10 | 5516.15  | 55161.499 |



|    |          |  |         |      |          |           |
|----|----------|--|---------|------|----------|-----------|
| 35 | 15019300 | Supply of Digital Clock suitable for Office Complex with GPS Synchronization in standalone mode as per Clause 6 of RDSO SPN TC 62/2008, (Rev 3.0) Amnd. 2 or latest. Inspection: (i) RDSO/RITES if value of item in work more than 5 lakhs or as per extant policy (ii) Consignee subject to procurement from RDSO approved vendors if value of whole item in work less than 5 lakhs or as per extant policy Inspection Charges: (i)Borne by Railways (ii)None Payment Terms: 100% after Supply  | Numbers | 10   | 11781.8  | 117817.99 |
| 36 | 15019400 | Supply of power cable 3 core 2.5 sq mm multi strand (36/0.3 mm dia) cable as per IS 694:1990 reaffirmed 1995 or latest suitable for railway electrification area shall be of reputed make like Delton, LAPP, Finolex, or superior. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after supply.   | Metre   | 1750 | 29.45648 | 51548.843 |
| 37 | 15019500 | Supply of screened 5 pair (10 core) color coded & twisted Data Communication Cable, each core made of Copper Conductor of 0.50mm diameter(7/0.20mm) ABC (Annealed Bare Copper) & Polyethylene Insulated having core outer diameter 1.3mm (wall thickness 0.25mm), such 2 core twisted in a pair and such 5 pair laid up & polyester taped, 0.6 mm ATC (Annealed Tinned Copper) Drain Wire, overlapped with Aluminium Foil for screening/shielded, polyester tape, grey color PVC outer sheath of wall thickness 1.3mm should be provided for the data communication wherever required. Tolerance in dimensions should be within $\pm 10$ . Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after supply. | Metre   | 500  | 47.13751 | 23568.754 |
| 38 | 15019600 | Supply installation and commissioning of versatile PA horn speaker 30W with 100V LMT Taps 15, 10 and 5W complete with fixture of make Philips/Ahuja/AKG. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after commissioning.  | Numbers | 30   | 1246.682 | 37400.454 |
| 39 | 15019700 | Supply and installation of column speaker 15W with LMT all metal weather resistant, including fixtures and other material required. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after execution.   | Numbers | 30   | 1499.631 | 44988.933 |
| 40 | 15020100 | Supply & installation of Amplifier AHUJA TZA-4000EM or similar. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after execution.   | Numbers | 8    | 15885.32 | 127082.58 |
| 41 | 15020200 | Supply of Mike AHUJA ACM-66CH or superior make. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after supply.  | Numbers | 15   | 1466.749 | 22001.235 |
| 42 | 15020700 | Supply of SFP Optical/Electrical 1 Gbps or 100/1000 Mbps Electrical as required. Make: Cisco, Eoptical or similar suitable for Neon. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.   | Numbers | 36   | 3590.622 | 129262.39 |
| 43 | 15022700 | Supply of Multimedia Projector Resolution 1280 X 800 WX GA, ANSI LUMEN 3000 with Installation of Ceiling Mount kit & other fitting make - Sony/Epson/BenQ/Dell or latest/superior. All necessary accessories required for installation will be supplied/ provided by contractor. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after supply  | Numbers | 1    | 46602.18 | 46602.179 |
| 44 | 15022800 | Installation & commissioning of Multimedia Projector Resolution 1280 X 800 WX GA, ANSI LUMEN 3000 with Installation of Ceiling Mount kit & other fitting make - Sony/Epson/BenQ/Dell or latest/superior. All necessary accessories required for installation will be provided by contractor.   | Numbers | 1    | 11650.55 | 11650.547 |

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|          |                          | Inspection: Consignee Inspection Charges: None.<br>Payment Terms: 100% after commissioning.  |         |     |          |           |
| 45       | 15022900                 | Supply of Projector Screen of Size 10' x 8' motorised glass based with remote. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after Supply.   | Numbers | 1   | 15300.67 | 15300.671 |
| 46       | 15023000                 | Supply, installation & commissioning of HDMI Cable with connectors for Connectivity between Audio visual system Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after commissioning.   | Metre   | 30  | 212.6183 | 6378.5504 |
| 47       | 15025700                 | Supply, fixing and wiring of surge protection device in attachment plug module with replaceable surge protection for coaxial signal, interfaces N-connector plug/socket installed as surge protection between antenna and 25 W VHF sets, make- Phoenix Contact model CN-UB- 280DC-SB- 2818148 or similar as per specifications. this includes mounting plate and reserve gas filled surge arrestor (one no.) with all required connectors/clamp for commissioning of SPD at site. Inspection: Consignee Inspection Charges: None. Payment Terms: 100% after execution.   | Numbers | 3   | 6227.477 | 18682.43  |
|          |                          |  |         |     |          |           |
|          |                          |  |         |     |          |           |
| Schedule | Schedule B-NON SOR ITEMS |  |         |     |          |           |
| Item- 16 | CHAPTER-16: EI NS items  |  |         |     |          |           |
| S No.    | Item No                  | Description of Item  | Unit    | Qty |          |           |
|          |                          |  |         |     |          |           |
| 1        | 1602                     | Installation, wiring, testing and commissioning of Distributed EI System at BHIWANI Junction. It includes transportation of material from consignee's depot to the site, erection and grouting of EI Relay Racks, fixing and wiring of all the interfacing relays (Vital & Non-Vital), installation and wiring of Microprocessor equipments, interface equipments, power supply equipments. Data Logger, FACS, and all other associated accessories to make complete EI system to be functional (at central location and two numbers of gumties in Bhiwani Yard). Item includes fixing/wiring/splicing of eqpt to establish OFC communication between central to gumty Els and with Auto Section Els. Item includes complete testing of EI at various levels as decided by Railway and arrangement of testing setup for FAT and SAT as per Raiway practice shall be done by contractor at their own cost. Note: (i) Technical Requirements are attached with tender document (ii) Contractor h a s to arrange simulator/simulation testing p a n e l for testing and commissioning by Selection Table and Square Sheet for each Signalling function.(iii) Installation, wiring, testing and commissioning of EI system will be done by OEM after following all the guidelines/directives issued by RDSO from time to time. Inspection: Consignee Inspection charges: | Station | 1   | 1114591  | 1114590.6 |

|   |      |  |         |   |          |           |
|---|------|--|---------|---|----------|-----------|
|   |      | None Payment terms: 100% after commissioning<br>(This item will be operated for EI at BNW station in second phase during yard remodeling only)   |         |   |          |           |
| 2 | 1604 | Installation, wiring, testing and commissioning of EI System with 'Hot Standby' architecture as supplied for Auto Hut (with OC if any). It includes transportation of material from consignee's depot to the site, erection and grouting of EI Relay Racks, fixing and wiring of all the interfacing relays (Vital & Non-Vital), installation and wiring of Microprocessor equipments, interface equipments, Communication equipment, power supply equipments and all other associated accessories to make complete EI system to be functional. The item includes installation , wiring and commissioning of EI of LC object controller connected with Auto Hut EI. Note: (i) Technical Requirements are attached with tender document (ii) Contractor has to arrange simulator/simulation testing panel for testing and commissioning by Selection Table and Square Sheet for each Signalling function.(iii) Installation, wiring, testing and commissioning of EI system will be done by OEM after following all the guidelines/directives issued by RDSO from time to time.Inspection: Consignee.Inspection charges: None.Payment terms: 100% after commissioning.(Unit for measurement: Numbers= Auto Hut EI.) | Numbers | 5 | 351282.3 | 1756411.6 |

|   |      |  |         |   |          |           |
|---|------|--|---------|---|----------|-----------|
| 3 | 1607 | <p>Installation, wiring, programming, testing and commissioning of EI equipment (MODIFICATION IN EXISTING EI of BHIWANI Junction including transportation from Consignee's depot to site. The works and materials for installation, wiring, testing and commissioning, grouting, cutting of floors, walls, refilling of the same, re-plastering, required CC/ masonry works, fixing/ placing/ laying of insulated ladders/ casing-capping/ cable trays/ RCC/GI pipes / Cables, termination of cables with lugs/ connectors, painting,/ lettering are to be provided/ done by the contractor for the supplied equipments .This also covers the networking of built in EI Data loggers of all the stations to monitor the system to any other places where desired by Engineer-in-charge. (THIS ITEM SHALL BE USED ONLY FOR ALTERATION WORK IN EXISTING EI OF BNW)Note: Installation shall be comply to RDSO Technical Advisory Note No STE/E/TAN/3012 dtd. 28 .08.2014 or latest amendment/guidelines of RDSO Installation, wiring, programming, testing and commissioning of Operator VDU in Hot standby with Redundancy. Any Equipments/cards/Modules required for Hot stand-by with Redundancy shall be supplied &amp; Installed by the Contractor. Termination of indoor/ PIJF cables in relay room on relays, tag blocks, CT racks as per approved wiring diagram including alterations/ modifications as required at site. Soldering to be done at all required termination. Dressing/ lacing of wiring shall be done neatly with help of dressing thread / plastic self lock strip of suitable size. The tools/ equipments/ materials/ simulation boards required for testing shall be supplied / fabricated by contractor. This includes replacement of modules/ cards/ LEDs/ equipments going defective during testing. Necessary power supply boards with required capacity plugs, sockets, surge &amp; lightning protection boxes shall be supplied and installed by the contractor. 230V supply shall be arranged by Railways. In case supplies are required to be extended, from Power room / relay room then same shall be extended by the contractor with his own materials such as 1X16 sq mm wires, cables, lugs, RCC/GI pipes, insulated ladders etc. After ST/LT testing, Factory Acceptance Tests (FAT) &amp; Square Sheet testing system should be fault free while submitting to Railways, otherwise suitable necessary action can be taken by Engineer- incharge. Inspection: Consignee Inspection charges: None Payment terms: 100% after commissioning. (Note:-This item shall be operated for alteration in existing EI of Bhiwani Junction for Phase-I i.e. for Patch doubling in BNW-MHU section)</p> | Station | 1 | 484207.6 | 484207.58 |
| 4 | 1609 | <p>Supply of embedded fan-less PC based VDU control terminal as per RDSO spec. No. RDSO/SPN/192/2019 Ver. 2 or latest &amp; RDSO TAN No. - STS/E/TAN/3007 version 1 dated: 02.11.12. The size of VDU shall be minimum 65 inch. (4K display- industrial monitor) Note: (i) Technical requirements are mentioned in the tender document as Annexure -TS-1(A). (ii) One revolving chair should be supplied with control terminal.Inspection: RITES, Inspection charges: Borne by Railways, Payment terms:100% after supply</p>  | Set     | 6 | 457089.9 | 2742539.2 |

|   |      |  |     |    |          |           |
|---|------|--|-----|----|----------|-----------|
| 5 | 1610 | Supply of embedded fan-less PC based VDU control terminal as per RDSO spec. No. RDSO/SPN/192/2019 Ver. 2 or latest & RDSO TAN No. - STS/E/TAN/3007 version 1 dated: 02.11.12. The size of VDU shall be minimum 75 inch. (4K display- industrial monitor) Note: (i) Technical requirements are mentioned in the tender document as Annexure -TS-1(A). (ii) One revolving chair should be supplied with control terminal. Inspection: RITES, Inspection charges: Borne by Railways, Payment terms:100% after supply  | Set | 2  | 586495   | 1172990   |
| 6 | 1611 | Supply of embedded fan less PC based Maintenance terminal as per RDSO spec. No. RDSO/SPN/192/2019 Ver. 2 or latest & RDSO TAN No. - STS/E/TAN/3007 version 1 dated:02.11.12 . The size of VDU shall be minimum 65 inch. Note: (i) Technical requirements is mentioned in the tender document as Annexure -TS-1(A). (ii) One table of suitable size along with revolving chair should be supplied with Maintenance terminal. Inspection: RITES, Inspection charges: Borne by Railways, Payment terms:100% after supply.   | Set | 6  | 435622.2 | 2613733.1 |
| 7 | 1612 | Supply of embedded fan less PC based Maintenance terminal as per RDSO spec. No. RDSO/SPN/192/2019 Ver. 2 or latest & RDSO TAN No. - STS/E/TAN/3007 version 1 dated:02.11.12 . The size of VDU shall be minimum 75 inch. Note: (i) Technical requirements is mentioned in the tender document as Annexure -TS-1(A). (ii) One table of suitable size along with revolving chair should be supplied with Maintenance terminal. Inspection: RITES, Inspection charges: Borne by Railways, Payment terms:100% after supply.   | Set | 3  | 565027.3 | 1695081.9 |
| 8 | 1613 | Supply of modular power supply arrangement for VDU (42" to 85") and embedded PC (As specified in NWR HQ Policy letter No. SG/184/1- Vol.VII dtd 01.03.24) with input and output redundancy arrangement and hot plug-able modules having voltage & load current digital display on each module. Each set consisting of: - 1.Isolated inverters (master/slave with auto changeover) -2 Nos. input: 110VDC, output: 110 VAC, 500VA (as per RDSO TAN No. STS/E/TAN/3012 Version 3.0 Dated.03.11.22) 2.Isolated DC-DC converters - 02 Nos. connected in parallel with built in O-ring diode, active current sharing as per RDSO/SPN/165/2023 version 4.0 or latest (input: 110VDC, output:24 VDC/10A) 3.Input (redundancy) O-ring diode module with two input sources and one output supply along with potential free contacts, alarm and acknowledgment switch. 4. 3U stainless steel rack with back panel mother board and front panel power connectors, power cord for VDU panel. Technical detail is mentioned in Annexure- TS-1(B). Make- Gallant/Phoenix/APC or better. Inspection: RITES, Inspection charges: Borne by Railways, Payment terms:100% after supply (Item is also planned to be use at mid-section LC gates (where IPS is not provided) to produce the 110V AC for road user signal and 24 V for gate circuits from common 110 V DC input extended from nearest IPS.) | Set | 23 | 165200   | 3799600   |
| 9 | 1614 | Installation, Wiring, Testing and Commissioning of modular power supply arrangement for VDU (42" to 85") as per RDSO TAN No. STS/E/TAN/3012 Version 3.0 Dated.03.11.22 item includes supply and fixing of suitable mounting arrangement. Inspection: Consignee, Inspection charges: None ,Payment terms:100% after   | Set | 20 | 18880    | 377600    |

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|----------|-------------------------------------|--|---------|-----|----------|-----------|
|          |                                     | commissioning.   |         |     |          |           |
|          |                                     |  |         |     |          |           |
| Item- 17 | CHAPTER-17: MSDAC                   |  |         |     |          |           |
| S No.    | Item No                             | Description of Item  | Unit    | Qty |          |           |
| 1        | 1703                                | Installation, Wiring, Testing and Commissioning of Multi Section Digital Axle Counter (MSDAC)<br>Complete set under directions of OEM's representative with all accessories including of complete indoor-outdoor equipment , reset boxes, track side electronics, track devices and monitoring console etc. This Items covers all the works related to execution to make the complete MSDAC system functional in MHU-BWK & BNW-BNWC automatic block signalling sections and at BNW Yard. Item Includes transportation of MSDAC material from consignee store depot to site where installation of central evaluator is proposed at the locations shown in SIP. The item includes OEM's installation certificate and RDSO's pre-commissioning check list. (Measurement Unit: Number=Per DP)  | Numbers | 410 | 11504.32 | 4716771.2 |
|          |                                     |  |         |     |          |           |
| Item- 18 | CHAPTER-18: Data logger accessories |  |         |     |          |           |
| S No.    | Item No                             | Description of Item  | Unit    | Qty |          |           |
| 1        | 1801                                | Supply of Micro Processor based Data Logger System with 512 digital inputs and 32 analog inputs with protocol converter as per RDSO Spec. No. IRS (S) 99/2006 (Amnd. 3) or latest. It includes supply of all the items required for complete indoor relay room wiring from data logger to relay rack tag blocks, drawing/ extension of power supply up to Data Logger. It includes relay room door lock checking arrangement, commercial power supply monitoring arrangement & monitoring of DG sets, ELD, IPS, UFSBI, ELD, MSDAC etc., interlinking and networking of Data logger, interfacing with EI. Note: Total numbers of relays and other Signalling functions/gears required to be wired as per list circulated vide RDSO Letter No. STS/E/Data logger dtd.12.09.2011 or latest guidelines. Inspection: RDSO, Inspection charges : Borne by Railways, Payment terms:100% after supply. (Item required at Auto Huts, LC-OC Huts, Bhiwani OC1 & OC2) | Numbers | 9   | 268054.1 | 2412486.9 |

|          |                             |  |         |     |          |           |
|----------|-----------------------------|--|---------|-----|----------|-----------|
| 2        | 1802                        | Installation, testing and commissioning of Micro Processor based Data Logger System with 512 digital inputs and 32 analog inputs with protocol converter as per RDSO Spec. No. IRS (S) 99/2006 (Amnd. 3) or latest. It includes supply of all the items required for complete indoor relay room wiring from data logger to relay rack tag blocks/relay bases, drawing/extension of power supply up to Data Logger. It includes relay room door lock checking arrangement, commercial power supply monitoring arrangement & monitoring of DG sets, ELD, IPS, UFSBI, BI, MSDAC, interfacing with EI and interlinking & networking of Data logger. It also includes installation of MODEM and other interfacing cards, if required for networking of Data Logger. Note: Total numbers of relays and other signalling functions/gears required to be wired as per list circulated vide RDSO Letter No. STS/E/Data logger dtd.12.09.2011 or latest guidelines. Inspection: Consignee, Inspection charges: None, Payment terms: 100% after commissioning. (Item required at Auto Huts, LC- OC Huts, Bhiwani OC1 & OC2) | Numbers | 9   | 70764.2  | 636877.8  |
| 3        | 1803                        | Alteration in existing data logger wiring and re-validation of inputs as per site requirement. Work includes supply of wiring material , shifting/re fixing of DATA LOGGER (if required). Inspection: Consignee, Inspection Charges: None, Payment Terms: 100% after commissioning. (ITEM WILL BE REQUIRED AT BNW IN C/W MODIFICATION IN EXISTING EI & RELAY ROOM)   | Numbers | 1   | 36125.22 | 36125.216 |
|          |                             |  |         |     |          |           |
| Item- 19 | CHAPTER-19: IoT based RDPMS |  |         |     |          |           |
| S No.    | Item No                     | Description of Item  | Unit    | Qty |          |           |
| 1        | 1901                        | Supply of field IoT device or Mini logger with basic function of capturing the parameters from the Point Machines, DC Track circuits, ELB to transmit the data to the station gateway system as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Technical specifications of the item are attached in tender document at Annexure- TS13. Inspection: RITES . Inspection charges: Borne by Railways . Payment terms: 100% after supply.  | Numbers | 197 | 65480.76 | 12899710  |
| 2        | 1902                        | Supply of field IoT device or Mini logger with basic function of capturing the parameters from the Signals to transmit the data to the station gateway system as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Technical specifications of the item are attached in tender document at Annexure -TS-13. Inspection: RITES . Inspection charges: Borne by Railways . Payment terms: 100% after supply.  | Numbers | 152 | 67282.09 | 10226877  |
| 3        | 1903                        | Supply of IoT device or BHMU for sensing 110 V DC Battery Bank parameters and transmit the data to the station gateway system as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Technical specifications of the item are attached in tender document at Annexure- TS13. Inspection: RITES . Inspection charges: Borne by Railways . Payment terms: 100% after supply.   | Numbers | 14  | 164097.8 | 2297369.3 |

