



RAILTEL CORPORATION OF INDIA LTD.

(A Govt. of India Enterprise)

Eastern Region Office

19th Floor, Aurora Waterfront, GN 34/1,

Sector V, Bidhannagar, Kolkata, West

Bengal 700091 **Corporate Office**

Plate-A, 6th Floor, Office Tower-2,

NBCC Building, East Kidwai Nagar, New Delhi-110023

Invitation for Expression of Interest

for

**Selection of Partner for exclusive PRE-BID TEAMING ARRANGEMENT for
“Design, supply, installation, testing & commissioning of Automatic
Block Signalling System between Kharagpur - Amarda Road (82 Route
KM) section of Kharagpur Division of South Eastern Railway.”.**

EOI No: RAILTEL/ER/MKT/EOI/2023-24/Tender/40

DTD 27.03.2024

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 time table 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.

NOTICE

RailTel Corporation of India Limited, Eastern Region,
19th Floor, Aurora Waterfront Building,
Plot no. 34/1, Block -GN, Sector - V,
Salt Lake City, Kolkata -700091, West Bengal

EXPRESSION OF INTEREST

EOI Notice No: RAILTEL/ER/MKT/EOI/2023-24/Tender/40 dt.27.03.2024

RailTel Corporation of India Ltd., (hereafter referred to as RailTel) invites EOIs from RailTel's Empaneled Partners/eligible OEMs/Authorized Partners of OEMs for Selection of partner for exclusive PRE-BID TEAMING ARRANGEMENT for *“Design, supply, installation, testing & commissioning of Automatic Block Signaling System between Kharagpur - Amarda Road (82 Route KM) section of Kharagpur Division of South Eastern Railway.”*

The details are as under:

1	Date of EOI Floating	27.03.2024 at 17. 00 Hours
2	Last date for submission of Bids against EOI	03.04.2024 at 15.00 Hours
3	Opening of Bids received against EOI	03.04.2024 at 15.30 Hours
4	Number of copies to be submitted	Single Stage (Single Packet System)
5	EOI document cost inclusive tax(non-refundable)	Rs. 5,900/- (Five Thousand Nine Hundred only)
6	Estimated amount of EOI <i>Rfe Tender no- ST_P_SER_ABS_KGP-ARD_01</i>	Rs. 36,08,23,844 /- (incl GST)
7	EMD for Pre-Bid Arrangement (Token EMD)	Rs. ₹ 05,00,000/- (Five Lakhs Only) to be submitted along with EOI. (To be submitted via online bank transfer). The Balance amount of advertised EMD by the customer in NIT, in proportion to the scope of work for BA
8	Bid Submission Mode	Online on https://railtel.enivida.com
9	Single packet/two Packet bid	Single Packet Bid

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., Rs. 5,00,000/- in form of RTGS / NEFT.

The remaining amount may be submitted before the CoR Bid.

The EMD should be in the favour of RailTel Corporation of India Limited payable at KOLKATA 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: Union Bank of India, Account no. 401601010519491, IFSC Code: UBIN0540161. Demand Draft should be submitted in favour of RailTel Corporation of India Limited payable at Kolkata.

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

Prospective bidders are required to direct all communications related to this Invitation for EoI document, through the following Help Desk:

Level:1 Contact: Sh. Sridip Das , Position: Chief Manager/Marketing/ER

Email: sridip.das@railtelindia.com Contact: +91- 9007041225

Level:2 Contact: Sh. Abhishek Mani Position: Sr. DGM/Marketing/ER

Email: abhishekmani@railtelindia.com Contact: +91-6289857500

Note:

1. The EOI response is invited from eligible Empaneled Partners of RailTel/ eligible OEMs/Authorized Partners of OEMs. However, RailTel reserves the right to select non-empaneled companies as per RailTel's BA/SI Policy & its exception clause.
2. Empaneled partners are required to submit soft copy of response through Online on RailTel's e-nivida portal at <https://railtel.enivida.com> duly signed by Authorized Signatories with Company seal and stamp.
3. If, the interested bidder is OEM/Distributor of OEM/Direct Partner of OEM or Consortium, it should submit the supporting document for the same.
4. All the document must be submitted with proper indexing and page no.
5. This is an exclusive pre-RFP partnership arrangement with empaneled business associate of RailTel for participating in the end customer RFP. Selected partner's authorized 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.
6. **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 Contractor any part thereof.
7. **Bidder has to provide Necessary documents & undertakings on behalf of RailTel as sought by CoR (but not limited to) in terms of Quality Assurance, Long term Availability of spares, Technical collaboration/MOU and Software validation.**
8. Bidder has to agree to comply with all scope of work and term and conditions including special term and condition, SLA and OEM technical & Financial documentation including, Technical certificates/others as per end-to-end requirement mentioned in the end customer's RFP & its corrigendum (if any) as mentioned below:

Tender Ref. No.	NIT No: ST_P_SER_ABS_KGP-ARD_01 Dated: 08/04/2024 15:00
Date of floating	05/03/2024
Floated on portal	www.ireps.gov.in
9. The selected bidder will have to accept all Terms & Conditions of CoR RFP **on back-to-back basis**.
10. Anything not mentioned in the EOI, Customer RFP and its corrigendum (if any) may be referred & considered. Customer RFP is enclosed along with.

11. OEM considered by Bidder for this project have to mandatorily comply all the eligibility & technical criteria/compliance.
12. **Make in India-** The bidder must comply the make in India clause as per the CoR, and must submit an undertaking specifying the total Percentage (%) of Local Content for the total system supply as a whole for Unified System Integration Project, along with specific Details. **The same must be submitted along with the bid EoI.**

1) PROJECT BACKGROUND & OBJECTIVE OF EOI

RailTel Corporation of India Ltd (here after 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.

RailTel intends to participate in SIGNAL & TELECOM WORKS floated by South Eastern Railway For *Design, supply, installation, testing & commissioning of Automatic Block Signalling System between Kharagpur - Amarda Road (82 Route KM) section of Kharagpur Division of South Eastern Railway.*

RailTel is hence inviting EOIs for the selection of suitable partner for participating in above mentioned work for the agreed scope of 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 technical & Financial documentation including Technical certificates/others as per end-to-end requirement mentioned in the end customer's RFP. Bidder also undertake to submit technical solution of major items of the proposed solution and other documents required in the end Customer Organization tender in favour of RailTel against the proposed products.

The details of pertinent tender are as below:

Tender Title:

Design, supply, installation, testing & commissioning of Automatic Block Signalling System between Kharagpur - Amarda Road (82 Route KM) section of Kharagpur Division of South Eastern Railway.

2) RAILTEL – INTRODUCTION

RailTel Corporation of India Limited (RailTel), an ISO-9001:2000 organization is a Mini Ratna Government of India undertaking under the Ministry of Railways. The Corporation was formed in Sept 2000 with the objectives to create nationwide Broadband Telecom and Multimedia Network in all parts of the country, to modernize Train Control Operation and Safety System of Indian Railways and to

contribute to realization of goals and objective of national telecom policy 1999. RailTel is a wholly owned subsidiary of Indian Railways.

RailTel has approximately 61000 kms of OFC along the protected Railway tracks. The transport network is built on high capacity DWDM and an IP/ MPLS network over it to support mission critical communication requirements of Indian Railways and other customers. RailTel has Tier-III Data Center in Gurgaon and Secunderabad hosting / collocating critical applications. RailTel is also providing Telepresence as a Service (TPaaS), where a High-Definition Video Conference facility bundled with required BW is provided as a Service.

For ensuring efficient administration across India, country has been divided into four regions namely, Eastern, Northern, Southern & Western each headed by Executive Director and Headquartered at Kolkata, New Delhi, Secunderabad & Mumbai respectively. These regions are further divided into territories for efficient working. RailTel has territorial offices at Guwahati, & Bhubaneswar in East, Chandigarh, Jaipur, Lucknow in North, Chennai & Bangalore in South, Bhopal, and Pune & Ahmedabad in West. Various other territorial offices across the country are proposed to be created shortly.

RailTel's business service lines can be categorized into three heads namely B2G/B2B (Business to Government and Business to Business) and B2C (Business to customers):

Licenses & Service portfolio:

Presently, RailTel holds Infrastructure Provider -1, National Long-Distance Operator, International Long-Distance Operator and Internet Service Provider (Class-A) licenses under which the following services are being offered to various customers:

a) Carrier Service

- National Long Distance: Carriage of Inter & Intra -circle Voice Traffic across India using state of the art NGN based network through its Interconnection with all leading Telecom Operators
- Lease Line Services: Available for granularities from E1 to multiple of Gigabit bandwidth & above
- Dark Fiber/Lambda: Leasing to MSOs/Telco's along secured Right of Way of Railway tracks
- Co-location Services: Leasing of Space and 1000+ Towers for collocation of MSC/BSC/BTS of Telco's

b) Enterprise Services

- Managed Lease Line Services: Available for granularities from E1, DS-3, STM-1 & above
- MPLS VPN: Layer-2 & Layer-3 VPN available for granularities from 2 Mbps & above

- Dedicated Internet Bandwidth: Experience the “Always ON” internet connectivity at your fingertips in granularities 2 Mbps to several Gbps.

c) DATA CENTER

Infrastructure as a service (IaaS), Hosting as Services, Security operation Centre as a Service (SOCaaS): RailTel has MeitY empanelled two Tier-III data centres in Gurgaon & Secunderabad. Presently RailTel is hosting critical applications of Indian Railways, Central & State government/ PSUs applications. RailTel will facilitate Government’s applications / Hosting services including smooth transition to secured state owned RailTel’s Data Centers and Disaster Recovery Centres. RailTel also offers SOC as a Service ‘SOCaaS’. In addition, RailTel offers VPN client services so that employees can seamlessly access government’s intranet, applications securely from anywhere without compromising security.

d) High-Definition Video Conference:

RailTel has unique service model of providing high-definition video conference bundled with Video Conference equipment, bandwidth and FMS services to provide end to end seamless services on OPEX model connecting HQ with other critical offices. RailTel also offers application-based video conference solution for employees to be productive specially during this pandemic situation.

e) Retail Services – RailWire

RailWire: Triple Play Broadband Services for the Masses. RailTel has unique model of delivering broadband services, wherein local entrepreneurs are engaged in delivering & maintaining broadband services and upto 66% of the total revenues earned are shared to these local entrepreneurs in the state, generating jobs and revitalizing local economies. On date RailTel is serving approx. 5,00,000 subscribers on PAN Indian basis. RailTel can provide broadband service across– Government PSU or any organization’s officers colonies and residences.



3) SCOPE OF WORK & PARTNER SELECTION

SCOPE OF WORK:

The bidder) shall be responsible for complete turnkey of the of the proposed Design, supply, installation, testing & commissioning of Automatic Block Signalling System between Kharagpur - Amarda Road (82 Route KM) section of Kharagpur Division of South Eastern Railway.

RailTel's Authorized Officials will work for direct Supervision of the Entire Project .

The scope of work shall include but not be limited to the following broad areas, considering the approach towards the Automatic Block Signaling of the specified stretch. Any functionality not expressly stated in this document but required to meet the needs of COR'S as specified in the scope in this RFP and captured during the assessment/requirement gathering phase and preparation of Project Design Documents for actual implementation of the project shall essentially be under the scope of the bidder to ensure successful operations of the system and for that, no extra charges shall be admissible. The bidder will have to maintain the implemented Project for a period as specified in the CoR.

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.

The bidder must be ready to deploy a team of manpower with suitable skill set during the implementation and the maintenance phase. In case of any discrepancy or ambiguity in any clause / specification pertaining to scope of work area, the RFP released by end customer organization shall supersede and will be considered sacrosanct. (All associated clarifications, response to queries, revisions, addendum and corrigendum, associated prime service agreement (PSA)/MSA/SLA also included.)

The scope of work will be as mentioned in CoR RFP, available on portal www.ireps.gov.in with Tender reference no. **ST_P_SER_ABS_KGP-ARD_01**.

Special Note: RailTel may retain some portion of the work mentioned in the end organization RFP, or directly take the rates from the OEMs or where RailTel has competence so that overall proposal becomes most winnable proposal.

3.1.1.2. DOCUMENTS

The Bidder shall prepare and submit a System Requirements Specification (SRS) document along - comprising As-Is study, an approach and methodology to be adopted , proposed solutions as per the CoR.

4) RESPONSE TO EOI GUIDELINES**4.1 Language of Proposals**

The proposal and all correspondence and documents shall be written in English in soft copy through an email.

4.2 RailTel's Right to Accept/Reject responses

RailTel reserves the right to accept or reject any response and annul the bidding process or even reject all responses at any time prior to selecting the partner, without thereby incurring any liability to the affected bidder or Business Associate or without any obligation to inform the affected bidder or bidders about the grounds for RailTel's action.

4.3 EOI response Document

The bidder is expected to examine all instructions, forms, terms and conditions and technical specifications in the bidding documents. Submission of bids, not substantially responsive to the bidding document in every aspect will be at the bidder's risk and may result in rejection of its bid without any further reference to the bidder.

All pages of the documents shall be signed by the bidder including the closing page in token of his having studied the EOI document and should be submitted along with the bid.

4.4 Period of Validity of bids and Bid Currency

Bids shall remain valid till the communication received from end customer for finalization of tender.

4.5 Bidding Process

The bidding process as defined in para 4.10 & 6.

4.6 Bid Earnest Money (EMD)

- 4.6.1** The Business Associate shall furnish a sum as given in EOI Notice via online transfer from any scheduled bank in India in favour of "RailTel Corporation of India Limited" along with the offer or directly through e-Nivida portal. This will be called as **EOI EMD**.

- 4.6.2** Offers not accompanied with valid EOI Earnest Money Deposit shall be summarily rejected.
- 4.6.3** In case of sole partner/ consortium offer is selected for bidding, sole partner/consortium has to furnish Earnest Money Deposit (for balance amount as mentioned in the customer's Bid as and if applicable) for the bid to RailTel. The selected Business Associate shall have to submit a Bank Guarantee against EMD in proportion to the quoted value/scope of work to RailTel before submission of bid to end customer as and if applicable.
- 4.6.4 Return of EMD:** EOI EMD of the unsuccessful partner shall be returned without interest after completion of EOI process.
- 4.6.5 Return of EMD for successful Business Associate/partner:** EOI-EMD & Earnest Money Deposit (balance proportionate EMD) if applicable of the successful bidder will be discharged / returned as promptly as possible after the receipt of RailTel's EMD/BG from the Customer and or on receipt of Security Deposit Performance Bank Guarantee as applicable (clause no. 4.7) from Business Associate whichever is later.
- 4.6.6** Forfeiture of EOI EMD or EOI EMD & EMD (balance proportionate EMD) and or Penal action as per EMD Declaration:
- 4.6.6.1** The EOI EMD may be forfeited and or penal action shall be initiated if a Business Associate withdraws his offer or modifies the terms and conditions of the offer during validity period.
- 4.6.6.2** In case of non-submission of SD/PBG (as per clause no. 4.7) lead to forfeiture of EOI EMD, EMD (balance proportionate EMD) if applicable and or suitable action as prescribed in the EMD Declaration shall be initiated as applicable.

4.7 Security Deposit / Performance Bank Guarantee (PBG)

- 4.7.1** In case the bid is successful, the PBG of requisite amount proportionate to the agreed scope of work will have to be submitted to RailTel.
- 4.7.2** As per work share arrangements agreed between RailTel and Business Associate the PBG will be proportionately decided and submitted by the selected Business Associate/consortium.

4.8 Modification and/or Withdrawal of EOI response

EOI response once submitted will be treated, as final and no modification will be permitted except with the consent of the RailTel.

No Business Associate shall be allowed to withdraw the response after the last date and time for submission.

The successful Business Associate will not be allowed to withdraw or back out from the response commitments. In case of withdrawal or back out by the successful business associate, the Earnest Money Deposit shall be forfeited and all interests/claims of such Business Associate shall be deemed as foreclosed.

4.9 Details of Financial bid for the above referred tender

Sole partner/ consortium with lowest (L1) offer will be selected for exclusive pre-bid arrangement for optimizing technical and commercial solution so that most winnable solution is submitted to end customer.

The final bid for the tender will be prepared jointly with the selected Business Associate/Consortium so that the optimal bid can be put with a good chance of winning the Tender.

4.10 Clarification of EOI Response

To assist in the examination, evaluation and comparison of bids the purchaser may, at its discretion, ask the Business Associate for clarification. The response should be in writing and no change in the price or substance of the EOI response shall be sought, offered or permitted.

4.11 Period of Association/Validity of Agreement

RailTel will enter into a pre-bid agreement with selected bidder with detailed Terms and conditions.

5) BIDDER'S PROFILE

The bidder shall provide the information in the below table:

Sl. No.	ITEM	Details
1.	Full name of bidder's firm	
2.	Full address, telephone numbers, fax numbers, and email address of the primary office of the organization / main / head / corporate office	
3.	Name, designation and full address of the Chief Executive Officer of the bidder's organization as a whole, including contact numbers and email Address	
4.	Full address, telephone and fax numbers, and email addresses of the office of the organization dealing with this tender	
5.	Name, designation and full address of the person dealing with the tender to whom all reference shall be made regarding the tender enquiry. His/her telephone, mobile, Fax and email address	

6.	Bank Details (Bank Branch Name, IFSC Code, Account number)	
7.	GST Registration number	

6) ELIGIBILITY CRITERIA FOR BIDDING BUSINESS PARTNER OF RAILTEL & ASSOCIATED ANNEXURES

S No	Particulars	Documents Required
A)	Financial Conditions	
i)	Sole partner/all consortium members should be registered under Companies Act, 1956 or Companies Act 2013 or Limited Liability Partnership Act, 2008 as amended and should have at least 3years of operations in India as on bid submission date.	1. Certificate of Incorporation 2. GST Registration 3. PAN Card 4. Audited Financial Reports for FY 22-23,21-22 & 20-21 5. ITR (Last 3 Years)
ii)	Sole partner/ consortium should have cumulative annual turnover of at least 150% of the Estimated EoI Value. for last three years i.e year ending 20-21, 21-22 & 22-23	Turnover Certificate issued by the Chartered Accountant. Certificate should contain UDIN no. issued by ICAI. Need to be complied by lead bidder in case of consortium.
iii)	Sole partner/ consortium should also have a positive net worth in the last 3 financial years i.e year ending 20-21, 21-22 & 22-23.	Positive Net Worth Certificate issued by the CA for the last three financial years (FY 20-21, 21-22, 22-23). Certificate should contain UDIN no. issued by ICAI. Need to be complied by all member in case of consortium.
B)	Technical Conditions	
iv)	<p>The Bidder must have experience of works (includes completed/ ongoing) with completion certificate/P.O of similar work during last 5 (five) years ending Bid submission date.</p> <p>In order to qualify on above account, the bidder must have completed/ongoing</p> <p>i. One single work of Minimum 60% of the Estimated amount of EOI. OR</p> <p>ii. Two works of Minimum 40% of Estimated amount of EOI. OR</p> <p>iii. Three works of Minimum 30% of</p>	Documentary evidence such as Certificate from Customer for satisfactory services/supply/ Payments along with Customer's purchase orders/ work orders /GST Invoices etc for completed / ongoing project.