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| 4  | 1904 | Supply of Microprocessor based interface for MSDAC in SM/Relay Room as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Technical specifications of the item are attached in tender document at Annexure-TS13. Inspection: RITES. Inspection charges: Borne by Railways. Payment terms: 100% after supply.   | Numbers | 17  | 129534.2 | 2202082.2 |
| 5  | 1905 | Supply of station Gateway equipment system to receive the data from various IoT devices at field, relay room, equipment room as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Technical specifications of the item are attached in tender document at Annexure-TS13. Inspection: RITES. Inspection charges: Borne by Railways. Payment terms: 100% after supply.              | Numbers | 12  | 167277   | 2007324.6 |
| 6  | 1906 | Supply of Edge computing device for data receiving and routing to the central processing and storage system at Zonal HQ and Central cloud as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Technical specifications of the item are attached in tender document at Annexure-TS13. Inspection: RITES. Inspection charges: Borne by Railways. Payment terms: 100% after supply. | Numbers | 5   | 228936.6 | 1144682.8 |
| 7  | 1907 | Supply of networking interface (E1 Converter Converter) for Station gateway to network with Division HQ. Technical specifications of the item are attached in tender document at Annexure-TS13. Inspection: RITES. Inspection charges: Borne by Railways. Payment terms: 100% after supply.   | Numbers | 14  | 37805.36 | 529275.04 |
| 8  | 1908 | Supply of Voice Modem to connect IoT devices to station Gateway via copper cable. Technical specifications of the item are attached in tender document at Annexure-TS13. Inspection: RITES. Inspection charges: Borne by Railways. Payment terms: 100% after supply.  | Numbers | 26  | 22819.79 | 593314.59 |
| 9  | 1909 | Installation, testing & commissioning of IoT Devices or Mini loggers for point machines, Track ckt. etc. as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Specifications of the item are attached in tender document at Annexure-TS13. Inspection: Consignee. Inspection charges: None. Payment terms: 100% after commissioning.  | Numbers | 197 | 4903.704 | 966029.69 |
| 10 | 1910 | Installation, testing & commissioning of IoT Devices or Mini loggers for signal aspects as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Specifications of the item are attached in tender document at Annexure-TS13. Inspection: Consignee. Inspection charges: None. Payment terms: 100% after commissioning.   | Numbers | 152 | 4903.704 | 745363.01 |
| 11 | 1911 | Installation, testing & commissioning of IoT Devices or BHMU for IPS Battery Bank as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Specifications of the item are attached in tender document at Annexure-TS13. Inspection: Consignee. Inspection charges: None. Payment terms: 100% after commissioning.   | Numbers | 14  | 24518.49 | 343258.83 |
| 12 | 1912 | Installation, testing & commissioning of station Gateway equipment system and Edge Computing Device as per FRS Document No. RDSO/RDPM/FRS/2021 dated 06.05.2021 or latest. Specifications of the item are attached in tender document at Annexure-TS13. Inspection: Consignee. Inspection charges: None. Payment terms: 100% after commissioning.   | Numbers | 17  | 33133.89 | 563276.1  |



|          |  |   |         |     |          |           |
|----------|--|---|---------|-----|----------|-----------|
| 13       | 1913   | Installation, testing & commissioning of Microprocessor based interface for MSDAC in SM/Relay room as per FRS Document No. RDSO/RDPM/ FRS/2021 dated 06.05.2021 or latest. Specifications of the item are attached in tender document at Annexure-TS13. Inspection: Consignee. Inspection charges: None. Payment terms: 100% after commissioning.   | Numbers | 17  | 10362.74 | 176166.65 |
| 14       | 1914   | Supply, installation, testing and commissioning of Maintenance Monitoring System. Specifications of the item are attached in tender document at Annexure- TS13. Inspection: RITES. Inspection charges: Borne by Railways . Payment terms: 100% after commissioning.   | Numbers | 4   | 125907.3 | 503629.15 |
| 15       | 1915   | Supply, installation, testing and commissioning of RDPM Software and it includes configuration and mapping of gear wise signalling information in remote diagnostic software. Specifications of the item are attached in tender document at Annexure- TS13. Inspection: Consignee. Inspection charges: None. Payment terms: 100% after commissioning. (Measurement Unit: Number= Per IoT Device)  | Numbers | 380 | 9326.464 | 3544056.3 |
| 16       | 1916   | Supply, installation, testing and commissioning of Data Concentrator along with one dual card modem. Specifications of the item are attached in tender document at Annexure-TS13. Inspection: RITES. Inspection charges: Borne by Railways. Payment terms: 100% after commissioning.  | Numbers | 4   | 107258.1 | 429032.38 |
| 17       | 1917   | Supply, installation, testing and commissioning of Dual serial to OFC Media converter for networking of Data loggers with auto Huts. Specifications of the item are attached in tender document at Annexure- TS13. Inspection: RITES . Inspection charges: Borne by Railways. Payment terms: 100 % after commissioning.   | Numbers | 15  | 28419.95 | 426299.28 |
| 18       | 1918   | Supply of MFP machine for preparing reports. Machine should be capable of Color Printing, Scanning and Copying on A3 Size paper with Auto Document Feeder, should be capable of Auto Duplex Printing & scanning, should have refillable ink tanks, should be supplied with set of spare tonners/ink bottles of same brand. Make Canon/HP/Brother/Epson/Xerox or similar (model must be approved by engineer in-charge) . Specifications of the item are attached in tender document at Annexure- TS13. Inspection: Consignee . Inspection charges: None. Payment terms: 100% after supply | Set     | 4   | 65726.83 | 262907.33 |
|          |  |   |         |     |          |           |
| Item- 20 | CHAPTER-20: Augmentation of IPS and other power supply items |   |         |     |          |           |
| S No.    | Item No  | Description of Item   | Unit    | Qty |          |           |
|          |  |   |         |     |          |           |

|   |      |   |         |    |          |           |
|---|------|---|---------|----|----------|-----------|
| 1 | 2001 | Augmentation of existing Integrated Power Supply System of way side station/LC gate, it includes wiring alteration, new wiring and testing of existing Integrated Power Supply System including power distribution connection to bus bars and relay racks in the room with contractor's own wiring materials and fabrication and fixing of AC/DC power distribution board made on 10mm thick Phenolic hylam sheets or any standard make with connections suitable for 32 A. Wiring to be done considering site requirement, depending upon the load with suitable wires, lugs & glands as per instructions of Engineer-in- charge. The work includes fixing & wiring of change over switch (if required) for selection of DG set supply (DG1 & DG2) and wiring of change over switch (program switch) for selection of mains or DG supply. This item also includes supply & fixing of ladder along the wall for carrying power supply wires/cables from IPS room to Relay room/power room etc. Any masonry work required will be carried out by contactors own material. Supply of DC DC converters will covered separately. Inspection: Consignee, Inspection Charges: None, Payment Terms: 100% after execution | Set     | 2  | 26346.38 | 52692.752 |
| 2 | 2002 | Supply of DC-DC convertor 24-32 V, 5Amp as per RDSO Spec. No. RDSO/SPN/165/2012 version -3 or latest and compatible to installed make of IPS system (or make decided by the engineer in-charge).The item includes all the accessories like input /output connectors, input/output wires, sharing cables, SPD and other things required to fit the DC DC converter in existing IPS or separate cabinet/space as per site requirement. Inspection: RDSO. Inspection Charges: Borne by railways.Payment Terms:100% after supply.   | Numbers | 40 | 17646.86 | 705874.56 |
| 3 | 2003 | Supply of DC-DC convertor 24-32 V, 10 Amp as per RDSO Spec. No. RDSO/SPN/165/2012 version -3 or latest and compatible to installed make of IPS system (or make decided by the engineer in-charge).The item includes all the accessories like input /output connectors, input/output wires, sharing cables, SPD and other things required to fit the DC DC converter in existing IPS or separate cabinet/space as per site requirement. Inspection: RDSO. Inspection Charges: Borne by railways.Payment Terms:100% after supply.   | Numbers | 40 | 18956.46 | 758258.24 |
| 4 | 2004 | Installation-wiring of DC-DC convertors supplied as per RDSO Spec. No. RDSO/SPN/ 165/2012 version -3 or latest. The item includes fixing and wiring of DC DC Converter in existing IPS or out side IPS for extension of supply as decided by site in charge. The supply of wire of adequate capacity along with lugs/connector will be supplied by contractor. Fixing arrangement of DC DC converter in IPS or mounting arrangement if provided out side IPS cabinet will also be done by contractor its own cost as per the instruction of site engineer. Supply of suitable size wire and termination from IPS to CTR is included in the item. Inspection: Consignee, Inspection Charges: None, Payment Terms:100% after installation/testing.  | Numbers | 80 | 6994.696 | 559575.68 |

|          |  |  |         |     |          |           |
|----------|--|--|---------|-----|----------|-----------|
| 5        | 2005   | Supply, Fixing and Wiring of DISTRIBUTION BOARD (MCB BOX), 12 WAY, METAL DOOR (Double Door)TYPE OF MAKE- HAVELS (Model 'Metalic DB') /L&T (Model IP-43, Metal Door)/SIEMENS (Model Double Door SPN DB - IP-42 .The distribution box should be fitted with 06 numbers of Double Pole MCBs (2P/240V or 415 VAC) of current rating preferably 2 Amp ( or rating decided by suggested by site engineer) of HAVELS/L&T/SIEMENS make. (This item to be used for distribution of 230 V AC supply from DG/Mains changeover todifferent functions like - For Data logger 230 V operation supply, For 230 V inputfor Analog sensors of Data logger, For Input of VHF and other communication equipment of SM Room etc. or for other purposes as decided by siteengineer).Inspection: Consignee.Inspectioncharges: None.Payment terms: 100% after installation. | Set     | 19  | 10163.42 | 193105.06 |
|          |  |  |         |     |          |           |
| Item- 21 | CHAPTER-21: Operator Console, Filing Cabinet , Step ladder     |  |         |     |          |           |
| S No.    | Item No  | Description of Item  | Unit    | Qty |          |           |
| 1        | 2101   | Supply, fabrication, installation and fixing of panel operator console with arrangement to fix up to 55"/65"/75" VDU's - 2Nos. Reset boxes, and other S&T gadgets. This shall be made of not less than18mm thick plywood/novopan or better materials with storage facility of approved colors with contractors' materials, lead, lift and manpower as per the instructions of engineer in charge and as per tentative drawing enclosed in Annexure-TS-10. One number of revolving chair (Godrej Make) Model PCH7001 also to be supplied with the console. Inspection: Consignee. Inspection Charges-None. Payment-100% after supply and installation.  | Set     | 4   | 283947.5 | 1135790.1 |
| 2        | 2102   | Supply of lateral filing cabinet Godrej Make. Inspection: Consignee, Inspection Charges: None, Payment Terms:100% after supply.  | Numbers | 13  | 13781.59 | 179160.7  |
| 3        | 2103   | Supply of Step ladder (Popularly known as GHODA), Aluminum made (Minimum height 8" or more), BATHLA make or better, for maintenance on over head troughs /wiring/ fire alarm sensors in relay room/IPS room/OFC room. Inspection: Consignee, Inspection Charges: None,Payment Terms:100% after supply.   | Numbers | 14  | 8051.272 | 112717.81 |
|          |  |  |         |     |          |           |
| Item- 22 | CHAPTER-22: CTR Board, Rubber mat, Copper tape, DM water Plant |  |         |     |          |           |
| S No.    | Item No  | Description of Item  | Unit    | Qty |          |           |

|          |   |   |         |     |          |           |
|----------|---|---|---------|-----|----------|-----------|
| 1        | 2201  | Fabrication and supply of CT Rack Moveable Board. The CT Rack moveable board should have a rectanguloid structure consist of four nos. of white coloured rectangular faces of adequate size to accommodate terminal detail writing of one cable termination rack on each face. The CTR board should be fabricated from wood/metal frame, plywood, sun mica and mounted on a rectanguloid stand by mean of the ball bearing pivot to facilitate the rotation of upper rectanguloid structure freely. The bottom rectanguloid stand should be fitted with rollers for smooth movement on floor. Drawing, size and material will be as per instructions of Engineer in-charge of the work. Inspection: Consignee. Inspection charges: None. Payment terms: 100% after supply.  | Numbers | 5   | 59231.14 | 296155.68 |
| 2        | 2202  | Supply and fixing of insulation Rubber mat for electrical purpose 2.5mm thick size 2m x 1 m suitable for 3.3 KV to 11 KV (Class- B) confirming to IS 15652-2006.(Unit-Per Square Meter) Inspection: Consignee Inspection Charges: None Payment Terms: 100% after fixing.  | Sqm     | 82  | 1585.592 | 130018.54 |
| 3        | 2203  | Supply & installation of Copper Tape 25x3mm for perimeter bonding in S&T rooms as per RDSO Drawing no. SDO/RDSO/E&B/001 of latest. It includes supply of insulators , fasteners clamps etc. (To be used in Relay Room, IPS room and Panel Room for BRC and to be connected to Ring earth.). Inspection: Consignee. Inspection charges: None. Payment terms: 100% after installation.  | Metre   | 556 | 310.224  | 172484.54 |
| 4        | 2204  | Supply and Installation of RO membrane based De-ioniser plant to produce Battery water of TDS less than 5 ppm irrespective of the quality of raw water, pH Value:- 6 . 5 t o 7 . 2 , specific electric conductivity :- 0 to 5 micro mhos/cm at 25 Degree Celsius, output capacity should be 12-15 Ltr purified water/Hour. Plant should have suitable fixture/wall mounting arrangement with external PVC storage tank of capacity 200 Ltr, Plant should have on board TDS meter, Indication of On/Off, Solenoid/Flow switch fitted to avoid dry run of the machine, Weight sensor/Float switch installed on storage tank to avoid over flowing of the tank. The item includes supply of one set of the spare filters/membranes in addition to the fitted filters-membrane with the machine (spare should be of similar spec/type as used in the machine). Plant should work on 230V AC input (Internally works on 24 V DC) and should not require any type of chemical re- charging except filters and membranes. The life of filter/membrane should not last before production of minimum 12000 Ltr of battery water. Item includes supply of all the accessories required for installation of the plant like fasteners, connecting pipes (of length up to 2 Mtr ), cable from wall socket to the machine (of length up to 2 Mtr), couplers/tap required to connect it from water tap/outlet, PVC pipe up to storage tank (of length up to 2 Mtr). The quality test certificate of produced water must be submitted by the supplier from any repudiated test laboratory. The OEM should give on-site warranty of one year. Inspection: Consignee. Inspection Charges: None. Payment Terms: 100% after installation. | Set     | 7   | 66533.34 | 465733.35 |
|          |   |   |         |     |          |           |
| Item- 23 | CHAPTER-23: Earth Electrode, Fixing of TWS Point Machines & Relays, PPTC Fuse, Teakwood |   |         |     |          |           |

| S No. | Item No | Description of Item  | Unit      | Qty  |          |           |
|-------|---------|--|-----------|------|----------|-----------|
| 1     | 2301    | Supply ,installation and testing of Earth Electrode including MS flat for Signalling Equipment as lever frames, apparatus cases, signal, Relay Rack, Block Instrument etc. (Supply and fixing of each earth electrode as per drawingno.<br>RE/S&T/DRG/Tender/SK/398/94for apparatus cases, signal post and other equipment as per instruction on earthing of S&T equipment. Laying of earth lead mild steel flat of size 35 mm x6mm and fixing of lead M.S. flat to earth electrode and lever frame, signal post and apparatus cases as per drg. no. CORE/S&T/ALD/SK/591/2008, 592/2008 and 593/2008 respectively and instructions on earthing at S&T equipment And providing cement enclosure for earth electrode as per drawing no. RE/S&T/Sig/Tender/SK/13/85Alt.- 'A'.). The detail specification of work is enclosed as Annexure- TS-14 Inspection: RITES. Inspection Charges: Borne by Railway. Payment Terms:100% after testing.  | Numbers   | 637  | 6468.48  | 4120421.8 |
| 2     | 2302    | Addition/Alteration and Fixing of relays in outdoor. It includes supply and fixing of all type of material like relay frame, nut bolts , and PVC wires as per instructions ofEngineer in charge. All wiring will be done as per standard practice of North Western Railway with neat dressing & threading. This also includes supply of PVC insulated Jumper wires of multi strand 16/2 mm, tinned in all colours as per RDSO Specn.No.IRS- S-76/89(Amnd.2 or latest). Relays will be supplied by Railways.Inspection: Consignee.Inspection Charges: None.Payment Terms:100% after testing of circuit.   | Per Relay | 506  | 528.592  | 267467.55 |
| 3     | 2303    | Supply and fixing of teakwood planks 25mm thick duly varnished for keeping batteries, power supply equipment etc. Required size (i.e. length & breadth) will be decided by Engineer at site as per requirement. This item also includes supply and fixing of material like nuts, bolts, screws, nails etc.Inspection: Consignee. Inspection Charges: None.Payment Terms:100% after fixing.   | cum       | 1    | 109816.9 | 109816.94 |
| 4     | 2304    | Supply of PTCC Fuse 16-V(GP16-300) or 30V(GP30-185) as decided by Railway.Inspection: Consignee Inspection Charges: None,Payment Terms:100% after supply.  | Numbers   | 1030 | 9.416    | 9698.48   |
| 5     | 2305    | Fixing, wiring, testing & commissioning of Electrical Point Machine-220 mm stroke suitable for Thick Web Switches (TWS) on the extended sleepers at points as per standard railway practice as per RDSO Drg. No. S 3454 Alt 'A' or latest as per section of rails used. Item includes fixing of switch extension bracket, providing insulation for switch extension bracket, fixing ground connection, adjusting opening of the switches and adjusting the point machine with crank handle. The item also includes wiring inside the point machine, termination of tail cable in point machine and junction boxes. The item includes supply and fixing of GI pipe (banded in S shape according to NWR practice) with flange for taking cable into point machine and fixing of Ward plates for points. Complete material for installation like GI pipes, wiring materials (wiring should be done with 4 mm flexible copper wire with lug), various fixing nuts & bolts including castle nuts, spring washers etc. will be supplied by the contractor. Ground connections, extension brackets, insulation material will be supplied by Railway. The item includes all smithy & fitting works required at site for complete installation of point machine. This includes modification- smithy work at site on the | Numbers   | 78   | 18516.26 | 1444268   |

|          |  |  |         |     |          |           |
|----------|--|--|---------|-----|----------|-----------|
|          |  | material supplied by the Railway if desired.<br>Installation of gauge tie plate & providing<br>insulation for gauge tie plate will be done by<br>Railways.Inspection: Consignee. Inspection<br>Charges: None.Payment Terms:100% after<br>commissioning.  |         |     |          |           |
|          |  |  |         |     |          |           |
| Item- 24 | CHAPTER-24: Shifting of ELB/MLB, Apparatus Cases, Colour Light Signals |  |         |     |          |           |
| S No.    | Item No  | Description of Item  | Unit    | Qty |          |           |
| 1        | 2401   | Shifting, installation, wiring, testing and<br>commissioning of Lifting Barrier complete (ELB or<br>MLB) at level crossing gate with pedestals, locks<br>posts, boom lock arrangement & winch (if any). It<br>includes installation, testing and commissioning<br>of lifting barrier complete along with all the<br>accessories on masonry foundations with road<br>crossing of rodding and wire transmission (if any).<br>The boom locking post foundation, winch<br>foundation and other foundations are to be<br>fabricated by using mixture of cement, sand and<br>aggregate in ratio of 1:3:6. It also includes wiring<br>of pedestal, lock posts, HKT and cable termination<br>at LC gate lodge and location boxes. Item of cable<br>laying, road crossing for cable laying will be<br>covered separately. Inspection: Consignee,<br>Inspection Charges: None,Payment Terms:100%<br>after commissioning. | Set     | 10  | 51252.32 | 512523.2  |
| 2        | 2402   | Shifting/ re-installation, testing & Commissioning<br>of SLIDING BOOM complete along with E Type<br>locks on sliding boom post and gumty. It includes<br>testing & commissioning of ground lever frames (if<br>any), E type locks and CB on GF as per approved<br>SIP. The item includes casting/shifting of<br>foundations required for installation of sliding<br>booms of both side with contractor's own material<br>and supply of other nut-bolts, rivets, limit switches<br>etc required for commissioning of sliding<br>boom.Inspection: Consignee. Inspection Charges:<br>None.Payment Terms:100% after commissioning.   | Set     | 10  | 19891.1  | 198911.04 |
| 3        | 2403   | Shifting/relocation of existing colour light signals<br>with foundation and all fittings.Inspection:<br>Consignee Inspection Charges: NonePayment<br>Terms:100% after commissioning.   | Numbers | 15  | 20085.32 | 301279.8  |

|          |   |   |          |       |         |           |
|----------|---|---|----------|-------|---------|-----------|
| 4        | 2404  | Shifting and installation of Apparatus Cases single (Full) on CC foundation on grouted bolts. The item includes fitting of E Type locks and fabrication of slotted angle frame and fixing it inside location box. Railway will supply only location boxes. The casting of CC foundation for erection of location boxes will be covered separately. Inspection: Consignee. Inspection Charges: None.Payment Terms:100% after commissioning.  | Numbers  | 116   | 3442.64 | 399346.24 |
| 5        | 2405  | Shifting and installation of Apparatus Cases(Half) (or other small/quarter locations/MSDAC DPs/ Pot Boxes etc.) on CC foundation/grouted bolts. The item includes fitting of E Type locks and fabrication of slotted angle frame and fixing it inside location box. Railway will supply only location boxes. The casting of CC foundation for erection of location boxeswillbecovered separately.Inspection:Consignee. Inspection Charges: None.Payment Terms:100% after commissioning.   | Numbers  | 52    | 2270.48 | 118064.96 |
|          |   |   |          |       |         |           |
| Item- 25 | CHAPTER-25:Cable Termination and writing work |   |          |       |         |           |
| S No.    | Item No                                       | Description of Item   | Unit     | Qty   |         |           |
| 1        | 2501  | Termination of main, tail, Signalling and power cables on terminal/ fuse blocks in apparatus cases, cable termination boxes and in gate Lodges excluding cable termination rack at relay room. The work includes fixing of all cables by teakwood clamp on teakwood base plank, varnishing all teakwood items, fixing of terminals/ fuse blocks on the terminal board/Phenolic sheet, drilling of necessary holes, termination of cables, wiring, earthing of armour of all cables on copper bus bar of 25mm X 3 mm of suitable length to fix it from left wall to right wall of apparatus case, identification of cables using aluminium tags with letters punched neatly, as per approved circuit diagram and cable plan, painting/printing of particulars on sleeves and also on the inner side of the doors of apparatus cases. After terminations are over, the cable entry space/openings of apparatus case foundation shall be closed with brick work, cement plastered, the inter-space filled with river sand up to base level and the bottom surface shall be sealed with sealing compound. (Supply of Phenolic Sheet, Terminals and Fuse blocks are not covered in this schedule). [Cement,teakwood made cable clamp 50mm x 50mm, base planks 100mm x 25mm, PVC/Nylon sleeves, varnish, paints, slotted angles, bolts, nuts and washers, Aluminium cable tags, sealing compound, country bricks, copper bus bars for armour earthing, brass screw, river sand and other miscellaneous materials shall be supplied by the Contractor]. Note :- Termination/Writing work should be done in accordance with the policy circulated by Rly Board vide Letter No. 2023/Sig/17-Sig Equip/Maintenance/Part dtd 06.11.2023 (as reproduced below ) 1.Conductor/wire labeling:Function identification marker (Ferrules with printed letters / PVC sleeve with printed details of the cable core / Signaling function in Black with Yellow background) to be provided on each cable conductor., 2.Description details of Terminals : The Row of Screwless Disconnect Terminal I ARA Terminal shall be serially | Per Unit | 39654 | 126.368 | 5010996.7 |

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  | <p>numbered as A, B, C, D from top and in each row, terminals shall also be serially numbered from left to right starting from 1., 3.The Cable Termination Details of Location Box (Location Termination Particulars) shall be prepared in AutoCAD/ any suitable software. One copy of Cable Termination details shall be fixed in the respective location box duly printed on a sun board of A3 Size or large (fixed in a S.S./Aluminium frame with acrylic/transparent front cover mounted on apparatus case door) and another laminated copy in plastic cover shall also be kept in the location box. 4.After every cable terminated in a row, there should be a minimum gap equivalent to 1-2 ARA terminal or minimum 06 Screwless Disconnect Terminals 5.Inside the Location Box, minimum clearance of bottom most terminal row shall be around 150mm from base of location box. The Centre to Centre Distance between two rows of Screwless Disconnect Terminal/ARA Terminal shall be around 18cm to 20cm or suitable gap between rows to be kept for cable entry holes and description writings 6.Location Box shall be numbered from its front side as well as Back side/side walls with black letter on yellow/white background. 7.The Cables terminated on Location Box shall be identified by punched labels / Cable Identification Tag tied on each end of the cable for correct identification. . Inspection: Consignee, Inspection Charges: None, Payment Terms:100% after execution. {Measurement Unit: Per Unit= Per Terminal or Per Fuse Block}</p> |  |  |  |  |
|--|--|--|--|--|--|--|



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|---|------|---|----------|-------|---------|-----------|
| 2 | 2502 | <p>Termination of Main, Tail, Signalling and power cables and internal wiring on terminal/ fuse blocks in cable termination Rack at relay room. The work includes fixing of all cables by teakwood clamp on teakwood base plank, fixing of phenolic sheet/ladder for terminal board, varnishing all teakwood items, fixing of terminals/ fuse blocks on the terminal board, drilling of necessary holes, termination of cables, wiring, identification of cables using aluminium tags with letters punched neatly, as per approved circuit diagram and cable plan, printing of particulars on sleeves. After terminations are over, cable entry at the bottom shall be closed with cement plastered, the inter-space filled with sand up to base level and the bottom surface shall be sealed with sealing compound. Cable armour to be soldered to earth. (Supply of cable termination racks, Terminals, Fuse blocks is not included in this schedule). [All bolts and nuts with washers, Phenolic laminated Sheet, grade P3 of size 10 mm Thick, cement, sand, stone jelly, copper bus bars for armour earthing, brass screw, Teak wood base /MS ladder, insulators, PVC/Nylon sleeves, CT Rack detail printed on vinyl/flex duly fixed on S.S. frame of size prescribed by engineer in charge, varnish, paints, Aluminium cable tags, sealing compound and all other miscellaneous materials required for the work shall be supplied by the contractor] The work includes testing of terminated cables and verification of term. writing work under supervision of Railway at two levels and rectification in termination/writing work as per verified/completion details. Note :-</p> <p>Termination/Writing work should be done in accordance with the policy circulated by Rly Board vide Letter No. 2023/Sig/17-Sig equip/Maintenance/Part dtd 06.11.2023 (as reproduced below )</p> <p>1.Conductor/wire labeling:Function identification marker (Ferrules with printed letters / PVC sleeve with printed details of the cable core / Signaling function in Black with Yellow background) to be provided on each cable conductor., 2.Description details of Terminals : The Row of Screwless Disconnect Terminal I ARA Terminal shall be serially numbered as A, B, C, D from top and in each row, terminals shall also be serially numbered from left to right starting from 1., 3.The Centre to Centre Distance between two rows of Screwless Disconnect Terminal / ARA Terminal shall be around 18cm to 20cm. After every cable terminated in a row, there should be a minimum gap equivalent to 1 ARA terminal or 02 spacers/ dummy Screwless Disconnect Terminals, 4.The Cables terminated on CT rack shall be identified by punched labels/ Cable Identification Tag tied on each end of the cable for correct identification., 5.Line wise and if necessary, function wise cables shall be provided as per para 15.1.2.(c) of IRSEM, 6.Minimum clearance of bottom most terminal in CT rack shall be normally 300mm from ground, 7.CT Racks Particulars (i.e., Function wiring and termination details) may be made using Vinyl Printing or Flex Printing on 300 GSM PVC banner roll of suitable size framed or any other means and shall be fixed on. wall or CT Rack moveable board through suitable metallic frame (CT Board) adjacent to CT rack. Inspection: Consignee, Inspection Charges: None, Payment Terms:100% after execution. {Measurement Unit: Per Unit= Per Terminal or Per Fuse Block}</p> | Per Unit | 21240 | 121.256 | 2575477.4 |
|---|------|---|----------|-------|---------|-----------|

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|----------|--|--|---------|-----|----------|-----------|
|          |  |  |         |     |          |           |
| Item- 26 | CHAPTER-26: Drawing, Painting and Dismantling Items for Bhiwani Jn |  |         |     |          |           |
| S No.    | Item No  | Description of Item  | Unit    | Qty |          |           |
|          |  |  |         |     |          |           |
| 1        | 2601   | Design, preparation & supply of drawings in computer print copies and original tracing in AUTO CAD FORMAT for Electronic Interlocking of BHIWANI JUNCTION (Distributed EI- Complete). After completion of the work, the completion drawings incorporating completion details are to be supplied as per Technical Specifications given in tender document. . Inspection: Consignee Inspection charges: None Payment terms: 100% after execution.  | Station | 2   | 313953.9 | 627907.81 |
| 2        | 2602   | Complete painting and varnishing work at BHIWANI JUNCTION. This includes painting of signal posts and fittings, apparatus cases, point machines, junction boxes, rail post etc. This also includes varnishing, letter writing on relays, terminal Nos., apparatus cases, point machine, Signal Nos. and other details as per Signal Engineering Manual and instructions of Engineer at site. The item includes painting of distances of main cable run from G.P nearest to cable run and painting of distances of signals from nearest line on the signals base. At least two coats of paint is to be applied besides primary coating of red oxide. This includes supply of paints, varnishes and all other material required for complete painting work at a station. This includes painting on existing functional units also. The painting shall consist of initial red oxide / base paint followed by at least two coat of the paint as per standard painting scheme. This item also includes painting of interlocked gate attached to the station. Location box no. shall be painted on both sides. Inspection:Consignee Inspection Charges: None Payment Terms: 100% after Execution | Station | 1   | 90326.11 | 90326.112 |
| 3        | 2603   | Dismantling of existing lever frames/signal fittings/point fittings/lifting barriers (within station limit)/indoor and outdoor equipment and all other released material of S&T at BHIWANI JUNCTION  | Station | 1   | 133126.2 | 133126.18 |
|          |  | . All the released material will be transported to the place/location as decided by site engineer. The item includes i). Mechanical Signalling gears like levers, down rods, locking trough, Rodding, wire transmission, signal posts and hoods etc. ii). Electrical Signalling gears like relays, batteries, indicators, SM slide control and all released wire transmission for slot, telephone, selector control and their related items etc. Inspection:Consignee Inspection Charges: None Payment Terms:  |         |     |          |           |
|          |  | 100% after Execution   |         |     |          |           |
|          |  |  |         |     |          |           |
| Item- 27 | CHAPTER-27: Telecom accessories                                    |  |         |     |          |           |
| S No.    | Item No  | Description of Item  | Unit    | Qty |          |           |