S No	Particulars	Documents Required
	<p>Estimated amount of EOI.</p> <p>Definition of similar work: Panel Interlocking (Indoor) or Panel Interlocking (Indoor + Outdoor) or Route Relay Interlocking (Indoor) or Route Relay Interlocking (Indoor + Outdoor) or Electronic Interlocking/Solid State Interlocking (Indoor) or Electronic Interlocking/Solid State Interlocking (Indoor + Outdoor) or Multi Section Digital Axle Counter (Indoor + Outdoor) or Auto Block Signaling (Indoor + Outdoor).” OR “Any CTC/TMS work”</p>	
C)	Annexures	
vi)	Annexure 1	Covering Letter: Self-certification duly signed by authorized signatory on company letter head.
vii)	Annexure 2	<p>The Bidder should agree to abide by all the technical, commercial & financial conditions of the end customer RFP for which EOI is submitted.</p> <p>Self-certification duly signed by authorized signatory on company letter head.</p>
viii)	Annexure 3	An undertaking signed by the Authorized Signatory of the sole partner/ all consortium partners to be provided on letter head. The Bidder/any of the OEM should not have been blacklisted/debarred by any Governmental/ Non-Governmental Organization in India as on bid submission date.
ix)	Annexure 3A	Declaration- OEM has not been blacklisted
x)	Annexure-4	Format for Affidavit to be uploaded by sole partner/ all consortium partners with the tender documents.
xi)	Annexure-5	Non-disclosure agreement by sole partner/ all consortium partners with RailTel.
xii)	Power of Attorney	In case of Sole Partner: Power of Attorney and Board Resolution in favour of one of its employees who will sign the Bid Documents.

S No	Particulars	Documents Required
		<p>In case of consortium:</p> <p>1) Board resolution of each consortium members authorizing and appointing the authorized signatory for signing the EOI documents.</p> <p>2) Power of Attorney by all the members of consortium in favor of the lead member</p> <p>Consortium Agreement duly signed by all authorized members of consortium.</p>
xiii)	Additional Documents to be Submitted	<p>Technical Proposal with overview of the project with strength of the Partner.</p> <ul style="list-style-type: none"> • Understanding of the Project and it's Scope of Work • Approach & Methodology for implementation and support • Risk Management Plan • Detailed Project Plan
xiv)	Annexure-6	EMD (as PBG) Format
xv)	Annexure-7	Undertaking for Quality Assurance, Long term Availability of spares, Technical collaboration/MOU and Software validation.
xvi)	Annexure-8	Consortium Format
xvii)	Annexure-9	Self-declaration of not be under Ineligibility for corrupt and fraudulent practice
xviii)	Annexure-10	Proposed Manpower Details
xix)	Annexure-11	Self-declaration - Land Border Clause
xx)	Annexure-12	Price Bid Letter
xxi)	Annexure-13	Price Bid Format (BOQ) (Financial Bid)

- *The Bidder must submit the proposed EXECUTION Time line and plan as per Annexure K of the CoR along with diagrammatical BAR/PERT Chart*
- The Technical Compliance sheet provided with Hard Copy of Technical Specs.
- BOQ/BOM without Price quote in the attached format (Annexure 5).

- ***Compliance of OEM with their MAF's and all mandatory documents asked by CoR from OEM.***
- Unconditional Acceptance of the Tender document of CoR and any Other/General Document of CoR Tender RFP along with corrigendum and addendum.
- This EOI acceptance.
- Annexure Form at as mentioned in this EOI.
- All documents mentioned in checklist and annexures of this EOI.
- The Seller agrees to undertake a Maintenance contract for a minimum period as per CoR. Undertaking in this regard is to be submitted along with the technical bid.
- Delivery Period Undertaking – As per pertinent tender floated by CoR.
- The bid should be duly signed and submitted by Authorized Signatory.

7) EVALUATION CRITERIA

a. The Business Associates are first evaluated on the basis of the Eligibility Criteria as per clause 5 above.

b. The Business Associate who fulfills the Eligibility criteria of Bidding sole partner/ consortium shall be further evaluated on the basis of Technical Evaluation and Financial evaluation.

For the opened bid as per outcome of the Eligibility criteria above, the bidder will be selected on the lowest quote (L-1) basis for complete 'Scope of Work' as mentioned in the EOI document and documents of technical specifications of CoR, subject to the respective overall bid is in compliance to the requirements of this EOI. The so selected partner will be termed as 'Commercially Suitable Partner (hereafter referred to as 'CSP')'. It is re-mentioned, that the final selection of CSP will be on the L-1 basis only. Further, RailTel reserves the right to have negotiation with the CSP at any stage before issuing Work Order.

7.3 The Business Associate with lowest commercial (L1) offer will be selected for exclusive pre-bid arrangement for optimizing technical and commercial solution so that most winnable solution is submitted to end customer.

7.4 RailTel reserves the right to accept or reject the response against this EOI, without assigning any reasons. The decision of RailTel is final and binding on the participants. The RailTel evaluation committee will determine whether the proposal/ information is complete in all respects and the decision of the evaluation committee shall be final. RailTel may at its discretion assign lead factor to the Business associate as per RailTel policy for shortlisting partner against this EOI.

7.5 All General requirement mentioned in the Technical Specifications are required to be complied. The solution proposed should be robust and scalable.

8) PAYMENT TERMS

- a) 90% payment shall be released for execution items against

- i Schedule - A1 (S&T Execution SOR),
- ii Schedule - A2 (Micro-tunneling SOR),
- iii Schedule - A3 (S&T Execution Non SOR),

on completion of work duly inspected and certified by engineer in charge of work.

And the balance, 10% will be paid after completion of residual works such as completion drawings, finishing work, painting & lettering.

- b) 90% payment shall be released for items against -

- i Schedule - B1 (S&T Supply SOR),
- ii Schedule - B3 (IPS Non SOR),
- iii Schedule - B4 (S&T Others Supply Non SOR) & on supply of material

Balance 10% of the cost of the materials paid above shall be paid after successful installation & commissioning to the satisfaction of the engineer in charge of work.

- c) 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, subject to the cause to deduction / penalty is due to deviation in terms and conditions of service standards by the CSP.

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

- i. *PO copy issued to selected vendor.*
- ii. *Submission/Declaration of applicable BG amount against PO issued to selected bidder/vendor.*
- iii. *Signed Agreement Copy*
- iv. *Original Invoice for the period claimed.*
- v. *TDS declaration.*
- vi. *Delivery challan*
- vii. *Inspection certificate*
- viii. *Warranty certificate of the OEM/Authorized dealer.*
- ix. *Bidders Certificate of Dispatch*
- x. *E-way bill*
- xi. *Copy of Purchase Order*
- xii. *Insurance of the materials*
- xiii. *PAN, GST Registration Certificates*

- i. **Payment will only be released once GSTR-1 and GST-3B is filed by the bidder for claimed invoice.**

- ii. **The last bills shall be settled after end of the contract period after adjusting all**

outstanding dues.

iii. No interest is payable on any amount whatsoever to the successful Bidder.

9. Warranty-The successful bidder shall warranty satisfactory operation of complete installation including standby systems under the contract for a period of 12 (Twelve) months, beginning from the date of actual commissioning of the asset/ station. After the maintenance of the installation is taken over by the Railways, the contractor shall be responsible for the proper functioning of the system for the period of warranty.

10. Bill Passing Authority: RailTel's authorized representative

Bill Paying Authority: GM/Finance / Jt. GM/Finance/authorized representatives of RailTel

11. SERVICE LEVEL AGREEMENT (SLA)

There shall be two different service levels for Implementation Phase and O&M Phase. For Implementation Phase, the EA shall be liable for meeting the Project timeline as defined in the CoR RFP. If the EA fails to meet the overall implementation timeline and execute the project, then liquidated damage will be applicable as pre-implementation SLA. (Please refer Section – D of CoR RFP).

Note: Penalty/LD will be charged on back-to-back basis. All conditions of the end customer tender, which are not mentioned in EOI will have to be complied by bidder during execution period.

12. Performance Bank Guarantee (PBG)

- a) In case of successful participation by RailTel in the pertinent CoR's tender and subsequent engagements with CSP, The CSP shall at its own expense, deposit with department, within fifteen (15) 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 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 '10 %' of the contract value. The claim period should be one year more than the expiry date. 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 ₹5 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.
- b) PBG should have validity for a period as per CoR RFP and shall be on back-to-back basis. 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.

- c) 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.
- d) If the service period gets extended by virtue of extension of same by CoR, PBG should also be extended accordingly.
- e) During the contract period, RailTel may issue Purchase Order(s) for the additional services ordered by CoR (in case) to RailTel.
- f) 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.
- g) 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/Consortium. 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.
- h) If, CoR ask for submission for value more than 10%, same also needs to be submitted by the selected BA/Consortium.
- i) Integrity pact in the format as per CoR to be provided by the Bidder.

13. 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.

14. Liquidated Damages:

RailTel will levy the liquidated damages imposed by CoR to bidder on value terms for the services/items under its SOR.

15. Delivery & Inspection

- i. Delivery, Installation and Commissioning Period: As per CoR's RFP Terms from issue of LOI
- ii. All the material should be made available for Inspection by RailTel nominated person/agency.
- iii. Bidder will be custodian of all the material till installation and commissioning of system.

18. Provisional Acceptance Certificate (PAC)

- a) Immediately after the completion of the work at all the sites, the Bidder shall certify and advise the purchaser in writing that the installation is complete, commissioned and ready for handing

over to customer.

b) The tests will be conducted jointly by purchaser and Bidder as soon as possible after receipt of such advice of completion of the work from the Bidder. The test schedule shall be finalized mutually between the Bidder and RailTel. Any component/modules/sub-assemblies or equipment failing during the commissioning shall be replaced/repared free of cost by tenderer.

c) Purchaser's Engineer shall issue a Provisional Acceptance Certificate (PAC) after successful Supply, installation, Configuration, integration & commissioning at all locations covering all materials and services included in the Schedule of Requirements after the acceptance test as per the approved test procedure have been completed and the performance has been found to meet the specifications. RailTel's decision in this respect shall be final. The Provisional Acceptance Certificate (PAC) shall be signed by both the parties. The period of Comprehensive Maintenance shall commence from the date of issue of Provisional Acceptance Certificate (PAC)

19. Final Acceptance Certificate (FAC)

- a) The final acceptance of the works shall take effect after Five year i.e. 60 months of issue of Provisional Acceptance Certificates, provided in any case that the Bidder has complied fully with his obligations in respect of each item under the contract.
- b) Notwithstanding the issue of Final Acceptance Certificate (FAC), the Bidder and the purchaser (subject to Sub Clause as above) shall remain liable for fulfillment of any obligation incurred under the provision of the contract prior to the issue of Final Acceptance Certificate which remains unperformed at the time such certificate is issued and for determining the nature and extent of such obligation the contract shall be deemed to remain in force between the parties hereto.

Note: Depending on RailTel's business strategy RailTel may choose to work with Partner who is most likely to support in submitting a winning bid.

20. Integrity Pact Program

RailTel has adopted Integrity Pact Program and for implementation thereof all tenders relating to procurement of OFC, quad cable, pre-fab shelters, electronic equipment and its installation 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 will be covered under the Integrity Pact Program and the vendors are required to sign the IP document and submit the same to RailTel before or along with the bids.

- a) Only those vendors who have purchased the tender document and signed the IP document can send their grievances, if any, to the Independent External Monitors (IEMNs) through the nodal officer, i.e. Chief Vigilance Officer (CVO), RailTel.

Name of IEMs and contact details:

1. Shri. Vinit Kumar Jayaswal E-Mail: gkvinit@gmail.com M.No. +91-9871893484
2. Shri. Punati Sridhar E-Mail: poonatis@gmail.com M.No. +91-9448105097

Name & contact details of Nodal Officer (IP) in RailTel:

Chief Vigilance Officer
RailTel Corporation of India Ltd
6th Floor, Office Block Tower-2,
NBCC Complex, East Kidwai Nagar,
New Delhi-110023
E-Mail: cvo@railtelindia.com

- b) If the order, with total value equal to or more than the threshold value, is split to more than one vendor and even if the value of PO placed on any/each vendor(s) is less than the threshold value, IP document having been signed by the vendors at bid stage itself, the Pact shall continue to be applicable.
- c) 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. If the bidder is a partnership or a consortium, the Integrity Pact shall be signed by all the partners or consortium members.
- d) Bidder of foreign origin may submit the Integrity Pact on its company's letterhead, duly signed by the person signing the bid.
- e) The 'Integrity Pact' shall be submitted by the Bidder duly signed in all pages along with the Bid in a separate envelope, duly superscripted with 'Integrity Pact'. Tender received without signed copy of the Integrity Pact document will be liable to be rejected. Proforma for signing the Integrity Pact is available in Chapter-6 of this tender document (Form No. 6).
- f) 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.
- g) The Integrity Pact is applicable in this tender vide CVC circular no. 10/05/09 dated 18.05.09 and revised guideline of CVC circular no. 015/VGL/091 dated 13.01.17 or the latest updated from time to time shall be followed.

Annexure 1: Format for COVERING LETTER (to be submitted by sole partner/lead partner in case of consortium)

COVERING LETTER (To be on company letter head)

To,

The Principle Executive Director
RailTel Corporation of India Ltd. 19th Floor,
Aurora Waterfront, opposite NALBAN,
Sector V, Bidhannagar, Kolkata, West Bengal
700091

Dear Sir,

SUB: Participation in the Eol process

Having examined the Invitation for Eol document bearing the reference number _____ released by your esteemed organization, we, undersigned, hereby acknowledge the receipt of the same and offer to participate in conformity with the said Invitation for Eol document.

If our application is accepted, we undertake to abide by all the terms and conditions mentioned in the said Invitation for Eol document.

We hereby declare that all the information and supporting documents furnished as a part of our response to the said Invitation for Eol document, are true to the best of our knowledge. We understand that in case any discrepancy is found in the information submitted by us, our Eol is liable to be rejected.

We hereby Submit EMD amount of Rs. _____ issued vide _____ from Bank _____.

Authorized
Signatory Name
Designation

Annexure 2: Format for Self-Certificate & Undertaking (to be submitted by sole partner/lead partner in case of consortium)

Self-Certificate (To be on company letter head)

Eol Reference No:

Date:

To,

The Principle Executive Director
RailTel Corporation of India Ltd. 19th Floor,
Aurora Waterfront, opposite NALBAN,
Sector V, Bidhannagar, Kolkata, West Bengal
700091

Dear Sir,

Sub: Self Certificate for Tender, Technical & other compliances

- 1) Having examined the Technical specifications mentioned in this EOI & end customer tender, we hereby confirm that we meet all specification.
- 2) We _____ agree to abide by all the technical, commercial & financial conditions of the end customer RFP for which EOI is submitted (except pricing, termination & risk purchase rights of the RailTel). We understand and agree that RailTel shall release the payment to selected sole partner/lead partner in case of consortium after the receipt of corresponding payment from end customer by RailTel. Further we understand that in case selected sole partner/lead partner in case of consortium fails to execute assigned portion of work, then the same shall be executed by RailTel through third party or departmentally at the risk and cost of selected sole partner/lead partner in case of consortium.
- 3) We agree to abide by all the technical, commercial & financial conditions of the end customer's RFP for the agreed scope of work for which this EOI is submitted.
- 4) We hereby 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. We are hereby enclosing the arrangement of OEMs against each of the BOQ item quoted as mentioned end customer's RFP. We also undertake to submit MAF and other documents required in the end Customer organization tender in favour of RailTel against the proposed products.
- 5) We hereby certify that any services, equipment and materials to be supplied are produced in eligible

source country complying with OM/F. No. 6/18/2019 dated 23rd July 2020 issued by DoE, MoF.

- 6) We hereby undertake to work with RailTel as per end customer's RFP terms and conditions. We confirm to submit all the supporting documents constituting/ in compliance with the Criteria as required in the end customer's RFP terms and conditions like technical certificates, OEM compliance documents.
- 7) We understand and agree that RailTel is intending to select sole partner/ consortium who is willing to accept all terms & conditions of end customer organization's RFP for the agreed scope of work. RailTel will strategies to retain scope of work where RailTel has competence.
- 8) We hereby agree to submit that in case of being selected by RailTel as sole partner/ consortium for the proposed project (for which EOI is submitted), we will submit all the forms, appendix, relevant documents etc. to RailTel that is required and desired by end Customer well before the bid submission date by end customer and as and when required.
- 9) We hereby undertake to sign Pre Bid Agreement and Non-Disclosure Agreement with RailTel on a non-judicial stamp paper of Rs. 100/- in the prescribed Format.
- 10) We undertake that we will not submit directly or indirectly out 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 end customer organization by RailTel)

Authorized

Signatory Name

& Designation

Annexure 3: Undertaking for not Being Blacklisted/Debarred (to be submitted by sole partner/each of the consortium partners)

<On Company Letter Head>

To,

The Principle Executive Director
RailTel Corporation of India Ltd. 19th Floor,
Aurora Waterfront, opposite NALBAN,
Sector V, Bidhannagar, Kolkata, West Bengal
700091

Subject: **Undertaking for not Being Blacklisted/Debarred**

We, Company Name, having its registered office at Address

hereby declares that that the Company has not been blacklisted/debarred by any
Governmental/ Non-Governmental organization in India for past 3 Years as on bid submission date.