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|---|------|---|---------|----|----------|-----------|
| 1 | 2701 | Supply of 6dB GP Antenna VHF Band (136-174 MHz) with RF cable (min. length of 30 mtr) with both end Connectors (RG 213 Co-axial Cable) suitable for 25 W VHF set.(Kenwood, HYT, Motorola or similar)Inspection: RITES, Inspection Charges: Borne by Railway,Payment Terms:100% after Supply.  | Set     | 5  | 6574.96  | 32874.8   |
| 2 | 2702 | Fixing of GP antenna for 25 W VHF on the roof of ASM office, connection of theAntenna with coaxial cable, supply and fixing of wooden stand on the wall of ASM room for VHF set, SMPS at the station It includes supply of the 12V/100 AH battery, GI pipe of 50mm dia of suitable length (3 m or less), Wooden stand wall mounting size 18" x 12 " for VHF, SMPS and battery, PVC conduit pipe 25 mm of required length.it excludes supply of VHF set, Antenna, coaxial cable, SMPS.Inspection: Consignee Inspection Charges: NonePayment Terms:100% after installation. | Set     | 3  | 9152.792 | 27458.376 |
| 3 | 2703 | Supply, installation and wiring of 24 pair C.T. Box fitted with WAGO make or similar Disconnect type Terminal blocks (Knife type cage clamp technology [Screw-less] with spring loaded contact) having disconnection and reconnection facility, WAGO terminal should suitable for termination of cable from 0.4mm to 0.9mm dia. PIJF/Quad cable [Indoor type]. Inspection: Consignee. Inspection Charges: None. Payment Terms:80% after supply and remaining 20% after installation/wiring (if installed).  | Numbers | 41 | 3925.312 | 160937.79 |
| 4 | 2704 | Supply, installation and wiring of 20 pair C.T. Box fitted with WAGO make or similar Disconnect type Terminal blocks (Knife type cage clamp technology [Screw-less] with spring loaded contact) having disconnection and reconnection facility, WAGO terminal should suitable for termination of cable from 0.4mm to 0.9mm dia. PIJF/Quad cable [Indoor type]. Inspection: Consignee. Inspection Charges: None. Payment Terms:80% after supply and remaining 20% after installation/wiring (if installed).  | Numbers | 31 | 3658.464 | 113412.38 |
| 5 | 2705 | Supply, installation and wiring of 10 pair C.T. Box fitted with WAGO make or similar Disconnect type Terminal blocks (Knife type cage clamp technology [Screw-less] with spring loaded contact) having disconnection and reconnection facility, WAGO terminal should suitable for termination of cable from 0.4mm to 0.9mm dia. PIJF/Quad cable [Indoor type]. Inspection: Consignee. Inspection Charges: None. Payment Terms:80% after supply and remaining 20% after installation/wiring (if installed).  | Numbers | 31 | 2309.488 | 71594.128 |
| 6 | 2706 | Supply of magneto telephone desk type (push button) spec No. TC-79/2000 with Amendment No. 3 or latest. Inspection: Consignee (material must be procured from RDSO approved sources only)Inspection Charges: None,Payment Terms:100% after installation.  | Numbers | 50 | 2234.464 | 111723.2  |
| 7 | 2707 | Supply of straight joint closer and splicing of optical fibre (2X48) as per RDSO Spec. TC- 68/2020 Rev. 2 or latest. This includes supply of straight joint closer (SJC) complete with all accessories with latest amendments and splicing of optical fibre cables(2X48Fibers)and testing.Inspection:RITESInspection Charges: Borne by Railway.Payment Terms:100% after testing.  | Numbers | 78 | 17860.55 | 1393123.1 |

|    |      |  |           |    |          |           |
|----|------|--|-----------|----|----------|-----------|
| 8  | 2708 | <p>Supply, installation, complete splicing &amp; testing of Optical fiber cable termination box for 48 fibers complete with base housing, base mountings with fixing arrangement etc &amp; splicing of fibers with low loss of pigtail cables as per detailed specification mentioned in respective tender documents. Two pairs of fibers shall be derived from either side of OFC cable at every OFC cable hut provided at wayside stations through pigtails with FC/PC connectors and remaining fibers on either side will be made through by splicing. At OFC terminal stations/MW repeater stations, all fibers shall be derived from either side and to be terminated in OFC termination box through pig tails and FC/PC connector. The OFC termination box to be supplied as per TEC No. G/FTB 01-02 March- 99 or latest. Splice losses in no case should be more than 0.1 dB. Necessary 0 dB connectors should be provided by contractor in OFC termination box. Inspection: Consignee Inspection Charges: None. Payment Terms: 80% after supply and remaining 20% after splicing and testing.</p>  | Numbers   | 29 | 22295.59 | 646572.17 |
| 9  | 2709 | <p>Geographic Information System (GIS) Mapping of all S&amp;T cable trenches &amp; RCC Ducts (Main and Tail Cables) by collecting and storing positional data at every 5 meter interval with reference to existing track and proposed signalling gears like Location boxes, Signals, Points, Glued Joints, LC gates and other important fixed structures with an accuracy of 2-3 cm. The GIS mapping includes collection of positional data of the objects using a GNSS RTK enabled device and processing the data on suitable software and map it for preparation of trench layout and exporting data on excel format. It includes exporting and processing of data on google earth and other suitable applications in reference of tracks and track kilo meter chainage. Item covers preparation of trenching plan on CAD format on A3 size paper by importing the data collected from site through GIS mapping device. The plan shall be prepared with suitable scale to showing minute detail of depth of trench and ground level at every five- meter interval, Position of all S&amp;T gears. The data collection shall be done before refilling of trench and shall be processed. After approval of filed units the trench plan will be submitted in 8 Nos of colour copies. Trench data shall be used for preparation of standard cable route plan, preparation of cable route plan is covered separately in another item of schedule. Note:- The GIS mapping shall be done by contractor using their own devices , software and man power. The accuracy of mapped point (saved position of object) must be in range of 2-3 cm (the deviation shall not be permitted beyond 3 cm) Inspection: Consignee, Inspection Charges: None, Payment Terms: 100% after after execution. (Measurement Unit: Kilo meter = length of mapped trench/RCC duct in Kilo Meters)</p> | Kilometre | 82 | 4273.112 | 350395.18 |
| 10 | 2710 | <p>Supply of portable GIS mapping device LT800AH tablet or similar with Antenna, Charger and complete Accessories with warranty of minimum 3 years Technical specifications are attached in Annexure- TS-11 (B). Inspection: RITES, Inspection Charges: Borne by Railway. Payment Terms: 100% after supply.</p>  | Set       | 3  | 349508.8 | 1048526.3 |

| 11       | 2711                                  | Supply of cable route tracer with 10W, 500mA, 85V transmitter suitable for detecting & mapping underground cables with accuracy which can up to 3-5 cm or better, with current direction up/down arrows, Remote calibration check feature. Supply shall include inbuilt RTK enabled receiver, transmitter, with minimum 5 years subscription, compatible with NTRIP and RTCMv3.X messaging standards and includes supply of transmitter, A-Frame, tablet holder & standard accessories. Item should capable of Locating and mapping the position/path of buried cables and pipes Detecting and pinpointing insulation faults on buried cables and pipes Creating survey records of buried cables and pipes locations . Make/Model: Radiodetection, RD8200SG or similar with 3 year warranty from registration. Technical Specifications are given in Annexure- TS-11 (C) , Inspection : RITES, Inspection Charges: Borne by Railway. Payment Terms:100% after supply | Set     | 4   | 389446.5 | 1557785.9 |
|----------|---------------------------------------|--|---------|-----|----------|-----------|
| 12       | 2712                                  | Supply of LASER Distance meter capable of measuring distance up to range 150 M with accuracy upto 10 mm, Make- BOSCH Model GLM 150 C or similar product from Fluke , Stanlay, Dewalt etc.Inspection: Consignee, Inspection Charges: None, Payment Terms: 100% after after supply.  | Numbers | 3   | 14192    | 42576     |
| 13       | 2713                                  | Supply of Digital AC-DC clamp meter capable of measuring current from 0.1A to 200 A and Voltage up to 600 V with zaw opening size 18 mm (or +/- 2 mm). Make Fluke-362 or Similar from KUSAM-MECO/MATRIX or better. Inspection: Consignee, Inspection Charges: None, Payment Terms: 100% after after supply.  | Numbers | 17  | 7124.8   | 121121.6  |
|          |                                       |  |         |     |          |           |
| Item- 28 | CHAPTER-28: CCTV and Anti-theft alarm |  |         |     |          |           |
| S No.    | Item No                               | Description of Item  | Unit    | Qty |          |           |
| 1        | 2801                                  | Supply, installation, testing and commissioning of 2 Mega Pixel, Full HD & IR network bullet/dome IP camera, weather Proof for indoor/outdoor use, 2MP ,1/2.8", 1920 (H) x1080 (V) pixels, IR Distance up to 98ft, RJ-45 100Mbps, PoE enabled, Complies with IP66 , inbuilt memory of 128GB, Make: Sony, Hikvision, Samsung, Godrej, Avalonix or similar. Inspection: Consignee.InspectionCharges: None.Payment Terms:100% after commissioning.  | Numbers | 38  | 9421.712 | 358025.06 |
| 2        | 2802                                  | Supply, installation, testing and commissioning of 4K, 16 Channel NVR supporting 16 Channel upto 12 MP resolution,DecodingFormat H.265+/H.265/H.264+/H.264/MPEG4, HDMI and VGA output port 1 each, Dual- Stream Recording, TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SADP, SMTP, SNMP, NFS, iSCSI, ISUP, UPnP™, HTTP, HTTPS, PoE interface, 2 SATA interfaces with min 6TB of HDD, 1 x USB 2.0; 1 x USB 3.0, Power Supply 100 to 240 VAC, 50 to 60 Hz, Working Temperature - 10 to 55 Degree Celsius . Height 1U. Model : Hikvision DS-7616NI-I2/16P or similar.Inspection: Consignee. Inspection Charges: None.Payment Terms:100% after commissioning.  | Numbers | 3   | 8858.648 | 26575.944 |
| 3        | 2803                                  | Supply of 4 TB hard disk of reputed make for NVR.Inspection: Consignee. Inspection Charges: None.Payment Terms:100% after supply.  | Numbers | 3   | 6417.2   | 19251.6   |

|          |   |  |              |     |          |           |
|----------|---|--|--------------|-----|----------|-----------|
| 4        | 2804  | Installation, testing & commissioning of 2 layer/3 layer switch including all wiring.Inspection: Consignee. Inspection Charges: None.Payment Terms:100% after installation.  | Numbers      | 12  | 821.232  | 9854.784  |
| 5        | 2805  | Supply of Rigid uPVC conduit pipe of having outer dia. 25mm and inner dia.21.4 mm with ISI mark (IS:9537 Part- 3). Inspection: Consignee, Inspection Charges: None.Payment Terms:100% after supply.  | Metre        | 370 | 9.616    | 3557.92   |
| 6        | 2806  | Laying of cable for CCTV or other types of telecom cable through PVC conduit pipe/casing-capping/fall ceiling with laying/fixing of PVC pipe/casing (for C CTV work)Inspection: Consignee. Inspection Charges: None.Payment Terms:100% after installation.   | Metre        | 370 | 17.192   | 6361.04   |
| 7        | 2807  | Supply and installation of material for assembling of anti-theft alarm system in auto hut/station as per circuit diagram provided by Railway . It includes supply of 25W hooter /siren with amplifier, proximity switch, Push button, SMPS adapter 230V/12V/5A etc. Inspection: Consignee. Inspection Charges: None.Payment Terms:100% after installation.   | Set          | 9   | 5384.992 | 48464.928 |
|          |   |  |              |     |          |           |
| Item- 29 | CHAPTER-29: Hiring of accommodation and Man power |  |              |     |          |           |
| S No.    | Item No   | Description of Item  | Unit         | Qty |          |           |
| 1        | 2901  | Hiring of fully furnished Camp Office at site (of Size 2 BHK) for Railway S&T officials for monitoring/ supervision of work. The contractor will provide the storage safe for protection of Important tender related document i.e. M.B./Inspection certificates, drawings , T&P items etc .The rental cost includes electricity charges, water charges, cost of internet connection (Wifi) & cost of regular cleaning of camp office. The location of the camp office will be decided by the engineer in charge at any place/city/town near the section (probably at BHIWANI or HISAR or any other place as decided by Dy. CSTE/C/BKN) .Inspection: Consignee, Inspection Charges: None, Payment Terms: 100% after completion of each month cycle. | Number-Month | 18  | 15520    | 279360    |
| 2        | 2902  | Deployment of a Team consist of One skilled (wireman or fitter) and One unskilled staff round the clock along with SSE/JE for trouble shooting of installation during pre NI/NI work or prepare for meet sudden requirements during joint work like track renewal/ digging work by P way etc. The work includes jointing of cables while accidental cable cuts during work, and to help in failure restoration as per the direction of the SSE/JE. The item will be operated only for the works which are not covering anywhere else in the schedule. Inspection: Consignee. Inspection charges: None. Payment terms: 100% after execution. (Measurement Unit: Day means Per team per Day)   | Day          | 100 | 1845.048 | 184504.8  |
| 3        | 2903  | Arranging skilled labour at S&T CONST CONSIGNEE STORE DEPOT at LGH-BIKANER for loading/unloading/stacking of departmental materials.   | Man-Days     | 100 | 361.088  | 36108.8   |
|          |   |  |              |     |          |           |
| Item- 30 | CHAPTER-30: Printing Items                        |  |              |     |          |           |

| S No.              | Item No | Description of Item  | Unit        | Qty |                  |           |
|--------------------|---------|--|-------------|-----|------------------|-----------|
| 1                  | 3001    | Printing, Supply and fixing of sign board with printing on Sun board (of thickness minimum 4mm) having colour print of various drawings/photo graphs/documents like Power board diagram, Relay index chart, Station Rule Diagram, FTOT Particulars etc. as decided by the Railway). Item includes framing of the board with suitable mounting arrangement and fixing on the wall as per instruction of site engineer. Inspection: Consignee.Inspection Charges: None.Payment Terms:100% after fixing.  | Square Foot | 240 | 396.296          | 95111.04  |
| 2                  | 3002    | Supply of various type of printed and bounded booklets/registers/SMC cards required for use of maintenance record of the S&T assets. It includes maintenance registers for SMC 1 to 12, Battery maintenance record, cable testing record, earth testing record, counter record, key transaction record etc. for station record and Spot Maintenance Cards for axle counter, point machine, track circuit, Signal, LC Gate etc. to keep in the locationsboxes/gears.Each booklet/register must have proper binding with proper hardcover /Thick paper cover. Paper size, print matter, paper thickness and cover quality will be approved by the engineer in charge as per Railway practice. Approximate number of pages per each booklet will be 100 Pages (Measurement Unit :Number= per booklet). Inspection: Consignee.InspectionCharges: None.Payment Terms:100% after Supply. | Numbers     | 820 | 192.408          | 157774.56 |
|                    |         |  |             |     |                  |           |
| <b>GRAND TOTAL</b> |         |  |             |     | <b>244774518</b> |           |

**Total Amount of BoQ = Rs. 24,47,74,518/-**

|  |  |
|--|--|
| Bidder's offer: "I/We hereby offer to do the work at following rates." |  |
| In Figure:   | % Above/ At Par/ Below the schedule of rates |
| In Words:  | % Above/ At Par/ Below the schedule of rates |

**Signature of Authorized Signatory**

**Name:**

**Designation:**

**Place:**

**Annexure 4A**  
**(To be uploaded in Financial Offer)**

**BoQ (.xls) file copy enclosed**



**PROFORMA FOR PERFORMANCE BANK GUARANTEE**

(On Stamp Paper of ₹ One Hundred)

To,  
Executive Director (Mktg/NR) & TM Jaipur,  
RailTel Corporation of India Limited.

1. In consideration of the RailTel Corporation of India Limited (CIN: L64202DL2000GOI107905), having its registered office at Plate-A, 6<sup>th</sup> Floor, Office Block Tower-2, East Kidwai Nagar, New Delhi – 110023 (herein after called “RailTel”) having agreed to exempt..... (CIN : ..... ) having its registered office at ..... (hereinafter called “the said Contractor”) from the demand, under the terms and conditions of Purchase Order No. ....dated ..... made between RailTel and ..... for (hereinafter called “the said Agreement”) of security deposit for the due fulfilment by the said Contractor of the terms and condition contained in the said Agreement, or production of a Bank Guarantee for Rs. .... ( Rs. .... Only). We ..... (indicate the name and address and other particulars of the Bank) (hereinafter referred to as ‘the Bank’) at the request of ..... contractor do hereby undertake to pay RailTel an amount not exceeding Rs. .... ( Rs ..... Only) against any loss or damage caused to or suffered or would be caused to or suffered by the RailTel by reason of any breach by the said Contractor of any of the terms or conditions contained in the said Agreement.

2. We, ..... the Bank do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on demand from the RailTel stating that the amount is claimed is due by way of loss or damage by the said Contractor of any of terms or conditions contained in the said Agreement by reason of the Contractor’s failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs ..... ( Rs Only).

3. We, ..... the Bank undertake to pay the RailTel any money so demanded notwithstanding any dispute or disputes raised by the Contractor in any suit or proceedings pending before any court or Tribunal relating thereto our liability under this present being, absolute and unequivocal. The payment so made by us under this Bond shall be a valid discharge of our liability for payment there under and the Contractor shall

have no claim against us for making such payment.

4. We, ..... the Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor and accordingly discharges this Guarantee. Unless a demandor claim under the Guarantee is made on us in writing on or before .....  
. We shall be discharged from all liability under this Guarantee thereafter.

5. We, ..... the Bank further agree with the RailTel that the RailTel shall have fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the Agreement or to extend time of to postpone for any time or from time to time any of the powers exercisable by the RailTel against the said Contractor and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension to the said Contractor or for any forbearance, act or omission on the part of RailTel or any indulgence by the RailTel to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This Guarantee will not be discharge due to the change in the constitution of the Bank or the Contractor.

( .....indicate the name of Bank ..... ) lastly undertake not to revoke this Guarantee during its currency except with the previous consent of RailTel in writing.

Dated the ..... Day of ..... 2023 for ..... (Name of Bank)

In the presence of Witnesses:

1. Signature With Date Name

2. Signature With Date Name

**Encl:** SFMS PBG Report

*{RailTel SFMS details –*

*BG advising message – IFN 760COV/ IFN 767COV via SFMS.*

*IFSC Code of ICICI Bank to be used (ICIC0000007). Unique reference (RAILTEL6103) in field 7037}.*

**NON-DISCLOSURE AGREEMENT**

This Non-Disclosure Agreement (this “Agreement”) is made and entered into on this \_\_\_\_ day of \_\_, 2023 (the “Effective Date”) at \_.

By and between

RailTel Corporation of India Limited, (CIN: L64202DL2000GOI107905), a Public Sector Undertaking under Ministry of Railways, Govt. of India, having its registered and corporate office at Plate-A, 6th Floor, Office Block, Tower -2, East Kidwai Nagar, New Delhi-110023 & Northern Region office at 6th Floor, 3rd Block, Delhi IT Park, Shastri Park, New Delhi - 110053, (hereinafter referred to as 'RailTel'), which expression shall unless repugnant to the context or meaning thereof, deem to mean and include its successors and its permitted assignees of the ONE PART,

And

\_\_\_\_\_) (CIN: \_\_\_\_\_), a company duly incorporated under \_\_\_\_\_ the provisions of Companies Act, having its registered office at \_\_\_\_\_, (hereinafter referred to as '\_\_\_\_\_'), which expression shall unless repugnant to the context or meaning thereof, deem to mean and include its successors and its permitted assignees of OTHER PART

RailTel and \_\_\_\_\_ shall be individually referred to as “Party” and jointly as “Parties”

WHEREAS, RailTel and \_\_\_\_\_, each possesses confidential and proprietary information related to its business activities, including, but not limited to, that information designated as confidential or proprietary under Section 2 of this Agreement, as well as technical and non- technical information, patents, copyrights, trade secrets, know-how, financial data, design details and specifications, engineering, business and marketing strategies and plans, forecasts or plans, pricing strategies, formulas, procurement requirements, vendor and customer lists,

inventions, techniques, sketches, drawings, models, processes, apparatus, equipment, algorithms, software programs, software source documents, product designs and the like, and third party confidential information (collectively, the “Information”);

WHEREAS, the Parties have initiated discussions regarding a possible business relationship for

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WHEREAS, each Party accordingly desires to disclose certain Information (each Party, in such disclosing capacity, the “Disclosing Party”) to the other Party (each Party, in such receiving capacity, the “Receiving Party”) subject to the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of the receipt of certain Information, and the mutual promises made in this Agreement, the Parties, intending to be legally bound, hereby agree as follows:

**1. Permitted Use.**

**(a) Receiving Party shall:**

- (i) hold all Information received from Disclosing Party in confidence;
- (ii) use such Information for the purpose of evaluating the possibility of entering into a commercial arrangement between the Parties concerning such Information; and
- (iii) restrict disclosure of such Information to those of Receiving Party’s officers, directors, employees, affiliates, advisors, agents and consultants (collectively, the “Representatives”) who the Receiving Party, in its reasonable discretion, deems need to know such Information, and are bound by the terms and conditions of (1) this Agreement, or (2) an agreement with terms and conditions substantially similar to those set forth in this Agreement.

**(b) The restrictions on Receiving Party’s use and disclosure of Information as set forth above shall not apply to any Information that Receiving Party can demonstrate:**

- (i) is wholly and independently developed by Receiving Party without the use of Information of Disclosing Party;
- (ii) at the time of disclosure to Receiving Party, was either (A) in the public domain, or (B) known to Receiving Party;
- (iii) is approved for release by written authorization of Disclosing Party; or
- (iv) is disclosed in response to a valid order of a court or other governmental body in the India or any political subdivision thereof, but only to the extent of, and for the purposes set forth in, such order; provided, however, that Receiving Party shall first and immediately notify Disclosing Party in writing of the order and permit Disclosing Party to seek an appropriate protective order.

( c ) Both parties further agree to exercise the same degree of care that it exercises to protect its own Confidential Information of a like nature from unauthorised disclosure, but in no event shall a less than reasonable degree of care be exercised by either party.

## **2. Designation.**

(a) Information shall be deemed confidential and proprietary and subject to the restrictions of this Agreement if, when provided in:

- (i) written or other tangible form, such Information is clearly marked as proprietary or confidential when disclosed to Receiving Party; or
- (ii) oral or other intangible form, such Information is identified as confidential or proprietary at the time of disclosure.

**3. Cooperation.** Receiving Party will immediately give notice to Disclosing Party of any unauthorized use or disclosure of the Information of Disclosing Party.

**4. Ownership of Information.** All Information remains the property of Disclosing Party and no license or other rights to such Information is granted or implied hereby.

Notwithstanding the foregoing, Disclosing Party understands that Receiving Party may currently or in the future be developing information internally, or receiving information from other parties that may be similar to Information of the Disclosing Party. Notwithstanding anything to the contrary, nothing in this Agreement will be construed as a representation or inference that Receiving Party will not develop products, or have products developed for it, that, without violation of this Agreement, compete with the products or systems contemplated by Disclosing Party's Information.

**5. No Obligation.** Neither this Agreement nor the disclosure or receipt of Information hereunder shall be construed as creating any obligation of a Party to furnish Information to the other Party or to enter into any agreement, venture or relationship with the other Party.

**6. Return or Destruction of Information.**

(a) All Information shall remain the sole property of Disclosing Party and all materials containing any such Information (including all copies made by Receiving Party) and its Representatives shall be returned or destroyed by Receiving Party immediately upon the earlier of:

- (i) termination of this Agreement;
- (ii) expiration of this Agreement; or
- (iii) Receiving Party's determination that it no longer has a need for such Information.

(b) Upon request of Disclosing Party, Receiving Party shall certify in writing that all Information received by Receiving Party (including all copies thereof) and all materials containing such Information (including all copies thereof) have been destroyed.

**7. Injunctive Relief:** Without prejudice to any other rights or remedies that a party may have, each party acknowledges and agrees that damages alone may not be an adequate remedy for any breach of this Agreement, and that a party shall be entitled to seek the remedies of injunction, specific performance and/or any other equitable relief for any threatened or actual breach of this Agreement

**8. Notice.**

(a) Any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows, with notice deemed given as indicated:

- (i) by personal delivery, when delivered personally;

- (ii) by overnight courier, upon written verification of receipt; or
  - (iii) by certified or registered mail with return receipt requested, upon verification of receipt.
- (b) Notice shall be sent to the following addresses or such other address as either Party specifies in writing.

RailTel Corporation of India limited:

Attn:

Address:

Phone:

Email.:

Attn:

Address:

Phone:

Email

#### **9. Term, Termination and Survivability.**

- (a) Unless terminated earlier in accordance with the provisions of this agreement, this Agreement shall be in full force and effect for a period of years from the effective date hereof.
- (b) Each party reserves the right in its sole and absolute discretion to terminate this Agreement by giving the other party not less than 30 days' written notice of such termination.
- (c) Notwithstanding the foregoing clause 9(a) and 9 (b) , Receiving Party agrees that its obligations, shall:
  - (i) In respect to Information provided to it during the Term of this agreement, shall survive and continue even after the expiry of the term or termination of this agreement; and
  - (ii) not apply to any materials or information disclosed to it thereafter.

**10. Governing Law and Jurisdiction.** This Agreement shall be governed in all respects solely and exclusively by the laws of India without regard to its conflicts of law principles. The Parties hereto expressly consent and submit themselves to the jurisdiction of the courts of New Delhi.

**11. Counterparts.** This agreement is executed in duplicate, each of which shall be deemed to be the original and both when taken together shall be deemed to form a single agreement

**12. No Definitive Transaction.** The Parties hereto understand and agree that no contractor agreement with respect to any aspect of a potential transaction between the Parties shall be deemed to exist unless and until a definitive written agreement providing for such aspect of the transaction has been executed by a duly authorized representative of each Party and duly delivered to the other Party (a "Final Agreement"), and the Parties hereby waive, in advance, any claims in connection with a possible transaction unless and until the Parties have entered into a Final Agreement.

**13. Settlement of Disputes:**

(a) The parties shall, at the first instance, attempt to resolve through good faith negotiation and consultation, any difference, conflict or question arising between the parties hereto relating to or concerning or arising out of or in connection with this agreement, and such negotiation or consultation shall begin promptly after a Party has delivered to another Party a written request for such consultation.

(b) In the event of any dispute, difference, conflict or question arising between the parties hereto, relating to or concerning or arising out of or in connection with this agreement, is not settled through good faith negotiation or consultation, the same shall be referred to arbitration by a sole arbitrator.

**14.** The sole arbitrator shall be appointed by CMD/RailTel out of the panel of independent arbitrators maintained by RailTel, having expertise in their respective domains. The seat and the venue of arbitration shall be New Delhi. The arbitration proceedings shall be in accordance with the provision of the Arbitration and Conciliation Act 1996 and any other statutory amendments or modifications thereof. The decision of arbitrator shall be final and binding on both parties. The arbitration proceedings shall be conducted in English Language. The fees and cost of arbitration shall be borne equally between the part

**15. CONFIDENTIALITY OF NEGOTIATIONS**

Without the Disclosing Party's prior written consent, the Receiving Party shall not disclose to any Person who is not a Representative of the Receiving Party the fact that Confidential Information has been made available to the Receiving Party or that it has inspected any portion of the Confidential Information or that discussions between the Parties may be taking place.

**16. REPRESENTATION**

The Receiving Party acknowledges that the Disclosing Party makes no representation or warranty as to the accuracy or completeness of any of the Confidential Information furnished by or on its behalf. Nothing in this clause operates to limit or exclude any liability for fraudulent misrepresentation.



**17. ASSIGNMENT**

Neither this Agreement nor any of the rights, interests or obligations under this Agreement shall be assigned, in whole or in part, by operation of law or otherwise by any of the Parties without the prior written consent of each of the other Parties. Any purported assignment without such consent shall be void. Subject to the preceding sentences, this Agreement will be binding upon, inure to the benefit of, and be enforceable by, the Parties and their respective successors and assigns.

**18. EMPLOYEES AND OTHERS**

Each Party shall advise its Representatives, contractors, subcontractors and licensees, and shall require its Affiliates to advise their Representatives, contractors, subcontractors and licensees, of the obligations of confidentiality and non-use under this Agreement, and shall be responsible for ensuring compliance by its and its Affiliates' Representatives, contractors, subcontractors and licensees with such obligations. In addition, each Party shall require all persons and entities who are not employees of a Party and who are provided access to the Confidential Information, to execute confidentiality or non-disclosure agreements containing provisions no less stringent than those set forth in this Agreement. Each Party shall promptly notify the other Party in writing upon learning of any unauthorized disclosure or use of the Confidential Information by such persons or entities.

**19. NO LICENSE**

Nothing in this Agreement is intended to grant any rights to under any patent, copyright, or other intellectual property right of the Disclosing Party, nor will this Agreement grant the Receiving Party any rights in or to the Confidential Information of the Disclosing Party, except as expressly set forth in this Agreement.

**20. RELATIONSHIP BETWEEN PARTIES:**

Nothing in this Agreement or in any matter or any arrangement contemplated by it is intended to constitute a partnership, association, joint venture, fiduciary relationship or other cooperative entity between the parties for any purpose whatsoever. Neither party has any power or authority to bind the other party or impose any obligations on it and neither party shall purport to do so or hold itself out as capable of doing so.

**21. UNPUBLISHED PRICE SENSITIVE INFORMATION (UPSI)**

\_\_\_\_\_ agrees and acknowledges that \_\_\_\_\_, its Partners, employees, representatives etc., by virtue of being associated with RailTel and being in frequent communication with RailTel and its employees, shall

be deemed to be “Connected Persons” within the meaning of SEBI (Prohibition of Insider Trading) Regulations, 2015 and shall be bound by the said regulations while dealing with any confidential and/ or price sensitive information of RailTel. \_\_\_\_\_ shall always and at all times comply with the obligations and restrictions contained in the said regulations. In terms of the said regulations, shall abide by the restriction on communication, providing or allowing access to any Unpublished Price Sensitive Information (UPSI) relating to RailTel as well as restriction on trading of its stock while holding such Unpublished Price Sensitive Information relating to RailTel.

## **22. MISCELLANEOUS.**

This Agreement constitutes the entire understanding among the Parties as to the Information and supersedes all prior discussions between them relating thereto. No amendment or modification of this Agreement shall be valid or binding on the Parties unless made in writing and signed on behalf of each Party by its authorized representative. The failure or delay of any Party to enforce at any time any provision of this Agreement shall not constitute a waiver of such Party’s right thereafter to enforce each and every provision of this Agreement. In the event that any of the terms, conditions or provisions of this Agreement are held to be illegal, unenforceable or invalid by any court of competent jurisdiction, the remaining terms, conditions or provisions hereof shall remain in full force and effect. The rights, remedies and obligations set forth herein are in addition to, and not in substitution of, any rights, remedies or obligations which may be granted or imposed under law or in equity.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date set forth above.

RailTel Corporation of India Ltd

By

By

Name:

Name:

Title:

Title:

Witnesses:

**Pre Bid Agreement**

(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs. 100/-. The stamp paper has to be in the name of the BA)

This Pre-Bid Agreement (the “**Agreement**”) is made at Jaipur on this \_\_\_\_ Day of \_\_\_\_\_(month) 2023.

**BETWEEN**

**M/s. RailTel Corporation Of India Limited**, (CIN: L64202DL2000GOI107905) a company registered under the Companies Act 1956, having its registered and corporate office at Plate-A, 6<sup>th</sup> Floor, Office Block, Tower-2, East Kidwai Nagar, New Delhi India – 110 023 and Northern Regional office at 6<sup>th</sup> Floor, 3<sup>rd</sup> Block, Delhi IT Park, Shastri Park, New Delhi - 110053 (hereinafter referred to as “**RailTel**” which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted assigns) of the **FIRST PART**.

**AND**

**M/s. XXXX**, (CIN: \_\_\_\_\_) a company registered under the Companies Act 1956, \_\_\_\_\_ having its \_\_\_\_\_ registered office at \_\_\_\_\_ and its Corporate Office located at \_\_\_\_\_, (hereinafter referred to as “**XXXX**” which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted assigns) of the **SECOND PART**.

RailTel and \_\_\_\_\_ shall be hereinafter individually referred to as “**Party**” and collectively as “**Parties**.”

**WHEREAS,**

- A) RailTel is a "Mini Ratna (Category-I)" CPSU of Ministry of Railways, having exclusive right of way along Indian Railways and has created an OFC backbone and associated transport and network infrastructure to provide carrier class telecom services. RailTel has Unified License issued by DoT to provide a range of telecom services. RailTel also has two tier III certified datacentres at Secunderabad and Gurugram. RailTel has created a slew of digital services like cloud, hosting, hosted Video Conferencing service, Aadhar Services, Content delivery platform, WiFi as a service etc. RailTel has strong capabilities in managing telecom infrastructure, MPLS network infrastructure, data centre services like IaaS (Infrastructure as a Service) and PaaS (Platform as a Service).

B) \_\_\_\_\_(DETAILS OF SECOND PART)

C) RailTel had floated an EOI No: \_\_\_\_\_ dated  
pursuant to the RFP floated by End Customer for“ \_\_\_\_\_  
for End Customer Organization for agreed Scope of Work”(hereinafter referred as “The said  
work/project/tender”), and subsequently, based on the offer submitted by M/s XXXX towards the  
RailTel’s EOI, M/s XXXX has been selected by RailTel as Business Associate for the said Project.

D) RailTel is in the process of participating in the tender issued by end customer, complete details of which have  
deliberately not been shared with XXXX and XXXX has waived its right to get the RFP document of end  
customer owing to confidentiality concern raised by the end customer. However, a limited scope of work on  
‘need to know basis’ and as detailed in clause

1.7 below, which will be carried out by XXXX has been shared with XXXX and based on the representation  
of “XXXX” that “XXXX” has read the said limited Scope of Work and has understood the contents thereof  
and that “XXXX” has sufficient experience to execute the said limited and defined scope of work, the Parties  
have mutually decided to form a “ Business association” wherein RailTel shall act as the “Bidder” and  
“XXXX” shall act as the “business associate” in terms of the said Tender and in accordance to the terms  
agreed hereunder;

E) RailTel shall submit Rupees YYYY as BG against pre integrity pact at the time of submission of bid as an  
Integrity Pact bank guarantee to end customer and accordingly “XXXX” shall submit Rupees ZZZZ as BG of  
pre integrity pact on back to back

basis to RailTel before final submission of the said bid to end customer. **(This is applicable on cases to case  
basis as per CoR requirement. May please read in conjunction of the current RFP.)**

F) Party hereby acknowledges that RailTel has received Rs. \_\_\_\_\_ /-  
(Rs. \_\_\_\_\_) from M/s XXXX as per the Terms and conditions of EOI no.  
\_\_\_\_\_ dated \_\_\_\_\_.