Date and Place

Authorized Signatory's Signature:

Authorized Signatory's Name and Designation:

Bidder's Company Seal:

Annexure 3A - OEM has not been blacklisted
(To be submitted on the Letterhead of the responding agency)

To,

The Principle Executive Director
RailTel Corporation of India Ltd. 19th Floor,
Aurora Waterfront, opposite NALBAN,
Sector V, Bidhannagar, Kolkata, West Bengal
700091

RFP Notification no. & date

Subject: Self Declaration of Original Equipment Manufacturer (OEM) not been blacklisted in response to the RFP

Dear Sir/Madam,

We confirm that our company (OEM), _____, is not blacklisted in any manner whatsoever by any of the State/UT and/or central government in India on any ground including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice. It is further certified that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/ our security may be forfeited in full and the tender if any to the extent accepted may be cancelled.

Yours very Truly,

Place:

OEM's Company Seal:

Date:

Authorized Signatory's Signature

Annexure 4: Format of Affidavit (to be submitted by sole partner/each of the consortium partners)

FORMAT FOR AFFIDAVIT TO BE UPLOADED BY SOLE PARTNER/ ALL CONSORTIUM PARTNERS 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 Ltd.), 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.railtel.enivida.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. Incaseof any discrepancy noticed at any stage i.e. evaluation of EOI, execution of work or finalpayment 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/credentialssubmitted 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 arecorrect 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 foundto 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 constituentsunderstand that my/our constituents understand that my/our offer shall be summarilyrejected.

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.**

Annexure-5: Non-Disclosure Agreement (NDA) Format (to be submitted by sole partner/each of the consortium partners)

NON-DISCLOSURE AGREEMENT

This Non-Disclosure Agreement (this "**Agreement**") is made and entered into on this _____ day of _____, 2024 (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, (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 _____.

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 unauthorized 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 to 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 contract or 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.
- c) 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.

14. 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.

15. 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.

16. 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.

17. 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.

18. 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.

19. 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.

20: UNPULISHED 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

21 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 Limited:

By _____

By _____

Name:

Name:

Title:

Title:

Witnesses

Annexure-6: EMD (as PBG) Format

BG NO :
ISSUANCE DATE : DD-MM-YYYY
BG AMOUNT : Rs xxxxxxxx /-
EXPIRY DATE : xx.xx.xxxx

CLAIM EXPIRY DATE : xx-
 mmm-xx

In consideration of the **RailTel Corporation of India Limited**, (CIN: L64202DL2000GOI107905) having its registered office at Plate-A, 6th Floor, Office Block Tower-2, East Kidwai Nagar, New Delhi - 110023 (Here in after called RailTel) having agreed to exempt **Partner Name (CIN:-)** having its registered office at **Partner's address** (Here in after called "the said Contractor(s)") from the demand, under the terms and conditions of **EOI NO.** made between **RailTel Corporation of India Limited** and **Partner Name** for (here in after called "the said Agreement") of security deposit for the due fulfilment by the said contractor (s) of the terms and conditions contained in the said Agreement, or production of a Bank Guarantee for **Rs. /- (In Words)**.

We, **Bank Name** a banking company incorporated under the Companies Act, 1956 and carrying on Banking Business under The Banking Regulation Act, 1949 and having its Registered Office at **Bank's Address** and its Central office at **Bank's Corporate Office Address** (indicate the name of the Bank) here in after referred to as "the Bank") at the request of **Partner's Name** Contractor(s) do hereby undertake to pay the **RailTel** an amount not exceeding **Rs /- (In Words)** .. 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 said Contractor(s) of any of the terms or conditions contained in the said Agreement.

We, **Bank Name** do here by undertake to pay the amounts due and payable under this Guarantee without any demur, merely on demand from the **RailTel** stating that the amount as claimed is due by way of loss or damage caused to or would be caused to or suffered by the **RailTel** by reason of breach by the said Contractor(s) of any terms and conditions contained in the said Agreement or by 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. /- (In Words)**.

We, **Bank's Name** undertake to pay to the **RailTel** any money so demanded not with standing any dispute or disputes raised by the Contractor(s) / Supplier(s) 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(s)/ Supplier(s) shall have

no claim against us for making such payment.

We, **Bank's Name** further agree that the Guarantee here in 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(s) and accordingly discharge this Guarantee. Unless a demand or claim under the Guarantee is made on us in writing on or before the **DD-MM-YYYY(Claim Expiry Date.)** We shall be discharged from all liability under this Guarantee thereafter.

We, **Bank's Name** further agree with the **RailTel** that the **RailTel** shall have the 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 or to postpone for any time or from time to time any of the powers exercisable by the **RailTel** against the said contractor(s) 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(s) or for any forbearance, act or omission on the part of **RailTel** or any indulgence by the **RailTel** to the said Contractor(s) 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 discharged due to the change in the Constitution of the bank or the Contractor(s) Supplier(s).

Bank's Name lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the **RailTel** in writing.

Date : DD-MM-YYYY

Place :

Annexure-7: Under Taking

******Undertaking for Quality Assurance, Long term Availability of spares, Technical collaboration/MOU and Software validation, as per CoR******

Annexure-8: CONSORTIUM AGREEMENT

(On Stamp Paper of appropriate value)

This Consortium Agreement is executed at on this _ day of. BETWEEN

M/s. , a Company incorporated under the Companies Act, 1956 and having its Registered Office at acting through its Managing Director, duly authorized by a resolution of the Board of Directors dated (hereinafter referred to as the „LEAD MEMBER“ which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the ONE Part;

AND

M/s. , a Company having its Office at and Office at , acting through its Joint President/ MD/... , duly authorized by a resolution of the Board of Directors dated (hereinafter referred to as the (“Participant member”) which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the OTHER PART“

AND

M/s. , a Company having its Office at and Office at , acting through its Joint President/ MD/... , duly authorized by a resolution of the Board of Directors dated (hereinafter referred to as the (“Participant member”) which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the OTHER PART“

Whereas RailTel Corporation of India Ltd. (hereinafter referred to as „RCIL“) has invite tenders for the “(NAME OF WORK)” in terms of the tender documents issued for the said purpose and the eligibility conditions required that the applicants bidding for the same should meet the conditions stipulated by RCIL for participating in the bid by the Consortium for handling the project for which the tender has been floated by RCIL.

AND WHEREAS in terms of the bid documents the parties jointly satisfy the eligibility criteria laid down for a bidder for participating in the bid process by forming a Consortium between themselves.

AND WHEREAS the parties hereto have discussed and agreed to form a Consortium for participating in the aforesaid bid and have decided to reduce the agreed terms to writing.

NOW THIS CONSORTIUM Agreement hereby WITNESSES:

1. That in the premises contained herein the Lead Member and the Participant Member having decided to pool their technical know-how, working experiences and financial resources, have formed themselves into a Consortium to participate in the tender process for “(NAME OF WORK)” in terms of the tender invited by RailTel Corporation of India Ltd., (RCIL).
2. That the members of the Consortium have represented and assured each other that they shall abide by and be bound by the terms and conditions stipulated by RCIL for awarding the tender to the Consortium so that the Consortium may take up the aforesaid “(NAME OF WORK)” in case the Consortium turns out to be the successful bidder in the bid being invited by RCIL for the said purpose.
3. That the members of the Consortium have satisfied themselves that by pooling their technical know-how and technical and financial resources, the Consortium fulfills the prequalification/ eligibility criteria stipulated for a bidder, to participate in the bid for the said tender process for “(NAME OF WORK)”
4. That the Consortium have agreed to nominate any one of , and as the common representative who shall be authorized to represent the Consortium for all intents and purposes for dealing with the Government and for submitting the bid as well as doing all other acts and things necessary for submission of bid documents such as Tender Application Form etc., Mandatory Information, Financial Bid. Etc., and such other documents as may be necessary for this purpose.
5. That if any change in the membership of the Consortium be required to be made by the members of the Consortium, the same shall be done with the consent of RCIL subject to the conditions as may be stipulated by them in this regard.
6. That in case to meet the requirements of bid documents or any other stipulations of RCIL, it becomes necessary to execute and record any other documents amongst the members of the Consortium, they undertake to do the needful and to participate in the same for the purpose of the said project.
7. That it is clarified by and between the members of the Consortium that execution to this Consortium Agreement by the members of the Consortium does not constitute any type of partnership for the purposes of provisions of the Indian Partnership Act and that the members of the Consortium shall otherwise be free to carry on their independent business or commercial activities for their own respective benefits under their own respective names and styles. This Consortium Agreement is limited in its operation to the specified project.
8. That the Members of the Consortium undertake to specify their respective roles and responsibilities for the purposes of implementation of this Consortium Agreement and

the said project, if awarded to the Consortium, to meet the requirements and stipulations of RCIL.

9. The consortium formed will not be subject to alteration with regard to change in constituting firms and/or reorientation of roles. Any changes, if proposed by Consortium to take advantage of certain developments during evaluation stage will render the bid liable to be **REJECTED**.
10. All partners of the consortium shall be jointly and severally liable to RailTel for the execution of the entire contract in accordance with its terms.
11. Each Consortium member has minimum 20% contribution in the work and role/scope of each member is enclosed.
12. Power of Attorney by all members of the Consortium in favor of the Lead Member is also enclosed.

IN FAITH AND TESTIMONY WHEREOF, THE PARTIES HERETO HAVE SIGNED THESE PRESENTS ON THE DATE, MONTHS AND YEAR FIRST ABOVE WRITTEN

1. ()	2. ()	3 ()
Managing Director	Managing Director	Managing Director
For (Name of company)	For (Name of company)	For (Name of company)

WITNESSES:

1.

2.

Enclosure:

Board resolution of each of the Consortium Members authorizing:

- (i) Execution of the Consortium Agreement, and
- (ii) Appointing the authorized signatory for such purpose.

Annexure 9 - Self declaration of not be under Ineligibility for corrupt and fraudulent practice

(To be submitted on the letterhead of the Bidder)

To

The Principle Executive Director
RailTel Corporation of India Ltd. 19th Floor,
Aurora Waterfront, opposite NALBAN, Sector
V, Bidhannagar, Kolkata, West Bengal 700091

Ref: Tender No.: NIT No: ST_P_SER_ABS_KGP-ARD_01 Dated: 08/04/2024 15:00

Sub: RFP for "XXXXXXXXXXXXXXXXXXXXXXXXXXXX"

Dear Sir/Madam, We have examined the RFP document, we, the undersigned, herewith submit our RFP in response to your RFP no. _____ dated _____ for the work of "_____ " in full conformity with the said RFP document.

- I. We have read the provisions of the RFP document and confirm that these are acceptable to us. We further declare that additional conditions, variations, deviations, if any, found in our RFP shall not be given effect to.
- II. We agree to abide by this RFP, consisting of this letter, the detailed response to the RFP and all attachments, for a period of 180 days from the date of submission of the bid.
- III. We would like to declare that we are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment and we are not under a declaration of ineligibility for corrupt or fraudulent practices.
- IV. We would like to declare that there is no conflict of interest in the services that we will be providing under the terms and conditions of this RFP.
- V. We hereby declare that all the information and statements made in this proposal are true and accept that any misrepresentation contained in it may lead to our disqualification.
- VI. We understand you are not bound to shortlist / accept any RFP you receive.

Sincerely,

Signature of Authorized Signatory and Seal of the Bidder

Name:

Designation:

Date:

Annexure 10 - Proposed Manpower Details

Annexure 11 – Land Border Clause Declaration

To,

The Principle Executive Director
RailTel Corporation of India Ltd. 19th
Floor, Aurora Waterfront, opposite
NALBAN, Sector V, Bidhannagar,
Kolkata, West Bengal 700091

Tender Reference No. : _____

Sub: Undertaking of Rule 144 (xi) in the General Finance Rules (GFR)-2017 bearing reference number: F. No.6/18/2019-PPD dated 23.07.2020 published by Ministry of Finance, Dept. of Expenditure, Public Procurement Division.

Dear Sir,

We, _____ (Name/ Address) have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. We certify that our quoted product and our company are not from such a country, or if from such a country, our quoted product and our company have been registered with competent authority. We hereby certify that these quoted products and our company fulfils all requirements in this regard and is eligible to be considered for procurement for Bid.

For _____

_____ (Designation with seal)

Annexure 12- Price Bid Letter

To,

The Principle Executive Director
RailTel Corporation of India Ltd. 19th Floor,
Aurora Waterfront, opposite NALBAN, Sector
V, Bidhannagar, Kolkata, West Bengal 700091

Ref: Tender no. . CoR NIT No: ST_P_SER_ABS_KGP-ARD_01 Dated: 08/04/2024 15:00

Subject: Submission of financial proposal of Tender CoR NIT No:
ST_P_SER_ABS_KGP-ARD_01 Dated: 08/04/2024 15:00

Dear Sir,

We, the undersigned, offer to provide the services as mentioned in the scope of work of the RFP dated (date). Our Financial Proposal shall be binding upon us subject to the modifications resulting from arithmetic correction, if any, up to expiration of the validity period of the Proposal, i.e. [date].

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We understand you are not bound to accept any Proposal you receive. We remain,

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Annexure 13 - Price Bid Format**Commercial Bid****To be uploaded as per BOQ Format in RailTel eNivida Portal.**

To,
Principal Executive Director
RailTel Corporation of India Limited,
19th Floor, Aurora Waterfront Building,
Plot no. 34/1, Block -GN, Sector - V,
Salt Lake City, Kolkata -700091, West Bengal.

Ref: 1. **CoR NIT No: ST_P_SER_ABS_KGP-ARD_01** Dated: 08/04/2024 15:00

2. RailTel's EOI Ref: EOI No: RAILTEL/ER/MKT/EOI/2023-24/Tender/40 DTD 27.03.2024

Dear Sir

Summary of Price Bid:

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
1.00	Design and supply of the following drawings ton office records as per requirement of the Railways. This includes alteration at different stages and finally supply of all the drawings including tracings within 90 days from the date of commissioning of the work. This includes the following drawings for each station: (1) Cable layout plan (Main) (2) Cable layout plan (Tail) (3) Cable matching chart (4) Location Hut drawing (5) Termination chart of end goomties and location hut (6) Traction bonding plan (7) Contact Analysis Chart (8) SWRD & GWRD (9) Equipment Layout Plan (10) Power Supply arrangement diagram (11) Any other drawing as found relevant as per site condition. Office record include the following: (i) Battery History book (ii) Track Circuiting Register. (iii) Track circuit maintenance Register. (iv) Cable Meggering Register (v) Signal History Register (vi) LED Register (vii) Glued joint/ Block joint Register (viii) Point machine Maintenance Register. (ix) Joint Inspection Register such as P. Way, Electrical & Signal. (x) Relay Register (xi) Route cancellation Register (xii) Relay Room Key Register (xiii) Emergency Point operation Register. (xiv) Crank Handle Register (xv) Emergency Route Cancellation Register (xvi) Axle counter reset register. Note:- (i) All the diagram will be made on CAD.	1.00	Station	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	<p>The paper size of wiring diagram will be A-3 and minimum text size of 2 mm should be used. Wiring diagram will be made in 'Black colour'.</p> <p>Alteration to wiring diagram will be done using TWO drawing method'</p> <p>RED and Green colouring should be used on production copies of design detail to indicate changes as follows:</p> <p>RED = new equipment to be installed or commissioned.</p> <p>GREEN=redundant equipment to be recovered. :: Up to 5 line yard.</p>					
2.00	<p>Design and supply of the following drawings ton office records as per requirement of the Railways. This includes alteration at different stages and finally supply of all the drawings including tracings within 90 days from the date of commissioning of the work. This includes the following drawings for each station: (1) Cable layout plan (Main) (2) Cable layout plan (Tail) (3) Cable matching chart (4) Location Hut drawing (5) Termination chart of end goomties and location hut (6) Traction bonding plan (7) Contact Analysis Chart (8) SWRD & GWRD (9) Equipment Layout Plan (10) Power Supply arrangement diagram (11) Any other drawing as found relevant as per site condition. Office record include the following: (i) Battery History book (ii) Track Circuiting Register. (iii) Track circuit maintenance Register. (iv) Cable Meggering Register (v) Signal History Register (vi) LED Register (vii) Glued joint/ Block joint Register (viii) Point machine Maintenance Register .(ix) Joint Inspection Register such as P. Way, Electrical & Signal. (x) Relay Register (xi) Route cancellation Register (xii) Relay Room Key Register (xiii) Emergency Point operation Register. (xiv) Crank Handle Register (xv) Emergency Route Cancellation Register (xvi) Axle counter reset register. Note:- (i) All the diagram will be made on CAD. The paper size of wiring diagram will be A-3 and minimum text size of 2 mm should be used. Wiring diagram will be made in 'Black colour'.</p> <p>Alteration to wiring diagram will be done using TWO drawing method'</p> <p>RED and Green colouring should be used on production copies of design detail to indicate changes as follows:</p> <p>RED = new equipment to be installed or commissioned.</p> <p>GREEN=redundant equipment to be recovered. :: Up to 6 to 10 line yard.</p>	10.00	Station	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
3.00	Design and supply of the following drawings ton office records as per requirement of the Railways. This includes alteration at different stages and finally supply of all the drawings including tracings within 90 days from the date of commissioning of the work. This includes the following drawings for each station: (1) Cable layout plan (Main) (2) Cable layout plan (Tail) (3) Cable matching chart (4) Location Hut drawing (5) Termination chart of end goomties and location hut (6) Traction bonding plan (7) Contact Analysis Chart (8) SWRD & GWRD (9) Equipment Layout Plan (10) Power Supply arrangement diagram (11) Any other drawing as found relevant as per site condition. Office record include the following: (i) Battery History book (ii) Track Circuiting Register. (iii) Track circuit maintenance Register. (iv) Cable Meggering Register (v) Signal History Register (vi) LED Register (vii) Glued joint/ Block joint Register (viii) Point machine Maintenance Register. (ix) Joint Inspection Register such as P. Way, Electrical & Signal. (x) Relay Register (xi) Route cancellation Register (xii) Relay Room Key Register (xiii) Emergency Point operation Register. (xiv) Crank Handle Register (xv) Emergency Route Cancellation Register (xvi) Axle counter reset register. Note:- (i) All the diagram will be made on CAD. The paper size of wiring diagram will be A-3 and minimum text size of 2 mm should be used. Wiring diagram will be made in 'Black colour'. Alteration to wiring diagram will be done using TWO drawing method' RED and Green colouring should be used on production copies of design detail to indicate changes as follows: RED = new equipment to be installed or commissioned. GREEN=redundant equipment to be recovered. :: for more then 10 line yard.	3.00	Station	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
4.00	Design of circuits and plans to suit layout as per Signalling Interlocking Plan of IBS/ABS/LC GATE. This will include supply of Control cum Indication panel diagram, 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. Submission of Two sets of prints with	47.00	IBH/LC Gate/Auto Hut	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	all correction for Railway's approval. Approved copy (06 Sets) of all drawings in plastic folders along with the original tracings in spiral bound with editable AutoCAD copy latest version.					
5.00	Preparation of Station Working Rules (SWR) in English on the basis of station working rule diagram/gate working rule diagram to be supplied by the contractor. Submission of two draft copy to railway for checking and resubmission of draft in three copies for approval of division after making corrections. Soft copy (Editable form) to be supplied in pen drive.	12.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
6.00	Preparation of Station Working Rules (SWR) in Hindi/Regional Language of that station. Procedure to be followed as per above item.	12.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
7.00	Supply of 1 copy of SWR in English finally approved by railways along with spiral binding. This has to be done after CRS sanction has been obtained.	72.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
8.00	Supply of 1 copy of SWR in Hindi/Regional Language of that station finally approved by railways along with spiral binding. This has to be done after CRS sanction has been obtained.	36.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
9.00	Preparation of Gate Working Rules (GWR) in English on the basis of station working rule diagram/gate working rule diagram to be supplied by the contractor. Submission of two draft copy to railways for checking and resubmission of draft in three copies for approval of division after making corrections. Soft copy (Editable form) to be supplied in pen drive.	45.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
10.00	Preparation of Gate working rules (GWR) in Hindi/Regional Language of that LC Gate. Procedure to be followed accordingly.	90.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
11.00	Supply of 1 copy of GWR in English finally approved by railways along with spiral binding. This has to be done after CRS sanction has been obtained.	270.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
12.00	Supply of 1 copy of GWR in Hindi/Regional Language that LC gate finally approved by railways along with spiral binding. This has to be done after CRS sanction has been obtained.	540.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
13.00	Location survey of cable route, preparation of tentative and final cable route plan (for OFC/Quad cable only) as per approved format in the section including supply of final route plan after the cables are laid and commissioned indicating clearly the exact position of the cable, joints and other critical items with reference to OHE mast & other fixed structures, etc. in 06 nos. hard bound copies on white bond paper of maximum A-3 size well documented and bound with plastic covers with editable soft copy in Autocad (latest version) .	214.00	Route Kilo Meter (RKM)	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
14.00	Excavation of trench in all kinds of soils including soft rocky area and clearing of roots of trees, rocks, bushes, ballast & reconditioning etc., including bailing out water and disposal of extra soil including back filling with excavated earth and ramming of trenches after cable laying for the following depths and widths as specified in Technical Circular No. 2 of 1988 & 01/2010 issued by CSTE/SER. Note:- In case, trenches are other than prescribed depth & width, Proportionate payment shall be released.: Depth 1.2 meter, Width 0.5 meter.	94.00	Kilometre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
15.00	Excavation of trench in all kinds of soils including soft rocky area and clearing of roots of trees, rocks, bushes, ballast & reconditioning etc., including bailing out water and disposal of extra soil including back filling with excavated earth and ramming of trenches after cable laying for the following depths and widths as specified in Technical Circular No. 2 of 1988 & 01/2010 issued by CSTE/SER. Note:- In case, trenches are other than prescribed depth & width, Proportionate payment shall be released.: Depth 1.0 meter, Width 0.3 meter.	59.00	Kilometre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
16.00	Excavation of trench in all kinds of soils including soft rocky area and clearing of roots of trees, rocks, bushes, ballast & reconditioning etc., including bailing out water and disposal of extra soil including back filling with excavated earth and ramming of trenches after cable laying for the following depths and widths as specified in Technical Circular No. 2 of 1988 & 01/2010 issued by CSTE/SER. Note:- In case, trenches are other than prescribed depth & width, Proportionate payment shall be released.:Depth 0.8 meter, Width 0.3 meter.	35.00	Kilometre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
17.00	Excavation of trenches including clearing of roots of trees etc.in hard/rocky soil by chiselling up to a depth of 0.5 meter to 0.8 meter and width 0.3 meter at the bottom, supply & placing split RCC pipes with collar (for jointing pipes) of 100 mm nominal diameter to Spec. No. IS: 10262-1982 or latest and IS-456-2000 as per SEM Drawing No. 15-D3 (Sheet-2) on sieved soil of 30mm over cable and concreting(1:2:3) throughout the length upto a layer of 75mm approximately, then back filling the trench by digging and carrying earth from a distance of maximum 30 meters and then ramming of soil after cable laying. This includes Split RCC Pipes with collar and all the materials for concreting are to be supplied by the contractor. Materials inspection shall be done by Railway Site Engineer.	3000.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
18.00	Excavation of trench in all kinds of soils including soft rocky area and clearing of roots of trees, rocks etc. to a depth of 1 metre and width 0.3 metre. For Track/ pucca road/platform crossing/ level crossing as per SEM Drawing No.15-D5 including supply, transportation and laying of RCC Pipes(full) with collar(for jointing pipes) Inner diameter/Outer diameter: 100mm/150mm to Specification No. IS: 10262-1982 or latest and IS-456-2000 RCC structural drawings as per SEM Drawing No. 15-D3 (Sheet-2) in trench and drawing of cable through RCC Pipes with collar(for jointing pipes) including back filling and ramming after cable laying as specified in Technical Circular No. 2 of 1988 & 01/2010 issued by CSTE/SER for S&T Cables (Cable laying charges is also included).This includes repairing and plastering of platform/pucca road after cable laying. Material inspection shall be done by Railway Site Engineer.	5600.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
19.00	Excavation of trench in all kinds of soils including soft rocky area and clearing of roots of trees, rocks etc. to a depth of 1 metre and width 0.3 mtr. For Track/ pucca road/platform crossing/ level crossing as per SEM Drawing No.15-D5 including supply, transportation and laying of DWC pipes (full) with collar(for jointing pipes) Inner diameter/Outer diameter:103mm/120mm to Specification No.14830(Part-2):2001 as per SEM Drawing No. 15-D4,in trench and drawing of cable through DWC pipes with collar(for jointing pipes) including back filling and ramming after cable laying as	3000.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	specified in Tech. Circular No. 2 of 1988 & 01/2010 issued by CSTE/SER for S&T Cables (Cable laying charges is included). This includes repairing and plastering of platform/pucca road after cable laying. Material inspection shall be done by Railway Site Engineer.					
20.00	Excavation of trenches at kacha roads / under the low flooded bridges / culverts or places as advised by the site in-charge of the Railway and placing of RCC(full) pipe 100 mm dia. inside excavated trenches of suitable depth at kacha road/ culverts and concreting the collars at the places of joints and at both ends. Note:-RCC pipe 100 mm dia. with collars Spec. No. IS: 10262-1982 or latest and IS- 456-2000 as per SEM Drawing No. 15-D3 (Sheet-2) Class NP2 and concreting materials for collars will be supplied by the contractor.	1400.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
21.00	Cutting and smoothening of inside surface of sizes 80 mm deep and 170 mm width for single/multiple cable chase in concrete or hard rocks or platform or cemented floor. This work includes laying and covering of cable laid in the chase with standard sizes Second class/Fly Ash brick placed and embedded longitudinally and plastered on the top of the bricks and curing 72 hrs. as per Drawing No. Con/SK/T/1 for the following. (i) Single cable/Multiple cable (upto 3) (see Note 4 of Drawing no. Con/SK/T/1). Note: Bricks, sand and cement shall be supplied by the contractor at site and to be inspected by Railway Site Engineer before placing in the chase.	840.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
22.00	Chase cutting and smoothening of inside surface of sizes 80 mm deep and 170 mm width for single/multiple cable chase in concrete or hard rocks or platform or cemented floor. Note: Sand and cement shall be supplied by the contractor at site and to be inspected by Railway Site Engineer before placing in the chase.	840.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
23.00	Supply, transportation and fixing of Galvanised Iron Pipe (make: TATA/Jindal or better) with threaded collars (for jointing pipe) of 100 mm nominal bore Specification No. IS: 1239, thickness 3.6 mm medium grade, on bridges, culverts, drain or at places as per instruction of the site Engineer including supply and transportation of materials required for fixing the pipe as per SEM Drawing No.15-D7 including drawing of cables inside the pipe	1760.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	with masonry work at bridge entry and exit of the culvert and curing for 72 hours and pipes are to be clamped at max. 2 meter apart with drilling of holes on the pipe at 10 cm apart for the following: S&T Cables.The Galvanized iron pipes and other materials required for fixing to be supplied by the contractor. Material inspection shall be done by Railway Site Engineer before use. Note: This also includes dismantling of released GI Pipe/Trough and released material should be returned at concerned store.					
24.00	Supply, transportation and fixing of Galvanised Iron Pipe (make: TATA/Jindal or better) with threaded collars (for jointing pipe) of 100 mm nominal bore Specification No. IS: 1239, thickness 3.6 mm medium grade and fixing on girder bridges as per Drawing No. CON/SK/T/4 including supply and transportation of channel, angle, iron brackets with Steel Nuts and bolts with hole and split pin of proper size for fixing of through the Drawing No. CON/SK/T/4 including drawing of cables inside the pipe with masonry work at bridge entry and exit of the Bridge and curing for 72 hours and pipes are to be clamped at 1.5 meter apart for the following S&T Cables. The Galvanized iron pipes and other materials required for fixing to be supplied by the contractor. Material inspection shall be done by Railway Site Engineer before use. Note: This also includes dismantling of released GI Pipe/Trough and released material should be returned at concerned store.	3300.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
25.00	Transportation, laying including supply of Split RCC pipe as per Spec. No. IS: 10262-1982 or latest and IS-456-2000 & SEM Drawing No.15-D3 having plain ends with their jointing loose split collar half round of size 150 mm (inner diameter)/25mm thickness at site over the single/multiple cable laid in the trench.	6000.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
26.00	Transportation, laying including supply of Split RCC pipe as per Spec. No. IS: 10262-1982 or latest and IS-456-2000 & SEM Drawing No.15-D3 having plain ends with their jointing loose split collar half round of size 200 mm (inner diameter)/25mm thickness at site over the single/multiple cable laid in the trench.	3600.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
27.00	Transportation of cables in rolls with or without wooden drums (S&T Cables) from concerned store to the site of works.	1956.00	Drum-Km	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
						Execution SOR)
28.00	Laying of S&T Cables (Signal/Quad/Power) in the excavated trench to Drawing No. CON/SK/T/5. Transportation and supply of 'U' clamps, anchoring of cable at every 10 mtrs interval with 'U' clamp on trench to Drawing No. CSTE/CON /CABLES/81. Transportation, supply and placing of cable demarcating lead belt to Drawing No. CON/SK/T/6 punched at an interval of 30 mtrs. and wrapped round each cable throughout the cable route and also at every track/Road/ platform crossing as above specified in Technical Circular No. 2/1988 & 01/2010 issued by CSTE/SER and guarding the cables collecting empty drums with left over cable and return to the stores of stock holder.	1956.00	Kilometre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
29.00	Transportation including loading/unloading of Optical Fibre Cable along with HDPE pipe from the stores of SSE/Store or from any store of SE Railway to the site with care and laying of OFC as per procedure and returning empty cable drums with or without left over cable to the stores of SSE/Store. It includes supply and placing of warning & Detection tape orange colour of 100 mm. Wide printed in black as "CAUTION OFC CABLE" at every 1 meter interval (Minimum) and laid in the trench in station section and as directed by the Representative of Railway.	172.00	Kilometre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
30.00	Hiring of JCB/Hydra/ Poclain machine (in good working condition) for levelling & dressing of ground/ dismantling structures including disposal of debris through dumpers/Shifting the location box or signal post with foundation etc. with contractors labour, JCB/Hydra /Poclain machine, machine operator, fuel etc. Payment shall be made for actual working hrs. at site & proportionate payment to be made in case less than hours. Note: Vehicle shall not be more than 3 years old.	720.00	Hour	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
31.00	Supplying and placing of one layer of standard size of 'B' grade quality bricks spreading on cables laid. (minimum size of brick 200 mm X 100 mm X 70 mm):: Lengthwise (Approx. 4 to 5 bricks for up to 2 cables).	3420.00	Running Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
32.00	Supplying and placing of one layer of standard size of 'B' grade quality bricks spreading on cables laid. (minimum size of brick 200 mm X 100 mm X 70 mm)::Widthwise	2280.00	Running Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	(Approx. 9 to 10 bricks for more than 2 cables).					
33.00	Removal of Rail (13 m) in the way of cable route trench, signal/location box foundation, track crossing etc. In case of less or more than 13 m, proportionate payment to be done. These obstruction will be removed by the contractor for ensuring proper execution of related works.	1200.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
34.00	Removal of PSC/Wooden/Steel sleeper in the way of cable route trench, signal/location box foundation, track crossing etc. These obstruction will be removed by the contractor for ensuring proper execution of related works.	1200.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
35.00	Supply & installation of RFID based Electronic/Pipe route marker for S&T cable with programmable memory for saving the user specific data which can be buried at a depth range 1.5 meter. Make - Stanly/3M or similar Note: 90% payment can be done after supply of item & rest 10% after execution along with final cable route plan.	3774.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
36.00	Execution of Full Apparatus Case with pit, concrete foundation, surrounding earth work, erection, installation as per Drawing No. Con/SK/T/8 and wiring as per SEM Drawing No.19-D8 or as per direction of site engineer. Fixing of Hylam sheet strip of size approx. 925mmx100mmx3mm (including supply) with hole on both side for writing & terminal description, terminals, fuse blocks, relay and other accessories for signal/track circuit, termination of cable with number embossed ferrules, bunching of cables with PVC tape, earthing of cable armour as required. Painting of the apparatus case inside and outside after clearing the surface thoroughly and first coating of anticorrosive paint and subsequent two coats of Aluminium paint outside and red oxide inside and lettering etc. This includes transportation of 25 mm/12mm Hylam sheet for shelf or as required and also includes minor modification in L/Boxes as per site requirement .The contractor shall supply of 4 no. of foundation bolts 22 mm dia. x 450 mm long with 2 flat spring washers, one nut is to be used for each set, sand for filling up cable pit inside the apparatus case and bolts, nuts, screws, MS Clamps for fixing equipment/cable. Note: - Part payment shall be released after completion of- (i) Foundation-40%,	698.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	(ii) Erection - 10%, (iii) Wiring, earthing, testing - 20%, (iv) Painting, writings - 10%, (v) Plastering, sand filling & etc. - 10%, (vi) Commissioning - 10%.					
37.00	Execution of Half Apparatus Case with pit, concrete foundation, surrounding earth work, erection, installation Drawing No. SEM, 19-D2 and wiring as per SEM Drawing No.19-D9 or as per direction of site engineer. Fixing of Hylam sheet strip of size approx. 450mmx100mmx3mm (including supply) with hole on both side for writing & terminal description, terminals, fuse blocks, relay and other accessories for signal/track circuit, termination of cable with number embossed ferrules, bunching of cables with PVC tape, earthing of cable armour as required. Painting of the apparatus case inside and outside after clearing the surface thoroughly and first coating of anticorrosive paint and subsequent two coats of Aluminium paint outside and red oxide inside and lettering etc. This includes transportation of 25 mm/12mm Hylam sheet for shelf or as required and also includes minor modification in L/Boxes as per site requirement. The contractor shall supply of 4 no. of foundation bolts 22 mm dia. x 450 mm long with 2 flat spring washers, one nut is to be used for each set, sand for filling up cable pit inside the apparatus case and bolts, nuts, screws, MS Clamps for fixing equipment/cable.Note: - Part payment shall be released after completion of- (i) Foundation- 40%, (ii) Erection - 10%, (iii) Wiring, earthing, testing - 20%, (iv) Painting, writings - 10%, (v) Plastering, sand filling & etc. - 10%, (vi) Commissioning - 10%.	19.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
38.00	Execution of Quarter size Apparatus Case with pit, concrete foundation, surrounding earth work, erection, installation Drawing No. SEM, 19-D2 and wiring as per site requirement. Fixing of Hylam sheet strip of size approx. 450mmx100mmx3mm (including supply) with hole on both side for wiring & terminal description, terminals, fuse blocks, relay and other accessories for signal/track circuit, termination of cable with number embossed ferrules, bunching of cables with PVC tape, earthing of cable armour as required. Painting of the apparatus case inside and outside after clearing the surface thoroughly and first coating of anticorrosive paint and subsequent two coats of Aluminium paint outside and red oxide inside and lettering etc. This includes transportation of 25 mm/12mm Hylam sheet for shelf or as required and also includes minor modification in L/Boxes as per site requirement. The contractor shall supply of 4 no. of foundation bolts 22 mm dia. x 450 mm long with 2 flat spring washers, one nut is to be used for each set, sand for filling up cable pit inside the apparatus case and bolts, nuts, screws, MS Clamps for fixing equipment/cable. Note: - Part payment may be released after completion of- (i) Foundation- 40%,(ii) Erection - 10%, (iii) Wiring, earthing, testing -20%, (iv) Painting, writings - 10%, (v) Plastering, sand filling & etc. - 10%, (vi) Commissioning - 10%.	10.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
39.00	Alteration/modification in existing location boxes, fixing of equipments, cable insertion, termination, wiring, testing & commissioning, two coat painting, lettering to suit the circuits as per approved wiring diagram. This includes filling with sand and plastering the same. Note: All the sundry materials except that included in supply schedule shall be supplied by the contractor.	188.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
40.00	Transportation, installation of 2-Aspect Signal Post for MACLS as per drawing no. Con/SK/T/12 or SEM-Drawing No. 19-D3 complete with signal units, base, ladder and other fittings, excavation of pit, erection of posts, casting concrete foundation thereof as specified in the note given in drawing, fixing of complete fittings of the signals with necessary earth screen protection arrangement including termination of cables, painting and lettering as required. Foundation Bolts of	38.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	size 24 mm x 915 mm as per RDSO Drawing No. SA-116 A/M confirming to IS: 226 and IRS:S-10/78 Rev.8.					
41.00	Transportation, installation of 3/4 - Aspect Signal Post for MACLS as per Con/SK/T/12 or SEM-Drawing No. 19-D3 complete with signal units, base, ladder and other fittings, excavation of pit, erection of posts, casting concrete foundation thereof as specified in the note given in drawing, fixing of complete fittings of the signals with necessary earth screen protection arrangement including termination of cables, painting and lettering as required. Foundation Bolts of size 24 mm x 915 mm as per RDSO Drawing No. SA-116 A/M confirming to IS: 226 and IRS:S-10/78 Rev.8.	196.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
42.00	Transportation and fixing of Junction type Route Indicator with Route arm on the erected signal post including termination of cables, painting lettering as required.:Route Indicator with Route arm One way.	1.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
43.00	Transportation and fixing of Junction type Route Indicator with Route arm on the erected signal post including termination of cables, painting lettering as required.: Route Indicator with Route arm Two way.	2.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
44.00	Transportation and fixing of Junction type Route Indicator with Route arm on the erected signal post including termination of cables, painting lettering as required.: Route Indicator with Route arm Three way.	2.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
45.00	Transportation and fixing of Junction type Route Indicator with Route arm on the erected signal post including termination of cables, painting lettering as required.: Route Indicator with Route arm Four way.	2.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
46.00	Transportation and fixing of Junction type Route Indicator with Route arm on the erected signal post including termination of cables, painting lettering as required.: Route Indicator with Route arm Five/six way.	2.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
47.00	Transportation and fixing of Calling ON Signals/ Dependent Shunt Signals / Illuminated 'A' / Illuminated 'AG' marker for MACLS on the erected signal post complete with marker including termination of cables, painting and lettering as required.	314.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
48.00	Fixing of P/G/C/A/AG/IB Marker/Arrow marker/Signal Number plates with complete fittings as per site requirement.	430.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
49.00	Transportation, Installation, Wiring, Testing & Commissioning of LED Signals Lamps for Main signals Lighting Unit (i.e. Red, Yellow, and Green) as per instruction of railway Engineer at the site. Note:- LED particulars such as aspect, make, type, Sr. No. etc. to be recorded in proper register.	1148.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
50.00	Transportation, Installation, Wiring, Testing & Commissioning of LED Signals Lamps for Subsidiary signals lighting unit (i.e. Route aspect, Shunt Signal, Calling on aspect, A marker etc.) as per instruction of railway Engineer at the site. Note: LED particulars such as aspect, make, type, Sr. No. etc. to be recorded in proper register.	360.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
51.00	Transportation, installation and painting with retro reflective tape of SLB/BSLB/Legend/Stop Board etc. as per SEM Drawing No. 19-D4. This includes i) Excavation of pit of depth 900 mm, width 600 mm.ii) casting in the ratio of cement concrete mixture shall be 1:3:6 iii) foundation, (iv) Erection etc. Note: Supply of sighting board by contractor to be as per SEM Drawing No. 12-D1 or specified by Railway.	4.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
52.00	Transportation, installation and painting of SLB/BSLB/Legend Board/Stop board etc. as per SEM Drawing No. 19-D4. This includes i) Excavation of pit of depth 900 mm, width 600 mm. ii) excavation & shifting of old boards to new position. Note: The contractor shall supply all the materials required for the work except Boards which are to be supplied by the railway and lighting arrangement to the SLB/BSLB.	4.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
53.00	Alteration / modification, testing, commissioning, two coat painting, lettering of the existing Multi aspect signals/Shunt/Calling-On Signals to suit the circuit as per approved wiring diagram.	138.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
54.00	Supply and fixing of protective screen of expanded metal 12 SWG of size 1200 x 1500 mm on signals as per std. practice of SER and earthing the screen with MS flat of 2"x 1/4"using GI nut bolts and washer.	50.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
55.00	Transportation, Grouting/erection, wiring as per approved wiring diagram of 19" relay rack/Composite/QSeries Relay Rack with subsequent alteration (with 3/4 X 9" anchor bolts with one nut and one washer per bolt & D-bracket & 60mm insulator), fixing of M.S. ladder as per requirement for rack to rack connection, CTR and control panel, fixing of plug boards, relays, terminal blocks, terminals, filter units, tag blocks, fuses, bus bars, shelves,	60.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	strips, 6mm Hylam sheet of required length for writing terminal description etc. fixing and termination of cables on the relay racks with number embossed ferrules, bunching of cables with PVC tape, earthing of cable armour including painting and lettering. Wiring and testing of complete relay rack accommodating all relays as per wiring diagram. All materials such as eyelets, M.S ladder, Hylam sheets, ferrules, trough etc., if required for modification of rack shall be supplied by the contractor and to be carried out at site within the cost.					
56.00	Transportation, erection, fixing, installation and commissioning of Cable Termination rack (CTR), fixing of MS Wiring ladder from relay rack to CTR, and on to top of the CTR- including supply of 3/6mm Hylam sheet of required size for fixing terminal blocks & writing terminal description, termination of cables, bunching of cables by PVC tape and earthing of cable armours, painting, lettering as required. The contractor shall draft terminal analysis chart on the white bond paper of appropriate size & supply wiring materials like eyelets of sizes, trough, condensers and resistances as per required value, HV protection cover with fixing top caps and danger symbol, soldering material of approved quality etc. shall be supplied by the contractor. Cement of approved brand, stone chips 5/8" and sand as required for mounting CTR, Sand for filling of cable pit and other required masonry work, Sundry materials such as MS plate/angles, MS wiring ladders as per approved Drawing, Anchor bolt 5/8" X 9" with nut and washers -4 No., Nickel plated screws 2BA X1" with nuts and washers for fixing Hylam sheet, numbers embossed ferrules 2.5 sq. mm, PVC bunching tapes and buttons, paint synthetic enamel of smoke grey colour for painting, MS clamps with bolts and nuts of sizes, D-bracket and 60mm insulator, for fixing cables, screws of sizes as required shall be supplied by the contractor. Cables should be routed properly through ladder. All the materials required for installation, wiring, testing and commissioning as per the approved wiring diagram except the materials included in supply schedule shall be supplied by the contractor.	77.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
57.00	Alterations/modifications works on existing relay rack (Qseries/ Composite Relay Racks)/Cable Termination Racks (CTR) including works of installation, wiring, termination, testing and commissioning. The work includes fixing of aluminium/steel/M. S. ladder along with supply as per requirement to accommodate additional plug board, relays, terminals/blocks, terminals, tag blocks, fuses, transformers, bus bars, TW shelves/strips etc. in the existing relay racks/CTR's, 6 mm Hylam sheets of required length for writing terminal description etc. fixing and termination of cables on the relay racks, CTR's with number embossed ferrules, bunching of cables with PVC tapes, earthing of cable armours, covers including painting and lettering, making anti tilting arrangement. Note:- a) Existing relay rack (Q- series/ Composite Relay Racks) : Payments for alterations in existing relays upto 20 nos. relays & above 20 nos. shall be made 50% & 100% respectively. b) Cable Termination Racks (CTR):- Payments for alterations in existing CTR upto 120 cores & above 120 nos. cores shall be made 50% & 100% respectively.	23.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
58.00	Installation, Wiring, Testing, Validation and commissioning of Remote terminal unit with 128 Digital & 16 Analog inputs with modem as per Specification No. IRS:S-99/2006 (Amdt-3) or latest.	10.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
59.00	Installation, Wiring, Testing, Validation & commissioning of Data logger with 512 Digital and 32 Analog input with modem as per Specification No. IRS:S99/2006 (Amdt-3) or latest.	17.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
60.00	Supply, installation, testing & commissioning of Central Monitoring Unit (CMU) suitable for Data logger system or other application. Note:- CMU PC configuration are as follows:-Intel Core i5 10500 16 G B Ram, HDD 1000 GB, SSD 512 GB / Windows10 Professional, 2K Display- 21.5 inch.	2.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
61.00	Supply and installation of Multi Port Front End Processor (FEP) with 8 nos. of dual card modems with and 230/24V/10A charger and 24V, 42AH maintenance free battery as per Specification No. IRS:S-99/2006 (Amdt-3) or latest.	1.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
62.00	Installation, Testing and Commissioning of UFSBI for IB operation or Other works as per decision of site incharge complete	4.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	with all accessories as per Specification No. IRS:S-105/2012 (Ver.0) or latest.					Execution SOR)
63.00	Transportation, installation and wiring of Rotary key transmitters/KLCR on Hylam sheet board including wiring & fixing of push button bell switch on Hylam sheet of 12mm including termination, painting & lettering. The sundry materials such as Hylam sheet, push bell switch etc. to be supplied by contractor.	38.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
64.00	Supply and Installation of Glass fronted Key box made of water resistant Engineered wood for Rotary key transmitters (RKT)/EKT/KLCR/ SM's key box of appropriate size etc. with locking arrangement and 1 no. of G odrej make padlock it should be done as per site supervisor instructions. After installation it should be painted and letter writing as per SER practice.	18.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
65.00	Transportation, grouting and laddering of Integrated Power Supply (IPS) System including termination of power & signalling cables on Hylam sheet fixing on MS angle by contractor on wall in panel room, IPS room of adequate size duly fixed with galvanized MS clamp, ladder, painting & lettering. Note: Transportation of batteries, electrolyte, bolts & nuts, screws, trough etc. and other sundry materials required for the above work shall be supplied by the contractor as required. The IPS to be commissioned by the OEM.	27.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
66.00	Installation, testing and commissioning of track circuit on Straight Portion of Track (without involving points and crossings) as per Drawing No. SK/DRG/OL/27 and track bonding plan including drilling of 9/32" hole on Rails, provision of bonding, Glued Joints, fixing and painting of Track Lead Junction Boxes, provision of tail cable terminations, Track lead wires, Jumper wires, terminals, track feed set (Track Charger, Adjustable Resistance, choke coil, fuses, battery etc.) and also lettering/ numbering of track lead junction boxes, block joints and track circuits. This also includes transportation of all materials required for the above installation. Note:- Track feed set, bonding wires, TLJB, channel pin, tail cable to be supplied by Railway.	4.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
67.00	Transportation, installation, testing and commissioning of Electric lifting barrier (ELB) which includes excavation of pit, casting of foundations, fixing of pedestals, Boom rest etc., installation and wiring of control panel, booms for level crossing gate complete in all respect including provision of boom locking arrangements with fixing of boom light box, stop board boom rest and equipment of operation of gate from control panel, painting, lettering with following accessories:- (i) 2 (two) nos. lifting barriers with all accessories. (ii) 1 (one) Control panel (iii) Positive boom locking arrangements for above. (iv) Emergency crank handle attachment (v) Timer unit to adjust the time for operating the barrier (vi) Fixing of Hooters/Flashers on either side of gate barrier.	18.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
68.00	Transportation, installation, testing and commissioning of Emergency Sliding Boom at LC gates which includes casting of concrete foundation (total ten numbers per gate) including surrounding earthwork, fixing of lock post, clamps, welding of channel, cutting of rail post if required as per site condition. Note-Sliding boom with Pad lock, EKT, lock shall be supplied by the railway. All other required materials shall be supplied by the contractor.	18.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
69.00	Installation, wiring, testing and commissioning of the Control cum Indication panel as per approved interlocking plan, FPD, circuit diagram etc. (Mid- section interlocked LC Gate/IBS(operation-cum indication console Domino type)/ Siding motor operated point operation panel /Non Interlocking panel) For Single/Double line only.	1.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
70.00	Installation, wiring, testing and commissioning of the Control cum Indication panel as per approved interlocking plan, FPD, circuit diagram etc. (Mid- section interlocked LC Gate/IBS(operation-cum indication console Domino type)/ Siding motor operated point operation panel /Non Interlocking panel) With 3rd line only.	19.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
71.00	Modification of existing Domino type panel for Double distant/Auto signal or external arrangement for displaying the distant signal aspect separately in SM room. It includes drawing & design, all indoor wiring, cable termination and modification of relay rack in indoor and location	1.00	Station	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	box at outer if required for commissioning Double distant/Auto signal.Note:- This includes all required materials such as panel LED's, Dominos and button assemblies, counter, keys, buzzer etc. for commissioning.					
72.00	Excavation of earth pit, placing & fixing of Earth electrode with construction of cement enclosure to SEM Drawing No. 19-D6 and drawal of 6 SWG GI/Copper cable from earth electrode to goomties, relay room, cabin, station, etc. and drawal of MS flat 35mm x 6mm for signal post/Location box shall be used as the case may be, including fixing at both ends of the wire/MS flat. This includes transportation of materials. Note: Materials such as charcoals, salt, sal ammoniac, 6 SWG GI wire, copper lugs with Steel bolts & nuts etc. shall be supplied by the contractor. MS flat 35mm x 6mm/Copper cable shall be supplied by Railway.	1123.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
73.00	Installation of Single Maintenance Free Earth pit as per RDSO Drawing No. SDO / RDSO/ E&B/001 which includes the following:-a) Digging/Auguring/Boring of single earth pit of 100mm to 125mm dia. to the depth of approx. 3 meter. b) Insertion of 3.0 meter electrode and penetrating it minimum 150 mm by pushing gently with sledge hammer where the natural soil is assumed. (c) Filling of earth pit with Earth Enhancement Compound (EEC) in slurry form and backfilling. (d) Carrying out exothermic weld connection on single earth electrode to a copper tape of 200 x 25 x 6 mm. (e) Carrying out exothermic weld connection on the copper tape of 200 x 25 x 6 mm on Earth Electrode for connecting two 35 Sq. mm cables for redundancy. (f) The exothermic welding material for bonding the earth system shall be procured from RDSO approved firms, which includes graphite modules, clamps, weld metal powders. (g) The dimension of the chamber will be of 300 x 300 x 300 mm (inside dimension) of RCC with 50mm thick and fine finish, Inspection chamber should be as per IEC 62561-5 or latest. The top RCC cover size shall be 400mmX400mmX50mm. The date of testing and earth resistance value shall be written on the cover with black base with yellow paint.	146.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
74.00	Digging a trench to a minimum depth of 0.5 meter and laying 50x6 mm bare Galvanized steel tape (Interconnecting tape) connecting all the earth pits. Routing and laying 50x6 mm Galvanized steel tape connecting all the earth pits. Carrying out exothermic weld connections on all the earth electrodes to Galvanized steel tape of size 50x6 mm for interconnecting the earth pits. It shall be ensured that the distance between any two earth electrodes shall be minimum 3 meter (length of the earth electrode) and max up to 6 meter (twice the length of the earth electrode) to avoid mutual resistance effects. This interconnecting tape shall also be covered with approximately 30 Kg of earth enhancing compound for each 3 meters length. Earth enhancement compound 10Kg along each meter also to be spreaded along the Galvanized steel tape.	720.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
75.00	Routing and termination of 25x2 mm Copper tape/8 mm solid copper round conductor which is to be fixed inside the equipment room with 60mm, 6KVA insulation studs including supply of insulation studs. The separation of the two successive insulation stud should be 600mm apart.	1155.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
76.00	Routing and connecting all the equipment in the equipment/relay room to SEEB with 10 sq. mm copper cable using copper lugs with stainless steel nut and bolts and fixtures. The work includes laying and routing the copper cable in PVC / conduits and fixing them on wall.	2900.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
77.00	Routing and connecting of all the SPDs in the equipment room/SEEB to MEEB with 16 sq. mm copper cable using copper lugs with stainless steel nut and bolts.	1450.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
78.00	Digging a trench to a depth of at least 0.5 meter and run the two 35 sq. mm earth conductor (procured against supply item) from Earth pit to MEEB. Routing and exothermic termination of two 35 sq. mm earth conductors in trench from earth pit to 300 x 25 x 6mm MEEB, which is to be fixed inside the equipment room with two 60mm insulation studs.	1850.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
79.00	Supply and Installation of Lightning Protection System Class A type, detail as follows- (1) Lightning arrester technology: Advance Early Steamer Emission. Material: High current discharge stainless steel. International standards: NFC 17-102. (2) Mast material: FRP pipe and high-grade aluminium. Dimension: 50mm. length: 2 metres FRP pipe and 2 metres high grade aluminium mast. (3) Down conduct cable: PVC insulated copper cable. Dimension: 50 Sq. mm, length: 75mtrs (per set) Lightning strike counter number of counts: 6 digits. Current sensitivity: 1KA to 200 KA, 8/20 & 10/350 micro/Sec. induction Shunt: 0.5 micro. (4) Two (02) No. of maintenance Free Earth with all required consisting as per Specification No. RDSO/SPN/197/2016 Ver 1.0 or latest with all required copper cables and strips.	27.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
80.00	Installation, testing & commissioning of Earth Leakage Detector (ELD) - 8 channels as per Specification No. RDSO/SPN/256/2002 or latest.	27.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
81.00	Supply, Installation, Testing & Commissioning of Networkable Single loop addressable Fire alarm Control panel expandable upto 2 loops & interface with GSM/LTE module working as per RDSO/SPN/217/2021 ver-3 or latest. The control panel shall be networkable to Zonal /Divisional Headquarters preferably over TCP/IP and shall have clock synchronization facility. This schedule includes supply of TCP/IP converter/ Networking card. The control panel shall have provision of Graphical software to enable remote monitoring of entire fire detection and alarm system of a station from Head Quarters. The control panel shall be designed to work on power supply of 110V/230V AC as well as on DC battery backup of adequate capacity to work upto 24 hrs. Backup. The Power supplies like batteries and chargers shall be supplied by the contractor. The Control Panel shall have means for the user to visualize and interact with the complete Automatic Fire Detection and Alarm System layout through a user-friendly software executable on a standard Windows based Personal Computer. It shall be possible to download data and extend alarms from Control Panel	27.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	through suitable ports like RS485/RS232/USB/TCP/IP into a PC/Laptop available with SSE at the installation and remote location (Divisional Control room) operating on Windows platform. The software for downloading and analysing fault data shall be provided & shall be compatible with the latest windows operating system. Detection, actuation, and control system shall have provision for automatic as well as manual operation. The GSM/LTE module for interfacing with Control panel duly providing compatible SIM with SMS facility on minimum of 5 numbers (users) and all other accessories. Spares cost are also included & to be supplied as per RDSO para no. 4.15.					
82.00	Supply, installation testing & commissioning of Heat and smoke multi sensor with back box with integral short circuit isolator as per specification No. RDSO/SPN/217/2021 ver-3 or latest and required to be provided at suitable locations inside the diesel generator room, battery room, ASM room, and other S&T service rooms as directed by the Railway site Engineer. The location of fixing is to be meticulously decided so that full advantage of the system is achieved. Spares cost are also included & to be supplied as per RDSO para no. 4.15.	216.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
83.00	Supply, Installation and Testing, commissioning of Audio Visual alarm (Hooter and strobe) with back box controlled through addressable control model. Visual Alarms (Strobe): It shall be preferably flashing type RED/WHITE Color. Audio Alarms (Hooter): It shall be preferably with Piezoelectric type sounder. The sound level shall be preferably adjustable type up to 90dB at a distance of 1m as per specification No. RDSO/SPN/217/2021 Ver - 3 or latest. Spares cost are also included & to be supplied as per RDSO para no. 4.15.	27.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
84.00	Supply, Installation and Testing, commissioning of Analogue Addressable and resettable Manual call point with back box with integral short circuit isolator, Analogue addressable protocol having status LED for alarming & standby mode, Binary coded dip switch addressing. It shall have inbuilt fault isolator or alternate arrangement which shall isolate the Manual Call Point in case of open/short circuit fault within it as per specification No.	27.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	RDSO/SPN/217/2021 ver-3 or latest. Spares cost are also included & to be supplied as per RDSO para no. 4.15.					
85.00	Supply, Installation, Testing and Commissioning of Relay module with back box and all other accessories as per RDSO/SPN/217/2021 ver-3 or latest. Spares cost are also included & to be supplied as per RDSO para no. 4.15.	27.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
86.00	Supply, installation, testing & communication of Linear Heat Sensing (LHS) Interface module with all accessories for integration with main line fire alarm control panel as per RDSO specification No. RDSO/SPN/217/2021 ver-3 or latest. Spares cost are also included & to be supplied as per RDSO para no. 4.15.	27.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
87.00	Supply, Installation Testing and commissioning of Analogue type Linear Heat Sensing cable with required module to be integrated on main Fire Alarm Panel as per specification No. RDSO/SPN/217/2021 ver-3 or latest. Spares cost are also included & to be supplied as per RDSO para no. 4.15.	2214.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
88.00	Supply, Installation Testing and commissioning of FRLS/Fire Survival Circuit Integrity Cables and power cable with all accessories for connection of Fire Alarm devices specification No. RDSO/SPN/217/2021 ver-3 or latest. Spares cost are also included & to be supplied as per RDSO para no. 4.15.	3726.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
89.00	Supply, installation, configuring, testing and commissioning of remote monitoring software (GUI) along with license for Min. 20 addressing control panels with license as per RDSO/SPN/217/2021 Ver-3.0 or latest. This includes necessary gateway card and network interface card for the system fully functional as desired by railways. Spares cost are also included & to be supplied as per RDSO para no. 4.15.	2.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
90.00	Execution of Straight joint on Quad cable/ jelly filled Telecom cable using Thermo-shrink/Universal jointing kit (RTSF). This includes excavation of cable joint pit of size 1.2m x 1.2m x 1.0m for jointing of cables, back filling and ramming after jointing.	10.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
91.00	Execution of Derivation/Transformer joint on Quad cable/ jelly filled Telecom cable using Thermoshrink/Universal jointing kit (RTSF). This includes excavation of cable joint pit of size 1.2m x 1.2m x 1.0m for jointing of cables, back filling and ramming after jointing & without VF transformer.	10.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
92.00	Installation and commissioning of Fibre Distribution Management system (FDMS) for 24 Fiber complete with all accessories with patch cord & pigtail as per TEC Spec. with latest amendment. This include supply of installation accessories as per technical specification.	48.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
93.00	Installation and commissioning of Fibre Distribution Management system (FDMS) for 48 Fiber complete with all accessories with patch cord & pigtail as per TEC Spec. with latest amendment. This include supply of installation accessories as per technical specification.	236.00	Set	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