G) The Parties are thus entering into this Agreement to record the terms and conditions of their  
understanding and the matters connected therewith.

RailTel has agreed to extend all the necessary and required support to “XXXX” during the entire  
contract period.

**NOW, THEREFORE**, in consideration of the mutual covenants set forth herein it is hereby agreed by and

between the Parties hereto as under:

## **1. SCOPE OF CO-OPERATION**

- 1.1. Parties have agreed to form a “business association” to co-operate with each other on an exclusive basis with respect to execution of the said Project.
- 1.2. It has been further agreed between the Parties that Parties shall not bid individually for the said Project nor shall they enter into any arrangement with other parties for the purpose of bidding for the said Project during the validity of this Agreement.
- 1.3. The Parties also agree that the terms of the said EOI for limited and defined scope of work along with the Corrigendum’s issued thereafter shall apply mutatis-mutandis to this Agreement.
- 1.4. The Parties further agree that they shall, enter into a ‘Definitive Agreement’ containing elaborate terms and conditions, role and responsibilities and respective scope of work of this Agreement after declaration of RailTel as the successful bidder of the said Project.
- 1.5. RailTel shall submit the PBG amounting Rs. XXXXX, earnest money deposit / EMD declaration (whichever is applicable) and performance bank guarantee to **End customer** and accordingly “XXXX” shall submit to RailTel, BG amounting to Rs. \_\_\_\_\_ as the earnest money deposit. Further, XXXX shall also pay the performance bank guarantee in proportionate to the extent of its defined scope of work.
- 1.6. RailTel may further retain some portion of the work mentioned in the end organization’s RFP, where RailTel has competence so that overall proposal becomes most winnable proposal.  
  
XXXX agrees, undertakes and acknowledges that following shall be Scope of Work of XXXX out of the total project work.:

2. Technical Terms – As per CoR document

## **3. TERM AND TERMINATION**

- 3.1. This Agreement shall come into force as of the date of signing and shall continue to be in full force and effect till the complete discharge of all obligations, concerning the carrying out of the said Project, except terminated earlier by the Parties in terms of this Agreement or in terms of the said project, whichever is applicable.
- 3.2. This Agreement can be terminated by either Parties forthwith in the event of happening of the following events:

- (a) End customer announces or notifies the cancellation of the said Project and / or withdrawing the said RFP.
  - (b) The receipt of an official communication that End customer chooses not to proceed with RailTel for the said Project or RailTel is not short listed by End customer.
  - (c) Material breach of any of the terms and conditions of this Agreement by either of the Parties and the same is not rectified by the defaulting Party beyond 15 (fifteen) days (or a reasonable time period as mentioned under the notice issued by the other Party) from the date of receipt of notice from the other Party to cure the said breach.
- 3.3. Parties agree and understand that as of the execution of this Agreement they are contractually bound and obligated to perform the services, obligations and the scope of work entrusted, should RailTel be declared as the successful bidder of the said Project. Any Party shall not withdraw its participation subsequent to execution of this Agreement, at any point in time except in case of material breach of any of the terms of the Agreement.
- 3.4. In case “XXXX” breach the terms of Agreement i.e. defaulting party in such case the balance unsupplied quantity or service shall be completed by RailTel i.e. non-defaulting party and cost for completion of that balance unsupplied quantity or service of such defaulting party shall be executed by RailTel at the risk and cost of such defaulting party.

**4. Liability:**

It is understood that the parties are entering into this pre-bid teaming agreement for requirement of submission of bid against the RFP floated by end customer for Implementation of Network Security System and Integration for end Customer

Organization. Parties acknowledge and agree that “XXXX” shall be completely liable for the successful execution of this project, in relation to its defined scope of work (as detailed in clause 1.7 above), fully complying the end customer requirements . Accordingly, it is agreed that notwithstanding anything contained in the RFP document, “XXXX” shall be liable to RailTel with regard to its obligations and liability to complete the agreed and defined scope of work as detailed in clause 1.7 above..

**5. EXCLUSIVITY**

Parties agree to co-operate with each other for the purpose of the said Project on an exclusive basis with respect to applying for, submitting and execution of the said Project including providing of technical demo, proof of concept for the agreed and defined scope of work.

**6. PAYMENT TERMS**

The payment terms between the parties shall be only on receipt of payment from end customer and will be back to back as per customer acceptance on payment terms.

**7. TAXES**

Parties agrees that they will comply with the Indian Income Tax Act in force from time to time and pay Indian Income Tax, as may be imposed / levied on them by the Indian Income Tax Authorities, for the payments received by them for the Project under this agreement and any other taxes, cess, surcharge, etc. for their respective scope of works;

**8. INDEMNIFICATION**

- 8.1 Parties agree to and undertake to indemnify and hold each other, its officers, directors, agents and

employees harmless, from and against any and all claims, demands, causes of action, losses, damages, costs and expenses (including attorney's reasonable fees, costs of investigation and defence) arising out of or resulting from any claim, action or other proceeding (including any proceeding by any of the indemnifying party's employees, agents or contractors) based upon:

- i. any breach or contravention of any of the terms, conditions, covenants of this Agreement by the Party;
- ii. Unethical business practices;
- iii. any acts or omission of the Party and/ or any of its employees, agents or contractors, and the liability for damages to property arising from or out of party operations in connection with the performance of this agreement;
- iv. any claim for taxes that might arise or be imposed due to this performance of Services hereunder;
- v. any representation or warranty or information furnished by the Party being found to be false;
- vi. Parties failure to pay all applicable compensation to its respective personnel;
- vii. death or personal injury to any person;
- viii. destruction or damage to any property by acts or omissions of either Party, its representatives or personnel;
- ix. any violation/non-compliance by the Party with any applicable laws governmental regulations or orders;
- x. any third party liability;
- xi. improper handling or misuse of the Confidential Information of the Party(ies) by the Party

8.2 XXXX shall be liable to all risks and consequences (including the risk of payments) suffered in the performance of services under the Project and undertakes to indemnify RailTel from and against any non payments (of RailTel's share payable to RailTel), recoveries and claim from End Customer or any other cost or losses incurred due to default/non performance on part of XXXX.

## **9. COMPLIANCES TO STATUTORY OBLIGATIONS**

- 9.1. Parties shall also obtain and keep in place necessary insurance policies, mediclaim policies, group insurance schemes of adequate value to cover their workmen, supervisors, etc. with regard to any accidents, injury or the liability under the Employee Compensation Act.
- 9.2. Parties shall observe and be responsible for the compliance of all labour laws (including labour cess) as per government notifications and shall maintain necessary records for the same and shall submit the same to RailTel when so required.
- 9.3. Parties shall duly maintain all records / registers required to be maintained by them under various labour laws mentioned above and shall produce the same before the concerned Statutory Authorities whenever required and called upon to do so.

## **10. LEGAL STATUS**

This Agreement constitutes a contractual relationship and shall relate solely to the Project and shall not extend to other activities or be construed to create a corporation, body corporate, partnership or any other form of legal entity.

## **11. REPRESENTATIONS AND COVENANTS**

11.1. Each Party represents and warrants to the other Party as follows:

- 11.1.1. That it has full capacity, power and authority and has obtained all requisite consents and approvals to, enter into and to observe and perform this Agreement and to consummate the transactions contemplated hereunder. Each of the Persons / personnel executing this Agreement on behalf of the each of the Parties have full capacity and authority to sign and execute this Agreement on behalf of the respective Parties;
- 11.1.2. The execution, delivery and consummation of, and the performance by it, of this Agreement shall not conflict with, violate, result in or constitute a breach of or a default under, (a) any contract by which it or any of its assets or properties, are bound or affected, and/or (b) its constitutional documents;
- 11.1.3. This Agreement constitutes its legal, valid and binding obligations, enforceable against it, in accordance with their terms under Applicable Statutory Law(s);
- 11.1.4. It has the right, authority and title to execute this Agreement;

**12. SUBCONTRACTING BETWEEN PARTIES**

If a Party subcontracts certain supplies or services pertaining to its scope of work to the other party, then the resulting relationship between such parties shall be governed by a separate subcontract. This Agreement shall not in any way be affected thereby except as stated otherwise in this Agreement

**13. GOVERNING LAW AND JURISDICTION**

The construction, validity and performance of this Agreement shall be governed in all respects by the Laws of India. The Parties hereby submit to the exclusive jurisdiction of the Indian courts at Delhi only.

**14. GOOD FAITH NEGOTIATION AND DISPUTE RESOLUTION**

The parties shall, at the first instance, attempt to resolve through good faith negotiation and consultation, any difference, conflict or question arising between the parties hereto relating to or concerning or arising out of or in connection with this agreement, and such negotiation or consultation shall begin promptly after a Party has delivered to another Party a written request for such consultation.

In the event of any dispute, difference, conflict or question arising between the parties hereto, relating to or concerning or arising out of or in connection with this agreement, is not settled through good faith negotiation or consultation, the same shall be referred to arbitration by a sole arbitrator.

The sole arbitrator shall be appointed by CMD/RailTel out of the panel of independent arbitrators maintained by RailTel, having expertise in their respective domains. The seat and the venue of arbitration shall be New Delhi. The arbitration proceedings shall be in accordance with the provision of the Arbitration and Conciliation Act 1996 and any other statutory amendments or modifications thereof. The decision of arbitrator shall be final and binding on both parties. The arbitration proceedings shall be conducted in English Language. The fees and cost of arbitration shall be borne equally between the parties.

**15. FORCE MAJEURE**

“Force Majeure Event” shall mean any event beyond the reasonable control of the affected Party including acts of God, fires, earthquakes, strikes, pandemic, epidemics, lock down, and labor disputes, acts of war or terrorism, civil unrest, economic and financial sanctions, or acts or omissions of any Governmental Authority occurring on or after the Signature Date.

No Party shall be liable to the other if, and to the extent, that the performance or delay in performance of any of its obligations under this Agreement is prevented, restricted, delayed or interfered with, due to a Force Majeure Event.



The Party affected by Force Majeure Event shall promptly inform the other Party in writing and shall furnish within 30 (thirty) days thereafter, sufficient proof of the occurrence and expected duration of such Force Majeure Event. The Party affected by Force Majeure Event shall also use all reasonable endeavours to mitigate the negative effects of such Force Majeure Event on such Party's ability to perform its contractual obligations. In the event of a Force Majeure Event, the Parties shall immediately consult with each other in order to find an equitable solution and shall use all reasonable endeavours to minimise the consequences of such Force Majeure Event.

The occurrence of a Force Majeure Event shall however, not relieve a Party of any obligation to pay any sum due under this Agreement prior to the occurrence of the Force Majeure Event.

If the Force Majeure lasts for more than 6 (six) months, the Parties may mutually decide in writing on the future course of action with respect to this Agreement.

## **16. INTELLECTUAL PROPERTY RIGHTS**

16.1. Each Party shall remain the sole owner of all industrial or intellectual property rights, Technical Data, Know-How, designs, specifications and the like, generated or acquired before the signature, or beyond the scope of this agreement.

16.2. Each Party shall remain the sole owner of all industrial or intellectual property rights, technical data, know-how, design specifications and the like generated solely by that Party during the course of the performance of this agreement and shall not be free to use it by the other party and if the other party uses that intellectual property rights prior permission shall be taken with paying necessary fees for such rights.

16.3. In case of joint development, the work-share and associated ownership of intellectual property of each Party shall be mutually agreed upon and defined in advance in the definitive agreement for the specific program. However, should any invention be jointly made by the Parties in the performance of this agreement, without neither Party being in a position to reasonably claim the ownership of said intellectual property right, the said right shall be jointly owned by the Parties and the corresponding measures of protection for both Parties of the said right as may be practicable shall be mutually agreed by both Parties and cost for such registration of such right shall be borne by the parties proportionately as per the ownership of the rights.

16.4 As on date, Parties confirm that there are no infringements of any Intellectual Property Rights of the products contemplated under this agreement, in accordance with the laws prevailing in the country.

16.5. The Parties undertake and confirm that the Technology / Knowhow / Design owned by each of them and intended to be put into use for execution of various Projects pursuant to this agreement has been originally developed by each of such Parties. The Parties are entitled to all the Intellectual Property Rights in Technology / Knowhow / Design intended to be put into use for execution of various Projects and no third-party Intellectual Property Rights have been put into use either in their original or modified form without proper authorisation of such third party. The Parties further vouchsafes that the foregoing undertaking is actuated by truth and accuracy and no misrepresentation is being put into use for inducing each other to enter into this agreement.

## **17. CONFIDENTIALITY**

17.1. During the term of this agreement, either party may receive or have access to technical information, as well as information about product plans and strategies, promotions, customers and related non-technical business information which the disclosing party considers to be confidential ("Confidential

Information as per RFP tender document"). In the event Confidential Information is to be disclosed, the Confidential Information must be marked as confidential at the time of disclosure, or if disclosed orally but stated to be confidential, and be designated as confidential in writing by the disclosing party summarizing the Confidential Information disclosed and sent to the receiving party within thirty (30) days after such oral disclosure.

17.2. Confidential Information may be used by the receiving party only with respect to the performance of its obligations under this Agreement, and only by those employees of the receiving party and its subcontractors who have a need to know such information for purposes related to this Agreement, provided that such subcontractors have signed separate agreements containing substantially similar confidentiality provisions. The receiving party must protect the Confidential Information of the disclosing party by using the same degree of care to prevent the unauthorized use, dissemination or publication of such Confidential Information, as the receiving party uses to protect its own confidential information of like nature.

17.3. The obligations is not applicable to any information which is:

17.3.1. Already known by the receiving party prior to disclosure;

17.3.2. Publicly available through no fault of the receiving party;

17.3.3. Rightfully received from a third party without being responsible for its confidentiality;

17.3.4. Disclosed by the disclosing party to a third party without being responsible for its Confidentiality on such third party;

17.3.5. Independently developed by the receiving party prior to or independent of the disclosure;

17.3.6. Disclosed under operation of law;

17.3.7. Disclosed by the receiving party with the disclosing party's prior written approval.

17.4 XXXX agrees and acknowledges that XXXX, its Partners, employees, representatives etc., by virtue of being associated with RailTel and being in frequent communication with RailTel and its employees, shall be deemed to be "Connected Persons" within the meaning of SEBI (Prohibition of Insider Trading) Regulations, 2015 and shall be bound by the said regulations while dealing with any confidential and/ or price sensitive information of RailTel. XXXX shall always and at all times comply with the obligations and restrictions contained in the said regulations. In terms of the said regulations, XXXX shall abide by the restriction on communication, providing or allowing access to any Unpublished Price Sensitive Information (UPSI) relating to RailTel as well as restriction on trading of its stock while holding such Unpublished Price Sensitive Information relating to RailTel

17.5 Notwithstanding anything contained in this agreement, XXXX undertakes, agrees and acknowledges that being RailTel's Business Associate, XXXX shall maintain utmost confidentiality in relation to said Project. XXXX further, undertakes that any information relating to said Project which is or will be disclosed/ divulged by RailTel on need to know basis, will be received and treated by XXXX as strictly confidential and XXXX shall not, without the prior written consent of the RailTel or as expressly permitted herein, disclose or make available to any other person such information.

## **18. NOTICES**

Notices, writings and other communications under this Agreement may be delivered by hand, by registered mail, by courier services or facsimile to the addresses as set out below:

To: RailTel Corporation of India Ltd

Kind Attn: Executive Director / Northern Region

Address: 6th Floor, 3rd Block, Delhi IT Park, New Delhi - 110053  
Tel No.: +91-11-22185933/22185934  
Email: ednr@railtelindia.com

To XXXX

To: XXXX

Kind Attn: \_\_\_\_\_ Address: \_\_\_\_\_

Mob. No.: \_\_\_\_\_ Email: \_\_\_\_\_

## **19. AMENDMENT**

No amendment or modification or waiver of any provision of these presents, nor consent to any departure from the performance of any obligations contained herein, by any of the Parties hereto, shall in any event be valid and effective unless the same is in writing and signed by the Parties or their duly authorized representative especially empowered in this behalf and the same shall be effective only in respect of the specific instance and for the specific purpose for which it is given.

## **20. PRIOR UNDERSTANDING**

This Agreement contains the entire Agreement between the Parties to this Agreement with respect to the subject matter of the Agreement, is intended as a final expression of such Parties' agreement with respect to such terms as are included in this Agreement is intended as a complete and exclusive statement of the terms of such agreement, and supersedes all negotiations, stipulations, understanding, Agreements, representations and warranties if any, with respect to such subject matter, which precede or accompany the execution of this Agreement.

## **21. GENERAL**

### **21.1. Binding Effect:**

This Agreement shall be binding upon and inure to the benefit of the Parties here to and their respective legal successors.

### **21.2. Counterparts:**

This Agreement may be executed simultaneously in 2 (two) counterparts, each of which shall be deemed to be original and all of which together shall constitute the same Agreement.

### **21.3. Non-Partnership:**

21.3.1. This Agreement shall be on a principal-to-principal basis and shall not create any principal-agent relationship between the Parties.

21.3.2. Nothing in this Agreement shall be deemed to constitute a partnership or joint venture between the Parties or otherwise entitle either Party to have an authority to bind the other Party for any purpose.

### **21.4. Severability:**

In the event any provision of this agreement is held invalid or un-enforceable by a court of competent jurisdiction, such provision shall be considered separately and such determination shall not invalidate the other provisions of this agreement and annexure/s which will be in full force and effect.

### **21.5. Waiver:**

A failure by any Party to exercise or enforce any rights conferred upon it by this Agreement shall not be deemed to be a waiver of any such rights or operate so as to bar the exercise or enforcement thereof at any subsequent time.

**21.6. Time is of essence:**

Time is the essence of this agreement and the Parties herein agree and acknowledge to abide by the same.

**22. Miscellaneous**

22.1. No Party to this agreement will have any rights or obligations arising from or in relation to this agreement in excess of those rights and obligations expressly declared herein.

22.2. No Party to this agreement is entitled to sell, assign or otherwise transfer any of its rights and/or obligations arising from or in relation to this agreement to any third party, without the prior written consent of the other Party of this agreement.

22.3. Each Party shall be solely responsible for its own actions or failures to act and for its own commitments and undertakings. Neither Party shall present itself as the representative or agent of the other Party, nor shall it have the power or the authority to commit the other Party, unless it receives the other Party's prior written consent.

22.4. No release shall be made by any Party to the news media or the general public relating to this agreement and/or the subject matter thereof without prior written approval of the other Party..

22.5. During the term of this agreement, each party shall refrain from taking any action or attempt to take any action with the intent of impairing or causing prejudice to the business relationship, whether existing or prospective that subsists between the other party and its customers and business partners. Each party shall also desist from inducing or influencing or attempting to induce or influence any customer or business partner, whether existing or prospective of the other party, resulting into prejudice or detriment to business prospects of the other party.

Furthermore, Parties shall not compete with or cause detriment to the business prospects of each other by making use of confidential information, whether in its embodied or disembodied form, shared pursuant to this agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

For RailTel Corporation of India Limited  
Authorised Signatory

Name:

Designation:

In Presence of witness:

Signature:

Name:

Address:

For XXXX

Authorized Signatory

Name:

Designation:

Signature:

Name:

Address

### **Integrity Pact Program**

Bringing the practices in RailTel Corporation of India Limited up to the internationally acclaimed best practices for raising integrity levels in procurement of works and services, RailTel is implementing the Integrity Pact Program in line with the recommendation of Central Vigilance Commission (CVC).

The Integrity Pact Program envisages an 'Integrity Pact', an agreement between the prospective Bidders & Contractors and RailTel, committing the persons/officials of both parties, not to exercise any influence on any aspect of the contract.

#### **Coverage:**

The Integrity Pact Program will cover the following tenders/procurements:

All tenders relating to procurement of OFC, quad cable, pre-fab shelters, electronic equipments and its installations and/or commissioning etc and other item(s) or activity/activities proposed to be carried out or required by the Company for the value exceeding Rs. 15 crores at a time including for repair and maintenance of cable /network and any other items required for special works assigned to RailTel

#### **Implementation:**

The accompanying 'Integrity Pact' will be issued along with the bidding documents and will also be uploaded on the website.

Bidder of Indian origin shall submit the Integrity Pact (in 2 copies) on a non judicial stamp paper of Rs. 100/- duly signed by the person signing the bid. Bidder of foreign origin may submit the Integrity Pact on its company's letterhead, duly signed by the person signing the bid.

If the bidder is a partnership or a consortium, the Integrity Pact shall be signed by all the partners or consortium members.

The 'Integrity Pact' shall be returned by the Bidder duly signed along with the Bid in a separate envelope, duly superscripted with 'Integrity Pact'.

On behalf of RailTel, the Integrity pact will be signed by the concerned representative of the Projects department in the Bid Opening Committee immediately on receipt of Integrity Pact signed by the Bidder at the time of Bid opening. One copy of the Integrity Pact shall be retained by RailTel and the 2nd copy will be issued to the representative of the bidders during bid opening. If the Bidders representative is not present during the Bid opening, the 2nd copy shall be sent to the bidder by post/courier.

Bidder's failure to submit the Integrity Pact duly signed along with the Bid shall lead to outright rejection of the Bid.

The bidder shall not change the contents of the Integrity pact.

All the pages of the Integrity Pact are to be signed by both RailTel and the Bidder.

### **Independent External Monitors (IEMs):**

1. CMD of RailTel is the authority to appoint Independent External Monitor(s) to oversee Integrity Pact Program's implementation and effectiveness with respect to the tenders/procurements to which Integrity Pact Program applies. For this purpose, CVC would nominate IEMs for RailTel from the panel of IEMs maintained by it. The Terms and Conditions of their appointment would be decided by CMD, RailTel in line with CVC guidelines in the matter.
2. In all tenders covered under the Integrity Pact, particulars of all IEMs, including their email IDs should be mentioned.
3. A copy of such Tender Document shall be forwarded to both IEM's promptly after publishing of the same, Information regarding the contracts awarded against the said Tender shall be provided to the concerned IEM at regular intervals as decided in consultation with CVO. Additional details/documents, if any, shall be furnished to the concerned IEM/IEMs, as and when sought by them.
4. IEM/IEMs shall provide their opinion on the complaints received by them to CMD RailTel at the earliest. They may however send their report directly to the CVO in case of suspicion of serious irregularities requiring legal/administrative action.

| NAME                       | CONTACT  |
|----------------------------|--|
| Shri. Vinit Kumar Jayaswal | <b>Address:</b> E-34, Brahma Apartments, Plot-7, Sector-7, Dwarka, New Delhi-110075<br><b>E-Mail ID:</b> gkvinit@gmail.com<br><b>Mobile Number:</b> (+91)-9871893484     |
| Shri. Punati Sridhar       | <b>Address:</b> 8C, Block 4, 14-C Cross, MCHS Colony, HSR 6th Sector, Bangaluru-560102<br><b>E-Mail ID:</b> poonatis@gmail.com<br><b>Mobile Number:</b> (+91)-9448105097 |

### **GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS**

- 1.0 There shall be compulsory registration of agents for all global (Open) Tender and Limited Tender. An agent who is not registered with RailTel Units shall apply for registration in the prescribed Application -Form.
- 1.1 Registered agents will file an authenticated Photostat copy duly attested by a Notary Public/ Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/ remuneration/ retainer-ship being paid by the principal to the agent before the placement of order by RailTel.
- 1.2 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

#### **2.0 DISCLOSURE OF PARTICULARS OF AGENTS/ REPRESENTATIVES IN INDIA, IF ANY.**

##### **2.1** Tenderers of Foreign nationality shall furnish the following details in their offer:

- 2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial Company and details of the same shall be furnished.
- 2.1.2 The amount of commission/ remuneration included in the quoted price(s) for such agents/representatives in India.
- 2.1.3 Confirmation of the Tenderer that the commission/ remuneration if any, payable to his agents/ representatives in India, may be paid by RAILTEL in Indian Rupees only.

##### **2.2** Tenderers of Indian Nationality shall furnish the following details in their offers:

- 2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e, whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/representatives.

2.2.2 The amount of commission /remuneration included in the price(s) quoted by the tenderer for himself.

2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/ remuneration, if any, reserved for the Tenderer in the quoted price(s), may be paid by RAILTEL in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.

**2.3** In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission/ remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.

**2.4** Failure to furnish correct and detailed information as called for in paragraph 2.0 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by RAILTEL. Besides this there would be a penalty of banning business dealings with RAILTEL or damage or payment of a named sum.

\* \* \* \* \*



**GUIDELINES ON BANNING OF BUSINESS DEALINGS CONTENTS**

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## 1. Introduction

- 1.1 RailTel Corporation of India Ltd (RAILTEL), being a Public Sector Enterprise, under the administrative control of the Ministry of Railways and therefore being an authority deemed to be 'the state' within the meaning of Article 12 of Constitution of India, has to ensure preservation of rights enshrined in Chapter III of the Constitution. RAILTEL has also to safeguard its commercial interests. RAILTEL deals with Agencies, who have a very high degree of integrity, commitments and sincerity towards the work undertaken. It is not in the interest of RAILTEL to deal with Agencies who commit deception, fraud or other misconduct in the execution of contracts awarded / orders issued to them. In order to ensure compliance with the constitutional mandate, it is incumbent on RAILTEL to observe principles of natural justice before banning the business dealings with any Agency.
- 1.2 Since banning of business dealings involves civil consequences for an Agency concerned, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case.

## 2. Scope

- 2.1 The General Conditions of Contract (GCC) of RAILTEL generally provide that RAILTEL reserves its rights to remove from list of approved suppliers/ contractors or to ban business dealings if any Agency has been found to have committed misconduct and also to suspend business dealings pending investigation. If such provision does not exist in any GCC, the same may be incorporated.
- 2.2 Similarly, in case of sale of material there is a clause to deal with the Agencies/ customers/ buyers, who indulge in lifting of material in unauthorized manner. If such a stipulation does not exist in any Sale Order, the same may be incorporated.
- 2.3 However, absence of such a clause does not in any way restrict the right of Company (RAILTEL) to take action / decision under these guidelines in appropriate cases.
- 2.4 The procedure of (i) Removal of Agency from the List of approved suppliers/ contractors;  
(ii) Suspension and (iii) Banning of Business Dealing with Agencies, has been laid down in these guidelines.
- 2.5 These guidelines apply to Corporate Office, all Regions and Subsidiaries of RAILTEL.

2.6 It is clarified that these guidelines do not deal with the decision of the Management to avoid entertaining any particular Agency due to its poor / inadequate performance or for any other reason.

2.7 The banning shall be with prospective effect, i.e., future business dealings.

### 3. Definitions

In these Guidelines, unless the context otherwise requires:

- i) 'Party / Contractor / Supplier / Purchaser / Customer' shall mean and include a public limited company or a private limited company, a firm whether registered or not, an individual, a cooperative society or an association or a group of persons engaged in any commerce, trade, industry, etc. 'Party / Contractor / Supplier / Purchaser / Customer' in the context of these guidelines is indicated as 'Agency'.
- ii) 'Inter-connected Agency' shall mean two or more companies having any of the following features:
  - a) If one is a subsidiary of the other;
  - b) If the Director(s), Partner(s), Manager(s) or Representative(s) are common;
  - c) If management is common;
  - d) If one owns or controls the other in any manner;
- iii) 'Competent Authority' and 'Appellate Authority' shall mean the following:
  - a) For Company (entire RAILTEL) wide Banning: The Director shall be the 'Competent Authority' for the purpose of these guidelines. CMD, RAILTEL shall be the 'Appellate Authority' in respect of such cases except banning of business dealings with Foreign Suppliers of imported items.
  - b) For banning of business dealings with Foreign Suppliers of imported items, RAILTEL Directors Committee (RDC) shall be the 'Competent Authority'. The Appeal against the Order passed by RDC, shall lie with CMD, as First Appellate Authority.
  - c) In case the foreign supplier is not satisfied by the decision of the First Appellate Authority, it may approach Railway Board as Second Appellate Authority.
  - d) For RailTel Regions only: Any officer not below the rank of General Manager appointed or nominated by the Executive Director of concerned Region shall be the 'Competent Authority' for the purpose of these guidelines. The Executive Director of the concerned Region shall be the 'Appellate Authority' in all such cases.
  - e) For Corporate Office only: For procurement of items / award of contracts, to meet the requirement of Corporate Office only, Concerned Group General Manager / General Manager shall be the 'Competent Authority' and concerned Director shall be the 'Appellate Authority'.
  - f) CMD, RAILTEL shall have overall power to take suo-moto action on any information available or received by him and pass such order(s) as he may think appropriate, including modifying the order(s) passed by any authority under these guidelines.
- iv) 'Investigating Department' shall mean any Department or Unit investigating into the conduct of the Agency and shall include the Vigilance Department, Central Bureau of Investigation, the State Police or any other department set up by the Central or State Government having powers to investigate.

- v) 'List of approved Agencies - Parties / Contractors / Suppliers/ Purchaser/ Customers' shall mean and include list of approved /registered Agencies - Parties/ Contractors / Suppliers / Purchasers / Customers, etc.

#### 4. Initiation of Banning / Suspension

Action for banning / suspension of business dealings with any Agency should be initiated by the department having business dealings with them after noticing the irregularities or misconduct on their part. Besides the concerned department, Vigilance Department of each Region / Unit/ Corporate Office may also be competent to initiate such action.

#### 5. Suspension of Business Dealings

- 5.1 If the conduct of any Agency dealing with RAILTEL is under investigation by any department (except Foreign Suppliers of imported items), the Competent Authority may consider whether the allegations under investigation are of a serious nature and whether pending investigation, it would be advisable to continue business dealing with the Agency. If the Competent Authority, after consideration of the matter including the recommendation of the Investigating Department, if any, decides that it would not be in the interest to continue business dealings pending investigation, it may suspend business dealings with the Agency. The order to this effect may indicate a brief of the charges under investigation. If it is decided that inter-connected Agencies would also come within the ambit of the order of suspension, the same should be specifically stated in the order. The order of suspension would operate for a period not more than six months and may be communicated to the Agency as also to Investigating Department. The Investigating Department may ensure that their investigation is completed and whole process of final order is over within such period.
- 5.2 The order of suspension shall be communicated to all the departmental heads within the unit/ region/ Corporate Office as the case may be. During the period of suspension, no business dealing may be held with the agency.
- 5.3 As far as possible, the existing contract(s) with the Agency may continue unless the Competent Authority, having regard to the circumstances of the case, decides otherwise.
- 5.4 If the gravity of the misconduct under investigation is very serious and it would not be in the interest of RAILTEL, as a whole, to deal with such an Agency pending investigation, the Competent Authority may send his recommendation to Chief Vigilance Officer (CVO), RAILTEL Corporate Office alongwith the material available. If Corporate Office considers that depending upon the gravity of the misconduct, it would not be desirable for all the units/ regions of RAILTEL to have any dealings with the Agency concerned, an order suspending business dealings may be issued to all the units/ Regions / Corporate Office by the Competent Authority of the Corporate Office, copy of which may be endorsed to the Agency and all concerned. Such an order would operate for a period of six months from the date of issue.
- 5.5 for suspension of business dealings with Foreign Suppliers of imported items, following shall be the procedure:

- i) Suspension of the foreign suppliers shall apply throughout the Company/ Regions including Subsidiaries.
- ii) Based on the complaint forwarded by ED / GGM / GM or received directly by Corporate Vigilance, if gravity of the misconduct under investigation is found serious and it is felt that it would not be in the interest of RAILTEL to continue to deal with such agency, pending investigation, Corporate Vigilance may send such recommendation on the matter to Executive Director / GGM / GM, to place it before a Committee consisting of the following:
  - 1. ED / GGM/ GM (viz. Representative of Corporate Finance).
  - 2. ED / GGM/ GM (viz. Representative of Department concerned with procurement of imported items)- Convener of the Committee.
  - 3. ED / GGM/ GM (to be nominated on case to case basis).
  - 4. ED / GGM/ GM ((viz. Representative of Corporate Law).

The committee shall expeditiously examine the report and give its comments / recommendations within twenty-one days of receipt of the reference by ED/ GGM/ GM.

- iii) The comments / recommendations of the Committee shall then be placed by ED/GGM/GM, before RAILTEL Directors' Committee (RDC) constituted for import of items. If RDC opines that it is a fit case for suspension, RDC may pass necessary orders which shall be communicated to the foreign supplier by the ED/GGM/GM.

5.6 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence or argument with the Agency at this stage.

5.7 It is not necessary to give any show-cause notice or personal hearing to the Agency before issuing the order of suspension. However, if investigations are not complete in six months time, the Competent Authority may extend the period of suspension by another three months, during which period the investigations must be completed.

#### 6. Ground on which Banning of Business Dealings can be initiated

- 6.1 If the security consideration, including questions of loyalty of the Agency to the State, so warrants;
- 6.2 If the Director / Owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or RAILTEL, during the last five years;
- 6.3 If there is strong justification for believing that the Directors, Proprietors, Partners, owner of the Agency have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolations, etc;
- 6.4 If the Agency continuously refuses to return / refund the dues of RAILTEL without showing adequate reason and this is not due to any reasonable dispute which

would attract proceedings in arbitration or Court of Law;

- 6.5 If the Agency employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offence;
- 6.6 If business dealings with the Agency have been banned by the Govt. or any other public sector enterprise;
- 6.7 If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts;
- 6.8 If the Agency uses intimidation/ threatening or brings undue outside pressure on the Company (RAILTEL) or its official in acceptance/ performances of the job under the contract;
- 6.9 If the Agency indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;
- 6.10 Willful indulgence by the Agency in supplying sub-standard material irrespective of whether pre-dispatch inspection was carried out by Company (RAILTEL) or not;
- 6.11 Based on the findings of title investigation report of CBI / Police against the Agency for malafide/ unlawful acts or improper conduct on his part in matters relating to the Company (RAILTEL) or even otherwise;
- 6.12 Established litigant nature of the Agency to derive undue benefit;
- 6.13 Continued poor performance of the Agency in several contracts;
- 6.14 If the Agency misuses the premises or facilities of the Company (RAILTEL), forcefully occupies tampers or damages the Company's properties including land, water resources, etc.