94.00	Splicing of Optical Fiber Core and routing in joint closure/FDMS as per instruction of site Engineer.	17040.00	CORE	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
95.00	Supply, transportation and installation of RCC joint chamber with two piece top cover and bottom cover with holes for drainage and cable entry, as per Drawing No. RDSO/TCDO/COP-21(a). This includes trenching for jointing pit, back filling and ramming of the pit after placing the joint closure and cable loop in the chamber including dry sand upto 600mm height without causing any damage to same and consolidation of soil as well as disposal of excess soil.	95.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
96.00	Transportation and fixing of following types of C.T. Box (Aluminium/Wago type) and termination of cable as per details of jointing schedule approved by the Railway Engineers.:20 pair C.T. Box	12.00	Numbers	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
97.00	Transportation and fixing of following types of C.T. Box (Aluminium/Wago type) and termination of cable as per details of jointing schedule approved by the Railway Engineers.:Up to 200 Routes	8.00	Station	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
98.00	Transportation and fixing of following types of C.T. Box (Aluminium/Wago type) and termination of cable as per details of jointing schedule approved by the Railway Engineers.:More than 200 Routes	4.00	Station	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
99.00	Transportation and fixing of following types of C.T. Box (Aluminium/Wago type) and termination of cable as per details of jointing schedule approved by the Railway Engineers.:Up to 200 Route	8.00	Station	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
100.00	Transportation and fixing of following types of C.T. Box (Aluminium/Wago type) and termination of cable as per details of jointing schedule approved by the Railway Engineers.:More than 200 Routes	4.00	Station	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
101.00	Preparation of yard diagrams/Auto section diagram/speed restriction board, printing in vinyl with glossy lamination and installation at site as per requirement. Note: (1) The contractor may submit a paper print of yard diagram/Auto section diagram/speed restriction board for checking by Rlys. The same paper print diagram with corrections will be submitted to the Contractor. Then after incorporating all corrections the contractor may submit another paper print to Rlys and will take permissions of Rlys for final print. (2) The contractor should submit the final soft copies of yard diagrams in CD to Rlys. (3) This includes supply of board of suitable sizes with fixing arrangements on wall. (4) The printing should be clearly visible from 3-4 feet.	216.00	Square Foot	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
102.00	Cement Concrete of proportion 1:2:4 (Cement: Sand: Stone chips of 20mm nominal size) for miscellaneous items. It includes excavation, ramming of CC by using vibrator, curing and plastering with cement and sand mixture (aggregate will not exceed beyond 3.8 cm). Note: All materials required for foundation are to be supplied by the contractor.	300.00	cum	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
103.00	Cement Concrete of proportion 1:3:6 (Cement: Sand: Stone chips of 25mm nominal size) for miscellaneous items. It includes excavation, ramming of CC by using vibrator, curing and plastering with cement and sand mixture (aggregate will not exceed beyond 3.8 cm). Note: All materials required for foundation are to be supplied by the contractor.	300.00	cum	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
104.00	Providing brick masonry in ratio 1:6 cement & mortar including plastering with 1:4 cement & sand mixture both side, 20mm thick each with contractors own classII bricks including excavation, curing, grouting, bolting etc. wherever required. Bricks, sand & cement to be supplied by the contractor.	300.00	cum	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
105.00	Supply of PVC conduit pipe rigid plain ended conduit size 1 inch (25 mm) IS:9537(part-3) and 9537 (Part-1) 1980 with latest amendment ISI marked with minimum 1.2 mm wall thickness & one socket at every 3 meter pipe.	3726.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
106.00	Transportation and Fixing of PVC Conduit pipe/channel/casing capping on wall or structure with drawal of Telecom/Power /Data cable with proper finishing.	3975.00	Metre	₹ -	₹ -	Schedule 1- Schedule - A1 (S&T Execution SOR)
107.00	Horizontal Drilling by using manual pushing method (also called moling) at minimum depth of 1.5 meter below the formation level of earth as per decision of Engineer in charge. Boring diameter should be atleast 110mm. Note :-HDPE/GI pipe (make: TATA/Jindal or better) as per site requirements will be supplied by Railway.	706.00	Metre	₹ -	₹ -	Schedule 2- Schedule - A2 (Micro-tunneling SOR)
108.00	Micro Tunnelling through Horizontal directional drilling (HDD) machine, preparation of sites, boringm and laying of HDPE pipes of size (outer/inner diameter= 50mm/42mm) for crossing of S&T cable through HDPE pipe at bridges/culverts/track crossing/pucca road crossing, boring trench shall be minimum 3 (three) meter below the river bed and minimum 1 m at track/road/pucca road crossing area etc. This includes supply of permanently lubricated HDPE telecom ducts of equal length as per Specification No. RDSO/SPN/TC/45/2013 REVISION 2.0 with latest amendments. For each HDPE duct the following items are to be supplied as per requirement (a) End plug (b) Cable sealing plugs (c) Plastic coupler slip fit/push fit type (d) End plugs to be provided along with drum. In case the site doesn't allow to perform as per schedule, written approval must be obtained from atleast site incharge officer.Note: The boring profile should be recorded and submitted for verification of depth and length of boring.::1 HDPE pipe	7000.00	Metre	₹ -	₹ -	Schedule 2- Schedule - A2 (Micro-tunneling SOR)
109.00	Micro Tunnelling through Horizontal directional drilling (HDD) machine, preparation of sites, boringm and laying of HDPE pipes of size (outer/inner diameter= 50mm/42mm) for crossing of S&T cable through HDPE pipe at bridges/culverts/track crossing/pucca road crossing, boring trench shall be minimum 3 (three) meter below the river bed and minimum 1 m at track/road/pucca road crossing area etc. This includes supply of permanently lubricated HDPE telecom ducts of equal length as per Specification No. RDSO/SPN/TC/45/2013 REVISION 2.0 with latest amendments. For each HDPE duct the following items are to be supplied as per requirement (a) End plug (b) Cable sealing plugs (c) Plastic coupler slip fit/push fit type (d) End plugs to be provided along with drum. In case the site doesn't allow to perform as per schedule, written	7000.00	Metre	₹ -	₹ -	Schedule 2- Schedule - A2 (Micro-tunneling SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	approval must be obtained from atleast site incharge officer.Note: The boring profile should be recorded and submitted for verification of depth and length of boring.:2 HDPE pipe					
110.00	Micro Tunnelling through Horizontal directional drilling (HDD) machine, preparation of sites, boringm and laying of HDPE pipes of size (outer/inner diameter= 50mm/42mm) for crossing of S&T cable through HDPE pipe at bridges/culverts/track crossing/pucca road crossing, boring trench shall be minimum 3 (three) meter below the river bed and minimum 1 m at track/road/pucca road crossing area etc. This includes supply of permanently lubricated HDPE telecom ducts of equal length as per Specification No. RDSO/SPN/TC/45/2013 REVISION 2.0 with latest amendments. For each HDPE duct the following items are to be supplied as per requirement (a) End plug (b) Cable sealing plugs (c) Plastic coupler slip fit/push fit type (d) End plugs to be provided along with drum. In case the site doesn't allow to perform as per schedule, written approval must be obtained from atleast site incharge officer.Note: The boring profile should be recorded and submitted for verification of depth and length of boring.:3 HDPE pipe	10500.00	Metre	₹ -	₹ -	Schedule 2- Schedule - A2 (Micro-tunneling SOR)
111.00	Micro Tunnelling through Horizontal directional drilling (HDD) machine, preparation of sites, boringm and laying of HDPE pipes of size (outer/inner diameter= 50mm/42mm) for crossing of S&T cable through HDPE pipe at bridges/culverts/track crossing/pucca road crossing, boring trench shall be minimum 3 (three) meter below the river bed and minimum 1 m at track/road/pucca road crossing area etc. This includes supply of permanently lubricated HDPE telecom ducts of equal length as per Specification No. RDSO/SPN/TC/45/2013 REVISION 2.0 with latest amendments. For each HDPE duct the following items are to be supplied as per requirement (a) End plug (b) Cable sealing plugs (c) Plastic coupler slip fit/push fit type (d) End plugs to be provided along with drum. In case the site doesn't allow to perform as per schedule, written approval must be obtained from atleast site incharge officer.Note: The boring profile should be recorded and submitted for	17500.00	Metre	₹ -	₹ -	Schedule 2- Schedule - A2 (Micro-tunneling SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	verification of depth and length of boring..4 HDPE pipe					
112.00	Mechanised Drilling/ Micro Tunnelling under important/ busy metal/concrete road /Railway track and laying GI pipe (make: TATA/Jindal or better) min. 75mm inner diameter Grade Medium with Specn.No.IS- 1239, Pt-1, 1979 including supply), Boring and pulling cable upto 110mm dia. at a depth of min. 1 meter as per site condition. This also includes reinstatement of the surface to the original state.	1750.00	Metre	₹ -	₹ -	Schedule 2- Schedule - A2 (Micro-tunneling SOR)
113.00	Installation of fuse auto changeover System type - I along with audio visual indication as per RDSO Spec. No. RDSO/SPN/209/2012 Ver.1.0 or latest.	27.00	Numbers	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
114.00	Modification of control cum indication panel as per approved Front Plate diagram (FPD) of LC gate with supply of required nos. of dominoes and push buttons / switches, counters etc. as per Spec. no. RDSO/SPN/186 / 2004. Note: 10% spare dominoes and push buttons /switches are to be supplied additionally in the same cost by the contractor to the Railway.	11.00	LC Gate	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
115.00	Dismantling of Concrete foundation/ Demolishing RCC/CC/Stone work/Cutting Tar carpentering/ CC Flooring/ Precast concrete slab/ Brick work including leading the debris inside Railway limit or outside Railway limit as directed by site in charge. This work to be done by contactors with his own vehicle and labour.	600.00	cum	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
116.00	Cutting the masonry wall to the depth of 0.75 meter at the entry of room, placing of flexible HDPE pipe as per the instructions of Railway site-in charge and repairing of masonry wall and cement plastering after the cable is taken inside the flexible HDPE pipe suitable dia. with Clamps as per drawing No. RE/S&T/ALD/SK /161 /81. Clamps, flexible HDPE pipe etc. and masonry materials are to be supplied by the contractor.	84.00	Numbers	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
117.00	Installation, Testing and Commissioning of Mini goomty IPS without battery & SMPS for LC gate as per Specification No.	3.00	Set	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	RDSO/SPN/165/2012 Ver. 3.0 or latest and conforming to SE Railway Drawing No. SER/P/ABS/030224 along with provision of power distribution board on wall through angle separate for both AC & DC on hylum sheet.					Execution Non SOR)
118.00	Installation, Testing and Commissioning of SMPS based Integrated Power Supply System as per Specification No. RDSO/SPN/165/2012 Ver. 3.0 or latest and conforming to SE Railway Drawing No. SER/P/ABS/040224 & SER/P/ABS/050224.	27.00	Set	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
119.00	Dismantling of old S&T equipment's such as lever frame, mechanical rod run, FPL, old relay racks, CTR, IPS, Battery, old electrical equipments, Motor points, signal posts, and others as per site requirement after commissioning of the installation. All released materials are to be transported to concerned stores/Kharagpur Depot. Note:- 1) Before start of the dismantling, a detailed list of the materials which are to be dismantled to be prepared & handed over to the site engineer. 2) It includes dismantling of S&T gears at IB hut if any. 3) It includes dismantling of LC gates if any. 4) It also includes dismantling of existing TLBI/SLBP/DLBP/DLBI with accessories & other equipments at each station.	13.00	Per Block Section	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
120.00	Lump Sum charges on hire of Multi Utility vehicle 01(One) Ton capacity for 02 nos. of vehicle per day for supervision of Auto section works. Make:- TATA RX Pick Up Van or Similar.	365.00	Day	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
121.00	Rate per Kilometer running of vehicles 01 (One) Ton capacity . TATA RX Pick Up Van or Similar.	18000.00	Kilometre	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
122.00	Installation, validation, testing and commissioning of Data concentrator along with accessories.	12.00	Set	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
123.00	Supply, Installation, Testing & Commissioning of industrial grade Non-PoE based L3 switch (without L3 license) configured to L2 managed switch with 8 nos. Ethernet port & 4 Nos. 1 GE SFP port. make- Cisco or better.	44.00	Numbers	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
124.00	Supply, Installation, Testing & Commissioning of industrial grade Non-PoE based L3 switch (with L3 license) with manageable 8 nos. Ethernet port & 4 Nos. 10 GE SFP port. make- Cisco or better.	26.00	Numbers	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
125.00	Supply & laying of Polyolefin cable channel of size width 240/340 mm, height 155/230 internal/external, length one meter produced of polyefin with fire protection class K-1 in accordance with DIN 53438 Part II for laying Signalling/Telecom cables, channel attachable to each other with male female swallowtail connectors and having suitable detachable cover. This also includes installation of polyolefin cable channels of all sizes by Digging of the required size. Note: Duct integrity test also to be done after laying of duct in the trench.	250.00	Metre	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
126.00	Supply & laying of polyolefin cable channel of size width 100/200 mm, height 155/230 internal/external, length 1 meter produced of polyefin with fire, protection class K-1 in accordance with DIN 53438 part II for laying signaling /telecom cables, channel attachable to each other with male female swallowtail connectors and having suitable detachable cover. This also includes installation of polyolefin cable channels of all sizes by Digging of the required size. Note: Duct integrity test also to be done after laying of duct in the trench.	250.00	Metre	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
127.00	Fixing & Installation of 6/9U Rack with 19 inch standard dimension, wall mounting, front glass door with lock and two key, with rack fixing Multi point AC power strip, cable organiser with wall fixing screws.	49.00	Numbers	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
128.00	Installation of Single Line Directional Panel for Auto Signalling in bidirectional Line with Dominos made of PBT & switches.	4.00	Numbers	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
129.00	Supply of Unskilled labour assistance for SE/JE in day to day works i.e. giving marking of cable route, cable laying, taking of measurements, noting of daily work status, carrying the tools and equipments etc., watch and ward during the course of execution of work as per the instructions of concerned SE/JE (as per Chief Labour Commissioner Letter No. 1/131/1/2016-LS-II dt. 31.3.16 or latest).	365.00	Day	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
130.00	Providing the services of Computer oriented technical manpower to carryout works like Drawing, computation, write up etc., using computer, using software like AUTOCAD, MS Office etc. for 08.00 hrs in a day with all expenses of transportation, accommodation, food, consumables etc., with all ascents, descents, taxes, octroi, cess, fees, duties with contractors cost etc., as per special conditions/specifications/regulations and as directed by Engineer-in-charge. Note : The person engaged for providing the services shall be convergent with computer working knowledge in operation of above software packages.	365.00	Day	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
131.00	Erection, testing & commissioning of MCB 1X63A,230/416 V, DP, complete with HRC type back up fuses, housed in a weather proof MS box suitable for fixing on AT mast.	34.00	Set	₹ -	₹ -	Schedule 3- Schedule - A3 (S&T Execution Non SOR)
132.00	Supply of Industrial Grade VDU for 24X7 operation.:VDU of screen size 55 Inch (4K).	1	Per Visual Display Unit (VDU)	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
133.00	Supply of Industrial Grade VDU for 24X7 operation.:VDU of screen size 65 Inch (4K).	1	Per Visual Display Unit (VDU)	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
134.00	Supply & installation of Online 3 KVA UPS with 2 hours backup Make APC or better.	2.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
135.00	Supply of HDPE pipe with OD/ID 40mm/33mm, Thickness 4mm with suitable couplers, plugs, end caps, spacer, T band etc. as per Specification No. RDSO/SPN/TC/45/2013 Rev-2.0 or latest.	172.00	Kilometre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
136.00	Supply of Steel Apparatus case Full height as per Drawing No. SK/Drg./OL/SER /198 with lock & key ward No. will be decided by site engineer as per Specification No. IRS: S-10/78 with Rev. 8 or latest. Hylam sheets not to be supplied. This include one key & handle for each four Apparatus Case or minimum one.	698.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
137.00	Supply of Steel apparatus case (Half) type as per Drawing No. RE/S&T/ALD/SK/ 220/82 Alt. A and 221/82 with Alt. B with lock & key ward No. will be decided by site engineer as per Specification No. IRS:S-10/78 with Rev. 8 or latest. This include one key & handle for	19.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	each four Apparatus Case or minimum one.					
138.00	Supply of Steel Apparatus Case (Quarter) as per Drawing No. RE/S&T/ALD/SK/227/ 82 corrected upto 30686 & 228/82 corrected upto 18/1/93, with lock & key ward no. will be decided by site engineer as per Specification No. IRS:S-10/78 with Rev. 8 or latest. This include one key & handle for each four Apparatus Case or minimum one.	10.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
139.00	Supply of Hylam Sheet 6mm thickness of size 8 foot X 4 foot as per specification no. IS 2036 of 1995 or latest. In case of different configuration, proportionate rate to be considered for payment purpose. Note:- In case the requirements are different from the above, proportionate payment will be done.	4.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
140.00	Supply of Hylam Sheet 12mm of size 4 foot x 4 foot as per specification no. IS 2036 of 1995 or latest. In case of different configuration, proportionate rate to be considered for payment purpose. Note:- In case the requirements are different from the above, proportionate payment will be done.	4.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
141.00	Supply of Hylam Sheet 25mm.Size-955mm x 400mm for Apparatus case as per specification no. IS 2036 of 1995 or latest. In case of different configuration, proportionate rate to be considered for payment purpose. Note:- In case the requirements are different from the above, proportionate payment will be done.	4.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
142.00	Supply of Terminal block 6-way PBT, 25mm as per Specification No. IRS:S-75/2006 Rev. 2.0 or latest as per IRS Drg. No. SA-23756 Alt-3 or its latest amendments.	14340.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
143.00	Supply of Non-Deteriorating type low voltagem electric fuse for Railway signalling, fuse with cylindrical cap without indication, cylindrical fuse as per Specification No. IRS:S-78/2006 or latest.:ND Fuse Cylindrical Type 4/6 Amp.	2510.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
144.00	Supply of PBT fuse base as per Specification No. IRS:S-75/2006 Rev. 2.0 or latest as per IRS drawing No. . SA: 23748 with alt 4 or its latest amendments.	2510.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
145.00	Supply of Colour Light Signal, Multi Unit type Two Aspect complete but without lamp holder, lenses & transformers as per IRS:S-26/64 and RDSO Drawing No. SA23003 A/M (Adv.) or latest. Mounting socket including its material shall be as per RDSO Drawing No. S 23005/M for	38.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	post mounting on 140 mm outside diameter post.					
146.00	Supply of Colour Light Signal, Multi Unit type Four Aspect complete but without lamp holder, lenses & transformers as per IRS:S-26/64 and RDSO Drawing No. SA23001 A/M (Adv.) or latest. Mounting socket including its material shall be as per RDSO Drawing No. S 23005/M for post mounting on 140 mm outside diameter post.	334.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
147.00	Supply of Cast Iron (Grade-20) Signal base 140 mm diameter tube Drawing No. S-2011/M as per Specification No. IRS:S-10/78 & IS:210 or latest.	234.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
148.00	Supply of Tubular (Seamless) Post for Colour Light Signal 4.5 meter as per Specification No. IRS:S- 6/81 or latest to suit 140mm dia. base.	117.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
149.00	Supply of Tubular (Seamless) Post for Colour Light Signal 5.5 meter Specification No. IRS:S-6/81 or latest to suit 140mm dia. base.	117.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
150.00	Supply of Ladder 4.5 meter for Colour Light Signal as per RDSO Drawing No. SA-23153 (Adv.) and Stage with Ladder foundation as per Drawing No. S-2033/M (IRS) as per Specification No. IRS:S-10/78 & IS:210 or latest.	117.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
151.00	Supply of Ladder 5.5 meter for Colour Light Signal as per RDSO Drawing No. SA-23156 (Adv.) and Stage with Ladder foundation as per Drawing No. S-2033/M (IRS) as per Specification No. IRS:S-10/78 & IS:210 or latest.	117.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
152.00	Supply of Metallic Junction route indicator unit 3 ways (Without Lenses & Holder) as per RDSO Drg. No. 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).	5.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
153.00	Supply of Non- Metallic (FRP) A Marker/Calling On signal (CLS Type) unit as per Drawing No: SA 24351 (Adv.) and Specification No. IRS-S-10/78, IRS:S-26/64 & as per RDSO specification no. RDSO/SPN/153/2011 REV 4.1 or latest.	314.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
154.00	Supply of Signal Number plate pressure sensitive Retro reflective type high intensity grade white with imprinted 'Number/Alphabet/Arrow' in black/White of size as per SEM Drg.19-D10 (Sheet 6 to 7) with film thickness 0.3mm on ACP sheet with Clamp for Main/Shunt Signal made of	372.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	MS Flat of size 30mm x 3mm with nut & bolt as per SEM Drg.No. 19-D10 (Sheet 9-10).					
155.00	Supply of Signal Marker Retro reflective type high intensity grade white with imprinted Arrow Marker in white on red background of size as per SEM Drg.19-D10 (Sheet 8) with film thickness 0.3mm on ACP sheet with Clamp for Main/Shunt Signal made of MS Flat of size 30mm x 3mm with nut & bolt as per SEM Drg. No. 19-D10 (Sheet 9-10).	67.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
156.00	Supply of Signal Marker Retro reflective type high intensity grade white with imprinted 'A'/G'/C'/P' in black of size as per SEM Drg.19-D10(Sheet 1 to 5) with film thickness 0.3mm on ACP sheet with Clamp for Main/Shunt Signal made of MS Flat of size 30mm x 3mm with nut & bolt as per SEM Drg.No. 19-D10 (Sheet 9-10).	196.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
157.00	Supply of Red aspect Main LED Signal Lighting unit 110V AC as per Specification No. RDSO/SPN/ 199/ 2010 Rev 1.1 or latest.	257.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
158.00	Supply of Yellow aspect Main LED Signal Lighting unit 110V AC as per Specification No. RDSO/SPN/ 199/ 2010 Rev 1.1 or latest.	675.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
159.00	Supply of Green aspect Main LED Signal Lighting unit 110V AC as per Specification No. RDSO/SPN/ 199/ 2010 Rev 1.1 or latest.	216.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
160.00	Supply of Calling-ON LED Signal Lighting unit 110V AC as per Specification No. RDSO/SPN/153/2011 Rev 4.1 or latest.	5.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
161.00	Supply of Route LED Signal Lighting unit 110V AC as per Specification No. RDSO/SPN/153/2011 Rev 4.1 or latest.	10.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
162.00	Supply of A/AG Marker LED Signal Lighting unit 110V AC.	345.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
163.00	Supply of Pipe lock with key ring size inside dia. 40.5mm, outside dia. 60mm. Thickness 20mm, lock length 65mm.	706.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
164.00	Supply of Composite Relay Rack/Q series Relay Rack as per Drawing No. SK/DRG/OL/SER/192, Sheet 1 or 2 or latest and must be powder coated of stone grey colour.	60.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
165.00	Supply of MS Cable termination Racks (CTR) with full size of 6 mm thick Hylam sheet as per Drawing No. SK/DRG/OL/SER/197 or latest and must be powder coated of stone grey colour.	77.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
166.00	Supply of Tag block 200 way/160 way with PVC covers as per Specification No. IRS: S-77/2006 with Rev.1.0 or latest & Drawing No. SA-24751 & 52.	60.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
167.00	Supply of 2 conductor Knife disconnect terminal block i.e. Wago, Connection method: Spring-cage connection, Cross section: 0.2 mm ² - 2.5 mm ² , Nominal current: 16 A, Nominal voltage: 400 V, Color :- as per instruction of site engineer. Flammability rating according to UL 94-V0, confirming to Specification No. RDSO/SPN/189/2004, Ver.3 or latest.	30500.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
168.00	Supply of Steel Rail Carrier (Din Rail slotted) Size: 35mmx7.5mm as per Specification No. RDSO/SPN/189/2004, Ver.3 or latest.	486.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
169.00	Supply of Endplate/End stop suitable for disconnect terminal as per RDSO/SPN/189/2004, Ver.3 or latest.	3813.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
170.00	Supply of Wago Marker (1-100) for wago terminal.	305.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
171.00	Supply of Single Jumper/ shorting link for wago terminal.	3060.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
172.00	Supply of Negative Bus Bar 20 mm X 5 mm thick made of copper bar with brass screw & washer (The bar and screw should be nickel plated) minimum length of one piece is to be 0.3 m.	96.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
173.00	Supply of Remote terminal unit (RTU) with 128 Digital & 16 Analog inputs with modem as per Specification No. IRS:S-99/2006 (Amdt-3) or latest. Magnetic door lock coil to be supplied along with equipment.	10.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
174.00	Supply of Data logger system for Railway S&T Installations with 512 Digital and 32 Analog input as per Specification No. IRS:S-99/2006 (Amdt-3) or latest with power supply arrangement (batteries and charger), fault diagnostic software for failure analysis, modem card, as per technical specification. It includes:- CMU (i3 or latest with 256 GB SSD or better) with UPS (minimum 6 hrs. battery backup) and Printer- 01 No. Magnetic door lock coil to be supplied along with equipment.	17.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
175.00	Supply of data concentrator along with one Dual Card modem as per RDSO specification IRS:S- 99/2006 (Amdt3).	12.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
176.00	Supply of PVC Insulated Multicore copper conductor Indoor Cable 60 Core x 0.6mm diameter as per Specification No. IRS:S-76/89 or latest.	7.00	Kilometre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
177.00	Supply of Cable PVC Insulated single core multistrand, unsheathed with plain annealed copper conductor 16/0.2 mm diameter (0.5mm Insulation Thickness) Specification No. IRS:S-76/89 or latest. Colour of the cables may be Blue/Red/Grey/Green/Brown/Black/Yellow/White.	204.00	Kilometre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
178.00	Supply of 10 Sq. mm PVC insulated Single core Multistrands copper conductor (Red/Black/Green) as per IS:694/2010 or latest, as per Specification No. IRS:S-76/89 or latest. Colour of the wire which is required will be specified by the Engineer incharge.	38300.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
179.00	Supply of 16 Sq. mm PVC insulated Single core Multistrands copper conductor (Red/Black/Green) as per IS:694/2010 or latest, as per Specification No. IRS:S-76/89 or latest. Colour of the wire which is required will be specified by the Engineer incharge.	6800.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
180.00	Supply of 35 Sq. mm PVC insulated Single core Multistrands copper conductor (Red/Black/Green) as per IS:694/2010 or latest, as per Specification No. IRS:S-76/89 or latest. Colour of the wire which is required will be specified by the Engineer incharge.	1850.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
181.00	Supply of PVC Switch Board Cables 05 pair / 0.5 mm conductor dia. as per TEC specification GR/WIR-06/03 of march 02 or latest.	600.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
182.00	Supply of PVC Switch Board Cables 10 pair / 0.5 mm conductor dia. as per TEC specification GR/WIR-06/03 of march 02 or latest.	600.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
183.00	Supply of Relay, Non-AC immune, plug-in type, Style 'QN1', Neutral line, 24V DC, 8F/8B contacts, front and back contacts metal to carbon, with plug board, retaining clip & connectors conforming to BRS:930, and IRS:S-34 /68 Amd.6 & IRS:S-23/88 Amd.1 or latest. The interlocking code for this unit shall be "ABCD".	1334.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
184.00	Supply of Q-Series Neutral line Relay style 'QNA1' 24V DC, 8F/8B contact, front and back contacts metal to carbon with plug board, retaining clip and connectors confirming to BRS:931A, IRS:S-60 /78 Amd.1, IRS:S 34 /68 Amd.6 & IRS:S 23 /88 Amd.1 or latest. The interlocking code for this unit shall be "ABDGH".	2477.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
185.00	Supply of Q-Series Neutral line Relay style 'QL1' Magnetically latched 24 V DC, 11F/4B contacts each, front and back contact metal to carbon , complete with plug board, retaining clips and connectors conforming to BRS:935A, IRS:S 34/68 Amd.6 & IRS:S 23/88 Amd.1 or latest. The interlocking code for this unit shall be "ABDEG".	20.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
186.00	Supply of 24V DC Relay Fail Safe Electronic Time Delay Device For Railway Signalling with fixed timing (0 - 60) seconds and conforming to Specification No. IRS:S61 /2000 with Amd.3 or latest mounted on Q-series relay base & covered complete with connectors, retaining clip etc. The interlocking code for this unit shall be "AFHKY".	20.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
187.00	Supply of Electric key transmitter (EKT)/Rotary key transmitter (RKT) as per Specification No. IRS:S-21/2001 Rev 1.0 & Drawing No.SA-22601 or latest with the keys and wards nos. will be per instructions given by site Engineer in charge.	38.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
188.00	Supply of Key Lock - 'E' Type with key as per RDSO Drg. No. SA-3376/M, Alt-2(Lock) & SA-3377 (Key), and Specification No. IRS: S 30-64 Rev 0 and IRS S-10. Ward No. shall be as per instruction of Railway.	28.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
189.00	Supply of DC-DC converter 110/(24 - 32 V, 10A) as per Specification No. RDSO/SPN/165/2012 Ver. 3.0 or latest.	48.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
						Supply SOR)
190.00	Supply of Low Maintenance Lead Acid (LMLA) Secondary Cells for S&T installations made of hard rubber container and with nominal voltage 2 volts as per Specification No. IRS-S-88/2004 Ver. 1.0 or latest.:120 AH	30.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
191.00	Supply of Low Maintenance Lead Acid (LMLA) Secondary Cells for S&T installations made of hard rubber container and with nominal voltage 2 volts as per Specification No. IRS-S-88/2004 Ver. 1.0 or latest.:200 AH	5.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
192.00	Supply of Electrically operated lifting barrier (ELB) 24V/110V DC/110V AC without hand generator & boom length of 9.76 meter/32 feet confirming to IS: 277 with Base metal as IS: 513 grade CR3, the boom shall be painted alternately with 300-mm bands of black and yellow colour and additionally provided with luminous stripes (reflective tape) as per RDSO Drg. No. RDSO/S 11600, complete set as per Specification No. RDSO/SPN/ 208/2012 Ver. 2 Amd.1.0 or latest. List of spares & tool kit items mentioned in Para 10 of RDSO Specification shall also be supplied.	18.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
193.00	Supply of Sliding Boom Gate as per drawing no. E. Rly Signal workshop/HWHs Drg No. SW/SA/29/768. This includes supply of 8 Nos. 'E' type lock with key as per Specification No. IRS:S-30/64 or latest. Key for 'E' type lock as per Drg No. 3377/M with latest amendment ward no. to be fixed on MS plate as mentioned in the drawing and it include all the nut and bolt with washer, Anchor Bolt (750mmX250mm) and PAD lock 6 (Six) lever (make - Godrej or better) with three keys.	18.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
194.00	Supply of Dual tone warning bell hooter for L.C gate 25 watt horn, working voltage 110 VAC/24V DC (both provision).	18.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
195.00	Supply of Control cum Indication panel Domino Type as per RDSO Specification No. RDSO/SPN/186/2004Rev. 2.0 or latest. Size of each Domino will be 54 + 10mm X 34 + 7mm. - 0mm. - 0mm. Control Panel included panel rest, front and side table, complete with switches, push button, termination of cables, painting and lettering as required. This includes 10% spare of panel LED's, Dominos and button assemblies, counter, keys, buzzer	1.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	etc. Note: Size of the panel will depend upon the number of Dominos required as per Front Plate Diagram. (Midsection interlocked LC Gate/IBS (operation-cum indication console Domino type)/ Siding motor operated point operation panel /Non Interlocking panel. For Single/Double line only.					
196.00	Supply of Control cum Indication panel Domino Type as per RDSO Specification No. RDSO/SPN/186/2004Rev. 2.0 or latest. Size of each Domino will be 54 + 10mm X 34 + 7mm. - 0mm. - 0mm. Control Panel included panel rest, front and side table, complete with switches, push button, termination of cables, painting and lettering as required. This includes 10% spare of panel LED's, Dominos and button assemblies, counter, keys, buzzer etc. Note: Size of the panel will depend upon the number of Dominos required as per Front Plate Diagram. (Midsection interlocked LC Gate/IBS (operation-cum indication console Domino type)/ Siding motor operated point operation panel /Non Interlocking panel. For 3 lines.	19.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
197.00	Supply of Master Telephone Unit with voice logging facility for Electronic LC Gate Telephone System as per Specification No. RDSO /SPN/TC/51/2011 Rev 1.0 or latest.	4.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
198.00	Supply of Gate Telephone (Slave Telephones) for Electronic LC Gate Telephone System as per Specification No. RDSO /SPN/TC/51/2011 Rev 1.0 or latest.	12.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
199.00	Supply of Power Supply System with MF Battery of 12V/24V DC (12V DC supply shall be connected to the Station Telephone Unit & 24V shall be fed to Line Circuit) with maintenance free battery for electronic LC gate telephone system as per Specification No. RDSO/SPN/TC-51/2011, Rev 3.0 Amd.1 or latest including battery charger.	4.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
200.00	Supply of Earth Electrodes as per Drawing No.SEM2021, 19-D6, GI pipe confirming to IS:1239 of 3.0mm thickness, 3.0 meter long, 50.0mm diameter, 5 mm diameter drilled holes staggered at distance of 150 mm.	1123.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
201.00	Supply of MS Flat Plate Strip (Specification no. 226 STD or latest 35 mm x 6 mm thick for earth connection to Signal post, L/Box etc.	5615.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
202.00	Supply of basic material to construct unit Maintenance Free Earth for Single Earth consisting as per Spec. No. RDSO/SPN/197/2016 Ver 1.0 or latest, bonding connections drawing no. SDO/RDSO/E&B/002. (a) Copper bonded steel electrodes of 3.0 m long, 17.0 mm dia. min. with copper bonding thickness of min 250 micron and UL listed and marked -1 No. (b) Earth Enhancement compound of RDSO approved brand supplied in sealed bags of min 30-35 Kg.- 1 Nos. (c) Copper Strip of 200mm x 25mm x 6mm to exothermically welded to Earth electrode- 1no.(d) Copper Strip of 300mm x 25mm x 6mm (MEEB) - 1no.(e) Copper Strip of 150mm x 25mm x 6mm (SEEB)- 1no. It includes (i)Supply of 35 Sq. mm Multi-strand Single Core PVC insulated Copper Connector as per IS:694 for connecting Main Earth Electrode to MEEB in the equipment room in duplicate.-10 m. (ii)Supply of 16 Sq. mm Multi-strand Single Core PVC insulated Copper Connector as per IS:694 for connecting MEEB to SEEB and SPDs to MEEB.-10 m. (iii)Supply of 10 Sq. mm Multi-strand Single Core PVC insulated Copper Connector as per IS:694 for connecting various equipments to SEEB10 m. As per RDSO spec. for Desire Earth Resistance less than 1(one) Ohms.	22.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
203.00	Supply of basic material to construct Maintenance Free Earth for Ring Earth consisting as per Specification No. RDSO/SPN/197/2016 Ver 1.0 or latest, bonding connections drawing no. SDO/RDSO/E&B/002. (a) Copper bonded steel electrodes of 3.0 m long, 17.0 mm dia. minimum with copper bonding thickness of min 250 micron and UL listed and marked -1 No. (b) Earth Enhancement compound of RDSO approved brand supplied in sealed bags of min 30-35 Kg.- 1 Nos. (c) Copper Strip of 200mm x 25mm x 6mm to exothermically welded to Earth electrode- 1no.(d) Copper Strip of 300mm x 25mm x 6mm (MEEB) - 1no.(e) Copper Strip of 150mm x 25mm x 6mm(SEEB)- 1no.	124.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
204.00	Supply of 50 mm x 6 mm Galvanised steel tape for interconnecting the earth pits.	720.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
						Supply SOR)
205.00	Supply of 25mm x 2 mm bare copper strips in the equipment room.	1155.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
206.00	Supply of Class B & C Surge protection Device (SPD) - Type I & II with Visual Indication and Potential free contact to remote monitoring as per Specification No. RDSO/SPN/165/2012 Ver 3.0 or latest and IEC standard 61643 for Single line 230V AC application with handling Lightning surges of 10/350 microseconds and Switching surges of 8/20 microseconds .One Set consists of 3 nos. of SPD (2 No. of B Class (L-N, N-E) and one no. of C Class (L-N) all enclosed in a Box with KEMA or VDE certified as per latest IEC 61643-11-2011 Standard. Class B & C Surge protection device required with Three modules only.	36.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
207.00	Supply of Class C, Type 2 Protection for 60-100V AC/DC supply as per Clause No.3.12.3 of Specification No. RDSO/SPN/165/2012 Ver 3.0 or latest. The Class II/C type shall be with pluggable type, with indication and potential free contact. The supplier should submit OEM certificate, KEMA, UL Certificate with the material, for connection between L1-L2, L1-E & L2-E.	24.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
208.00	Supply of Class C, Type 2 Protection for 24-60V AC/DC supply as per clause No.3.12.3 of Specification No. RDSO/SPN/165/2012 [Version 3.0] or latest. The Class II/C type shall be with pluggable type, with indication and potential free contact. The supplier should submit OEM certificate, KEMA, UL Certificate with the material, for connection between L1-L2, L1-E & L2-E.	24.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
209.00	Supply of earth enhancement material for treatment of earth pits as per Specification No. RDSO/SPN/197/2016 Ver 1.0 or latest.	3600.00	Kg	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
210.00	Supply of Earth Leakage Detector (ELD) - 8 channels as per Specification No. RDSO/SPN/256/2002 or latest.	27.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
211.00	Supply of Power supply System 24 V/2 Amp with built in Charger with battery backup as per specification No. RDSO/SPN/217/2021 ver-3 or	27.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	latest. Spares cost are also included & to be supplied as per RDSO para no. 4.15.					Supply SOR)
212.00	Supply of CO2 Fire extinguisher 4.5 kg capacity confirming to IS 15683: 2018 or latest with ISI mark provided with all fittings and accessories.	54.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
213.00	Supply of Godrej executive high back revolving chair model CH-7001. Make: Godrej or better.	12.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
214.00	Supply of Computer chair Multipurpose chair CH- 7B. Make: Godrej or better.	34.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
215.00	Supply of Steel Table with sunmica Top with storage on both sides Unitised table model T-9. Make: Godrej or better.	60.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
216.00	Supply of cable fault locator complete with all necessary accessories including rechargeable battery pack and charger Liquid Crystal Display (LCD) with back light. Low Insulation Faults Mode Max. Low Insulation Faults Mode Max. Range: 20 Km etc.	1.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
217.00	Supply of Cable route tracer with GPS enable 10 Watt transmitter, rechargeable battery pack and main charger, direct connection lead 10 mtr. extension cable with all other accessories. Make Radiodetection, Stanly or better.	1.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
218.00	Supply of RFID Electronic Marker Locator System with built in GPS module/system for locating S&T Cables as per TEC approved Specification No. TEC/GR/TX/TIE07/02. MAR. 2014 with latest amendment or better.	1.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
219.00	Supply of Auto single fiber fusion splicer machine with all related accessories and power supply backup arrangement. Make: Fuzikura or better.	1.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
220.00	Supply of Optical Time Domain Reflectometer (OTDR) as per TEC Spec No. : TEC/GR/TX/OTD001/05/SEP-19 or latest. Make- Yokogawa/ Fuzikura/ Sumimoto.	1.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
221.00	Supply of Insulation tester 500V, 100 Mega ohms complete in leather case and testing probes (Hand Generating Type). Make: Waco-WI 104, Nippen, Fluke, and Motwane.	2.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
222.00	Supply of Insulation tester 100V, 100 MOHMS with lead cables, Analog Display, metal body hand driven.	2.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
223.00	Supply of Digital Earth Resistance meter with inbuilt rechargeable battery 3.5 digit LCD display, testing range 0.01 ohm to 2000 ohm & all accessories as four spikes, suitable length cable (10M,20M,30M,40M)on winder, battery charger, carrying bag, operating manual, hammer etc. Make:-Motwane, Metravi, or Waco.	2.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
224.00	Supply of Earth Tester (Analog 4 terminal) Range 0-10/0- 100 OHMS Double with accessories.	2.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
225.00	Supply of 4 digit Backlit LCD Hand Held True RMS Clamp Meter with iFlex. Model No. Fluke 376 FC or better.	4.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
226.00	Supply of Rodometer [Analog] Spec: Mechanical 5 digits counter, ABS Plastic wheel with rubber tyre, measure Forward & Backward, Telescopic handle, Precision measuring wheel. Make/Brand: Stanley or Bosch or JCB or Freeman or Equivalent.	2.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
227.00	Supply of Thermo shrink jointing (TSF) kits for jointing underground Quad cable 0.9mm diameter conductor for straight through joint, condenser joints, Y- (Derivation) joint, Loading Coil Joint, Transformer Joint as per Specification No. IRS - TC - 77 / 2012 Rev.3 with Amd. 3.0 or latest.	20.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
228.00	Supply of Fibre Distribution Management system (FDMS)/LIU for 24 Fiber complete with all accessories with patch cord & pigtail as per TEC Spec. GR/FDM/01/02 April'2007 or latest. This include supply of installation accessories as per technical specification.	48.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
229.00	Supply of Fibre Distribution Management system (FDMS)/LIU for 48 Fiber as per drawing No: RDSO/TCDO170(a) complete with all accessories as per TEC Spec. GR/FDM/01/02 April'2007 or latest. This include supply of installation accessories as per technical specification.	236.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
230.00	Supply of 24 Fiber OFC Joint Closure as per Specification No. RDSO/SPN/TC/68/ 2014 Rev 1.0 or latest complete with all accessories (sealing with mechanical clamp facility).	10.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
231.00	Supply of 48 Fiber OFC Joint Closure similar to Specification No. RDSO/SPN/TC/68/2014 Rev 1.0 or latest.	95.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
232.00	Supply of 20 Pair CT box made of 16 SWG CRC sheet with disconnection and reconnection (Wago type). The CT Box should be grey colour powder coated with terminal, washer, nut & bolt should be of brass. There shall also be locking arrangement.	12.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
233.00	Supply of 9U Rack with 19 inch standard dimension, wall mounting, front glass door with lock and two key, with rack fixing Multi point AC power strip, cable organiser with wall fixing screws.	8.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
234.00	Supply of 6U Rack with 19 inch standard dimension, wall mounting, front glass door with lock and two key, with rack fixing Multi point AC power strip, cable organiser with wall fixing screws.	41.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
235.00	Supply of Desk type Electronic Magneto Telephone (DTMF) having Specification No. IRS: TC/79/2000 with amd 4.0 or latest.	24.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
236.00	Supply of VF Transformer (1120:470/ 1120:1120/470:470/470:600 /1200:600 Ohm) as per Specification No. IRS-TC-76/2021 Ver 1.0 (Cylindrical type) or IRS/TC/22/ 2021 Ver 1.1 (Rectangular type) with latest amendment.	24.00	Numbers	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
237.00	Supply of STP CAT-6 Cable (Shielded Twisted Pair) STP compliant with latest EIA/TIA-568-B2-1.	625.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
238.00	Supply of UTP CAT - 6 cable, having bare Copper Conductor of diameter 0.5 mm, Suitable for Gigabit Ethernet TEC Specification No. G/WIR 06/02 or latest.	2500.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
239.00	Supply of 32 mm PVC casing capping in rectangular shape with separate Casing & Capping, double lock, heavy duty & ISI mark with IS:14927 or latest with minimum 1 mm thickness.	300.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
240.00	Supply of PVC conduit pipe rigid plain ended conduit size 1 inch (25 mm) IS:9537(part-3) and 9537 (Part-1) 1980 with latest amendment ISI marked with minimum 1.2 mm wall thickness & one socket at every 3 meter pipe.	300.00	Metre	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)
241.00	Supply of MCB 1X63A,230/416V, DP, complete with HRC type back up fuses with indication, housed in a weather proof MS box suitable for	34.00	Set	₹ -	₹ -	Schedule 4- Schedule - B1 (S&T Supply SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	fixing on AT mast with powder coating paint. The MCB /Main switch shall be either L&T, Siemens, ABB, Havells or better.					Supply SOR)
242.00	Supply & transportation of Mini SMPS based Integrated Power Supply System as per Specification No. RDSO/SPN/165/2012 Ver. 3.0 or latest and conforming to SE Railway Drawing No. SER/P/ABS/040224 for ABS hut along with a) 55 Nos. of Low Maintenance Lead Acid Batteries of 2V/200 AH as per Specification No. IRS:S-88/2004 or latest and additional five nos. of Spare Batteries per set of SMPS. b) One set of maintenance Tool Kit per IPS. c) Supply of Cables: i) Between IPS System to ASM Panel-12 Core x 1.5 sq.mm = 35 mtrs ,ii) System to Battery Bank-16 sq mm =25 mtrs. per set of IPS. NB: Cable between Central Relay Room and Goomtie will be provided and laid by Railway.	17.00	Set	₹ -	₹ -	Schedule 6- Schedule - B3 (IPS Non SOR)
243.00	Supply & transportation of SMPS based Integrated Power Supply System (Mini -IPS) as per Specification No. RDSO/SPN/165/2012 Ver. 3.0 or latest and conforming to SE Railway Drawing No.SER/P/ABS/050224 for LC gate along with following: a) 55 Nos. of Low Maintenance Lead Acid Batteries of 2V/200 AH as per Specification No. IRS:S88/2004 or latest and additional five nos. of spare batteries per set of SMPS. b) One set of maintenance tool kit per IPS. c) Supply of Cables: i) Between IPS System to ASM Panel-12 Core x 1.5 sq mm = 35 mtrs, ii) System to Battery Bank-10 sq mm =25 mtrs. per set of IPS NB: Cable between Central Relay Room and Goomtie will be provided and laid by Railway.	10.00	Set	₹ -	₹ -	Schedule 6- Schedule - B3 (IPS Non SOR)
244.00	Supply & transportation of Mini goomty IPS without battery & SMPS for LC gate as per Specification No. RDSO/SPN/165/2012 Ver. 3.0 or latest and conforming to SE Railway Drawing No.SER/P/ABS/030224.	3.00	Set	₹ -	₹ -	Schedule 6- Schedule - B3 (IPS Non SOR)
245.00	Supply of Fuse Auto Change Over System type - I along with audio visual indication as per RDSO spec. No. RDSO/SPN/209/2012 Ver.1.0 or latest. One module of Fuse Alarm System should be able to cater for monitoring of 32 nos. of "G" type or any other type of fuses from 0.6 Amp. to 4 Amp.	27.00	Numbers	₹ -	₹ -	Schedule 7- Schedule - B4 (S&T Others Supply Non SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
246.00	Tool Kit for maintainer as described below. a. Open Ended Spanner of size 13 & 17, 24 & 30, 34 & 36 One each- One set (Taparia Make or better). b. Ring Spanners 13,17,24,32 (Taparia Make or better) -1 each (one each). c. Portable Digital Multimeter Fluke/Rishab make RISK 18S or better - 1 No.(one). d. Soldering Iron 35 W, 2 2 0 V Soldron make or similar - 1 (One) no. e. Measuring Tape - 30 Mts. and 3 meters (freemens or similar) - 1 No. (one). f. Cutting pliers 6" insulated - 1 (one) no. g. Nose pliers 6 " insulated (Taparia Make or better) - 1 (one) no. h. Screw driver set with insulated handle.(Taparia Make or better) - 1 (one) no. i. Insulated box spanner 5/8" - 1 (one) no. j. Insulated box spanner 3/8" - 1 (one) no. k. Wago terminal screw driver - 2 (two) no. l. Canvas bag - One bag each.	12.00	Set	₹ -	₹ -	Schedule 7- Schedule - B4 (S&T Others Supply Non SOR)
247.00	Supply of Single Line Directional Panel for Auto Signalling in bidirectional Line with Dominos & switches. Note: 10% spare dominoes and push buttons /switches are to be supplied additionally in the same cost by the contractor to the Railway.	4.00	Numbers	₹ -	₹ -	Schedule 7- Schedule - B4 (S&T Others Supply Non SOR)
248.00	Supply & installation of dual serial to OFC Media converter for Data Concentrator.	29.00	Pair	₹ -	₹ -	Schedule 7- Schedule - B4 (S&T Others Supply Non SOR)
249.00	Supply of NMS Server (having 3 years warranty) hardware & software including Installation, Testing, Commissioning and support for one year with 800 nodes additional capability up gradation up to 1000 nodes with Configuration of SNMP and PING base nodes. Auto alert and Auto email for any critical device failure for remote monitoring of all the active components. It includes maintenance supports for 1 year after commissioning of the devices. For hardware details please refer Special condition of the tender documents.	1.00	Set	₹ -	₹ -	Schedule 7- Schedule - B4 (S&T Others Supply Non SOR)
250.00	Supply of Advanced Cable Maintenance Test Set providing measurement functions including Built in TDR for locating distance to faults on metallic signaling & telecom cables, Built in Resistive fault locator, Built in RFID marker locator, Built in functions should include AC & DC Voltage measurement function, ground resistance test measurement, distance to open	1.00	Numbers	₹ -	₹ -	Schedule 7- Schedule - B4 (S&T Others Supply Non SOR)