*(Note: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealing for any good and sufficient reason).*

## **7. Banning of Business Dealings**

- 7.1 Normally, a decision to ban business dealings with any Agency should apply throughout the Company including subsidiaries. However, the Competent Authority of the Region/ Unit except Corporate Office can impose such ban Region-wise only if in the particular case banning of business dealings by respective Region/ Unit will serve the purpose and achieve its objective and banning throughout the Company is not required in view of the local conditions and impact of the misconduct/ default to beyond the Region/ Unit. Any ban imposed by Corporate Office shall be applicable across all Regions/ Units of the Company including Subsidiaries.
- 7.2 For Company-wide banning, the proposal should be sent by ED of the Region/ Unit to the CVO/RailTel setting out the facts of the case and the justification of the action  
proposed

Along with all the relevant papers and documents except for banning of business dealings with Foreign Suppliers of imported items.

The Corporate Vigilance shall process the proposal of the concerned Region/ Unit for a prima-facie view in the matter by the Competent Authority nominated for Company-wide banning.

The CVO shall get feedback about that agency from all other Regions/ Units. Based on this feedback, a prima-facie decision for banning / or otherwise shall be taken by the Competent Authority.

If the prima-facie decision for Company-wide banning has been taken, the Corporate Vigilance shall issue a show-cause notice to the agency conveying why it should not be banned throughout RAILTEL.

After considering the reply of the Agency and other circumstances and facts of the case, a final decision for Company-wide banning shall be taken by the competent Authority.

- 7.3 There will be a Standing Committee in each Region/ Unit to be appointed by Chief Executive Officer for processing the cases of "Banning of Business Dealings" except for banning of business dealings with foreign suppliers. However, for procurement of items/ award of contracts, to meet the requirement of Corporate Office only, the committee shall be consisting of General Manager/ Dy. General Manager each from Operations, Finance, Law & Project. Member from Project shall be the convener of the committee. The functions of the committee shall, inter-alia include:
- i) To study the report of the investigating Agency and decide if a prima-facie case for Company-wide / Region wise banning exists, if not, send back the case to the Competent Authority.
  - ii) To recommend for issue of show-cause notice to the Agency by the concerned department.
  - iii) To examine the reply to show-cause notice and call the Agency for personal hearing, if required.
  - iv) To submit final recommendation to the Competent Authority for banning or otherwise.
- 7.4 If the Competent Authority is prima-facie of view that action for banning business dealings with the Agency is called for, a show- cause notice may be issued to the Agency and an enquiry held accordingly.
- 7.5 Procedure for Banning of Business Dealings with Foreign Suppliers of imported items.
- i) Banning of the agencies, shall apply throughout the Company including subsidiaries.
  - ii) Based on the complaint forwarded by Executive Director or received directly by Corporate Vigilance, an investigation shall be carried out by Corporate Vigilance. After investigation, depending upon the gravity of the misconduct, Corporate Vigilance may send their report to Executive Director/ GGM/ GM, to be placed before a Committee consisting of the following:

1. ED / GGM/ GM (viz. Representative of Corporate Finance).
2. ED / GGM/ GM (viz. Representative of Department concerned with procurement of imported items)- Convener of the Committee.
3. ED / GGM/ GM (to be nominated on case to case basis).
4. ED / GGM/ GM ((viz. Representative of Corporate Law).

The Committee shall examine the report and give its comments/ recommendations within 21 days of receipt of the reference by ED.

- iii) The comments/recommendations of the Committee shall be placed by ED/ GGM/ GM before RAILTEL Directors' Committee (RDC) constituted for import of foreign items. If RDC opines that it is a fit case for initiating banning action, it will direct

ED/ GGM/ GM to issue show-cause notice to the agency for replying within a reasonable period.

- iv) On receipt of the reply or on expiry of the stipulated period, the case shall be submitted by ED to RDC for consideration & decision.
- v) The decision of the RDC shall be communicated to the agency by ED/GGM/GM concerned.

#### 8. Removal from List of Approved Agencies – Suppliers / Contractors, etc.

- 8.1 If the Competent Authority decides that the charge against the Agency is of a minor nature, it may issue a show-cause notice as to why the name of the Agency should not be removed from the list of approved Agencies - Suppliers / Contractors, etc.
- 8.2 The effect of such an order would be that the Agency would not be disqualified from competing in Open Tender Enquiries but LTE (Limited Tender Enquiry) may not be given to the Agency concerned.
- 8.3 Past performance of the Agency may be taken into account while processing for approval of the Competent Authority for awarding the contract.

#### 9. Show-cause Notice

- 9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause notice has to be issued to the Agency. Statement containing the imputation of misconduct or misbehavior may be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defence.
- 9.2 If the Agency requests for inspection of any relevant document in possession of RAILTEL, necessary facility for inspection of documents may be provided.
- 9.3 The Competent Authority may consider and pass all appropriate speaking order:
  - a) For exonerating the Agency if the charges are not established.



- b) For removing the Agency from the list of approved Suppliers/ Contactors, etc.
- c) For banning the business dealing with the Agency.

94 If it decides to ban business dealings, the period for which the ban would be operative may be mentioned. The order may also mention that the ban would extend to the interconnected Agencies of the Agency.

#### **10. Appeal against the Decision of the Competent Authority**

10.1 The agency may file an appeal against the order of the Competent Authority banning business dealing, etc. The appeal shall lie to Appellate Authority. Such an appeal shall be preferred within one month from the date of receipt of the order banning business dealing, etc.

10.2 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the Agency as well as the Competent Authority.

#### **11. Review of the Decision by the Competent Authority**

Any petition / application filed by the Agency concerning the review of the banning order passed originally by Chief Executive / Competent Authority under the existing guidelines either before or after filing of appeal before the Appellate Authority or after disposal of appeal by the Appellate Authority, the review petition can be decided by the Chief Executive / Competent Authority upon disclosure of new facts / circumstances or subsequent development necessitating such review. The Competent Authority may refer the same petition to the Standing Committee for examination and recommendation.

#### **12. Circulation of the names of Agencies with whom Business Dealings have been banned**

12.1 Depending upon the gravity of misconduct established, the Competent Authority of the Corporate Office may circulate the names of Agency with whom business dealings have been banned, to the Government Departments, other Public Sector Enterprises, etc. for such action as they deem appropriate.

12.2 If Government Departments or a Public Sector Enterprise requests for more information about the Agency with whom business dealings have been banned, a copy of the report of the Inquiring authority together with a copy of the order of the Competent Authority / Appellate Authority may be supplied.

12.3 If business dealings with any Agency have been banned by the Central or State Government or any other Public Sector Enterprise, RAILTEL may, without any further enquiry or investigation, issue an order banning business dealing with the Agency and its interconnected Agencies.

12.4 Based on the above, Regions / Units may formulate their own procedure for implementation of the guidelines.

\* \* \* \* \*

*(To be executed in presence of Public Notary on non-judicial stamp paper of the value of Rs. 100/-. The paper has to be in the name of the BA)*

RailTel Corporation of India Limited, hereinafter referred to as "The Principal".

And

....., hereinafter referred to as "The Bidder/ Contractor"

#### Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for.....  
.....The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relations with its Bidder(s) and /or Contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

#### Section 1- Commitments of the Principal

1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
  - a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - b. The Principal will during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the process or the contract execution.
  - c. The Principal will exclude from the process all known prejudiced persons.
2. If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

#### Section 2- Commitments of the Bidder(s) / Contractor(s)

1. The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
  - a. The Bidder(s)/contractor(s) will not, directly or through any other persons or firm, offer promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage during tender process or during the

- execution of the contract.
- b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
  - c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s) /Contractors will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the bidder(s)/contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" as annexed and marked as Annexure A.
  - e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
2. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

### Section 3: Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process & exclude him from future business dealings as per the existing provisions of GFR,2017,PC ACT 1988) or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings" and any other Financial Rules/Guidelines applicable to the Principal. Copy of the "Guidelines on Banning of business dealings" is annexed and marked as Annex-"B".

### Section 4: Compensation for Damages

1. If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to be terminated the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

## Section 5: Previous Transgression

1. The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anti corruption approach or with any other public sector enterprise in India that could justify his exclusion from the tender process.
2. If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process for action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

## Section 6: Equal treatment of all Bidders / Contractors/Subcontractors.

1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a signed commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
2. The Principal Contractor shall take the responsibility of the adoption of IP by the sub- contractors. It is to be ensured that all sub-contractors also sign the IP.
3. In case of a Joint Venture, all the partners of the Joint Venture should sign the Integrity pact.
4. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions

## Section 7: Criminal charges against violation by Bidder(s) / Contractor(s) / Sub contractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

## Section 8: Independent External Monitor / Monitors

1. The Principal appoints competent & credible Independent External Monitors for this pact as nominated by the Central Vigilance Commission(CVC) Government of India, from the panel of IEMs maintained by it. The task of the Monitors is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, RailTel.
3. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Contractor.
4. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with

confidentiality.

5. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

*Note : However, the documents /records/information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.*

6. For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process or during execution of contract, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. The advice of the IEM panel is restricted to resolving issues raised by a bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders.
7. The panel of IEMs are expected to submit a joint written report to the CMD, RailTel within 30 days from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
8. Monitor shall be entitled to compensation on the same terms as being extended to / provided to Independent Directors on the RailTel Board.
9. The IEMs would examine all complaints received by them and give their recommendations/views to the CMD, RailTel at the earliest. They may also send their report directly to the CVO in case of suspicion of serious irregularities requiring legal/administrative action. Only in case of very serious issue having a specific, verifiable vigilance angle, the matter should be reported directly to the Chief Vigilance Commission.
10. The word 'Monitor' would include both singular and plural.
11. In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required, the organizations may adopt any mediation rules for this purpose. In case, the dispute remains unresolved even after mediation by the panel of IEMs, the organization may take further action as per the terms & conditions of the contract. However, not more than five meetings shall be held for a particular dispute resolution. The fees/expenses on dispute resolution shall be equally shared by both the parties.

## Section 9: Pact Duration

Integrity Pact, in respect of a particular contract, shall be operative from the date IP is signed by both the parties till the completion of contract. After award of work, the IEMs shall look into any issue relating to execution of contract, if specifically raised before them. However, the IEMs may suggest systemic improvements to the management of the organization concerned, if considered necessary, to bring about transparency, equity and fairness in the system of procurement.

In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the contract has been awarded.

If any claim is made / lodged by either party during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by CMD of RailTel.

## Section 10: Other Provisions

1. This agreement is subject to Indian Law, Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
2. Changes and supplements as well as termination notices need to be made in writing.
3. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
5. The parties signing the IP shall not approach the Courts while representing the matters to the IEMs and he/she will await the decision in the matter.
6. Principal contractor shall take the responsibility of the adoption of IP by the sub-contractor
7. The Integrity pact shall be deemed to form a part of contract and parties shall be bound by it's provision.
8. Issues like warranty/guarantee etc. should be outside the purview of IEMs.

(For & on behalf of the principal)

Name: \_\_\_\_\_  
Designation: \_\_\_\_\_

(For & on behalf of bidder/contractor)

Name: \_\_\_\_\_  
Designation: \_\_\_\_\_

Signature:

Signature:

(Office Seal)

(Office Seal)

Place: \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Witness 1:  
(Name & Address)

Witness 1:  
(Name & Address)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness 2:  
(Name & Address)

Witness 2:  
(Name & Address)

\_\_\_\_\_  
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\* \* \* \* \*

**EMD BANK GUARANTEE FORMAT**

EOI Ref No: \_\_\_\_\_ Date: XX-XX-XXXX

End Customer Tender Ref. No.: \_\_\_\_\_ Dated: XX-XX-XXXX on \_\_\_\_\_ portal

**BID SECURITY (BANK GUARANTEE)**

WHEREAS, [name of Bidder] (hereinafter called "the Bidder") has submitted his Bid dated [date] Selection of Implementation Partner from RailTel Empaneled Business Associate for exclusive PRE-BID TEAMING ARRANGEMENT for the work of [name of Contract] (hereinafter called "the Bid").

KNOW ALL PEOPLE by these presents that We [name of bank] of [name of country] having our registered office at \_\_\_\_\_ (Hereinafter called "the Bank") are bound unto RailTel Corporation of India Limited., 6th Floor, IIIrd Block, Delhi Technology Park, Shastri Park, Delhi-110053 [name of Employer] (hereinafter called "the Employer") in the sum of Rs. \_\_\_\_\_ (Rupees in words only) for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this \_\_\_\_\_ day of \_\_\_\_\_ 20XX. THE CONDITIONS of this obligation are:

1. If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of Bid;

OR

2. If the Bidder having been notified of the acceptance of his bid by the Employer during the period of Bid validity:

- a. Fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required;

or

- b. fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders;

or

- c. does not accept the correction of the Bid Price;

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date \_\_\_\_\_, \_\_\_\_\_ days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

Date: \_\_\_\_\_

Signature of the bank: \_\_\_\_\_

Seal of Bank: \_\_\_\_\_

[Signature, name, and address] \_\_\_\_\_

**{RailTel SFMS details –****BG advising message – IFN 760COV/ IFN 767COV via SFMS.****IFSC Code of ICICI Bank to be used (ICIC0000007). Unique reference (RAILTEL6103) in field 7037}.**



**FORMAT FOR AFFIDAVIT TO BE UPLOADED BY BA ALONGWITH THE EOI DOCUMENTS**

(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs. 100/-. The paper has to be in the name of the BA) \*\*

I \_\_\_\_\_ (Name and designation)\*\* appointed as the attorney/authorized signatory of the BA (including its constituents), M/s \_\_\_\_\_ (hereinafter called the BA) for the purpose of the EOI documents for the work of \_\_\_\_\_ as per the EOI No. \_\_\_\_\_ of (RailTel Corporation of India Limited), do hereby solemnly affirm and state on the behalf of the BA including its constituents as under:

1. I/we the BA (s), am/are signing this document after carefully reading the contents.
2. I/we the BA(s) also accept all the conditions of the EOI and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the EOI documents from RailTel website [www.railtelindia.com](http://www.railtelindia.com). I/we have verified the content of the document from the website and there is no addition, no deletion or no alternation to be content of the EOI document. In case of any discrepancy noticed at any stage i.e., evaluation of EOI, execution of work or final payment of the contract, the master copy available with the RailTel Administration shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/we also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
6. I/we declare that the information and documents submitted along with the EOI by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
7. I/we undersigned that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of EOI, it shall lead to forfeiture of the EOI EMD besides banning of business for five years on entire RailTel. Further, I/we (insert name of the BA)\*\* and all my/our constituents understand that my/our constituents understand that my/our offer shall be summarily rejected.
8. I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of EMD/SD and Performance guarantee besides any other action provided in the contract including banning of business for five years on entire RailTel.

DEPONENT

SEAL AND SIGNATURE OF THE BA

VERIFICATION

I/We above named EOI do hereby solemnly affirm and verify that the contents of my/our above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT

SEAL AND SIGNATURE OF THE BA

Place:

Dated:

\*\*The contents in Italics are only for guidance purpose. Details as appropriate, are to be filled in suitably by BA. Attestation before Magistrate/Notary Public.

**Name of Work: “Automatic Block Signaling System between Manheru-Bawani Khera in c/w doubling of MHU-BWK & BNW-BNWC Section of Bikaner Division of North Western Railway”**

**Scope of work (SoW):**

This work involves supply of materials and execution of both indoor as well as outdoor works as per details mentioned in the schedule and technical requirement as detailed in the tender documents.

Part supply of material and execution of indoor-outdoor work related to provision of Electronic interlocking and MSDAC based Automatic Block Signalling system between Manheru- Bawani Khera in c/w doubling of MHU-BWK & BNW-BNWC sections of Bikaner Division of North Western Railway. The work involves provision of new Electronic Interlockings at MANHERU, BHIWANI Junction (In Second Phase), BAWANI KHERA, BHIWANI BYE PASS JUNCTION CABIN Stations and at Five Auto Signalling Huts (ALH) to control mid -section auto signals and 7 Nos of mid-section LC gates. The work includes modification in M/s Kyosan Make existing EI of BHIWANI Junction (in first phase) to suit patch doubling in MHU-BNW Section. The work also includes provision of dual MSDAC in Auto Section and single MSDAC in BNW Yard along with associated works like trenching & laying of signalling and Telecom cables in pre-fabricated ducts/DWC/GI pipes, supply-installation of point machines, Apparatus cases, Electric Lifting Barrier Gate, Signals, Track circuit equipment, Earthing material, Data loggers, ELD, FACS, AFDAS, IoT based RDPMS, Passenger Amenity Telecom Items etc,

Detail scope of work with Technical specification is as per Tender document of CoR.

**COMPLETION PERIOD:-** The entire work shall be completed within twelve (12) months from the date of issue of letter of acceptance.

**(Please refer latest copy of Tender document with Corrigendum floated by CoR at [www.ireps.gov.in](http://www.ireps.gov.in) with Tender reference no. SNT\_C\_BKN\_24-25\_02).**