SN	Description	Item Qty	Qty Unit	Unit Rate	Total Amount	Schedule No.
	meter for cable length measurement, measurement of longitudinal balance, circuit noise and tracing tone generator. Built in memory function for upto 200 TDR results/400 Auto test results, USB data output, Built in Li-ion battery with charger to be provided.					

IF anything extra is required to complete the job, it will be the responsibility of the bidder.

***Price has to be quoted as per CoR RFP & corrigendum (if any).**

Authorized Signatory

Date:

Name:

Designation:

Office Seal:

Place:

For and on behalf of: (BIDDER NAME)

Note: -

- All the above price would be in INR only.
- The bidder has to compulsorily quote for all items mentioned in the Commercial-bid Tables. In case bidder fails to quote for any of this stage, the bid would be summarily rejected.
- Above is indicative, however the quantity may increase or decrease at the time of placing the purchase order as per actual.
- Tenderer shall quote rates inclusive of Taxes, but there should be break basic price and all type of applicable taxes and GST in a separate sheet (to be uploaded with Price-Bid)
- The bidder is expected to submit a separate sheet, which includes the details of tax-applicable for each component of the SOR, the breakup of price for each item of SOR in terms of Basic Unit Price, GST, Excise duty, Sales Tax, Freight, Forwarding, Packing, Insurance and any other Statuary Taxes/Levies/Charges already paid or payable by the supplier shall also be quoted separately.
- Detailed item description and its specification may be referred from CoR Tender as:

Tender Ref. No.	NIT No: ST_P_SER_ABS_KGP-ARD_01	Dated:
	08/04/2024 15:00	
Date of floating	05/03/2024	
Floated on portal	www.ireps.gov.in	

Annexure 14 – Integrity Pact

PROFORMA FOR “SIGNING THE INTEGRITY PACT”

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 forThe 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 or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". 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 commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

2. The Principal will enter into agreements with identical conditions as this one with all bidders, contractors and subcontractors.
3. 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 and credible Independent External Monitor for this Pact. The task of the Monitor 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. 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.
4. 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.
5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. 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.
6. The Monitor will submit a written report to the CMD, RailTel within 8 to 10 weeks from the date of reference or intimation to **him** by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
7. Monitor shall be entitled to compensation on the same terms as being extended to provided to Independent Directors on the RailTel Board.
8. If the Monitor has reported to the CMD, RailTel, a substantiated suspicion of an offence under relevant IPC/PC Act, and the CMD, RailTel has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
9. The word 'Monitor' would include both singular and plural.

Section 9: Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 10 months after the last payment under the contract, and for all other Bidders 6 months after 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.

(For & on behalf of the Principal)
(Office Seal)

(For & On behalf of Bidder/Contractor)
(Office Seal)

Place _____

Date _____

Witness 1:
(Name & Address)

Witness 2:

(Name & Address)

End of Document

-----XXXX-----