

RAILTEL CORPORATION OF INDIA LTD.

(A Govt. of India Enterprise)

Eastern Region Office

19th Floor, GN 34/1; Block- GN Aurora Water Front, Salt Lake, Sector-5, Kolkata 700 091

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(s) for Bharat Coking Coal Limited, Dhanbad

EOI No: RAILTEL/EOI/ER/Project/2023-24/029

RAILTEL

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NOTICE

RailTel Corporation of India Ltd.

19th Floor, GN 34/1; Block- GN

Aurora Water Front, Salt Lake, Sector-5, Kolkata 700 091

EXPRESSION OF INTEREST

EOI Notice No: RAILTEL/EOI/ER/Project/2023-24/029 dtd 17.01.2024

RailTel Corporation of India Ltd., Eastern Region (hereafter referred to as RailTel) invites sealed EoIs from the empaneled BA / SI partners of RailTel for participating in the process for selection of Partner(s) for the work of:

1. **SOR:** "Supply, Installation, Configuration and commissioning of Datacom Equipment, Network Rack, Online UPS, Earthing at 70 locations under BCCL command area including comprehensive maintenance for 3 (Three) Years".

The details are as under:

1	Issue date of 'Invitation for EoI document'	17.01.2024
2	Last date for submission of EOIs by applicants	30.01.2024 before 15:00 Hrs
3	Opening of applicant EOIs	30.01.2024 at 15:30 Hrs
4	No. of copies of EOIs to be submitted by applicants	One hard copy + 1 soft copy (in CD)
5	Estimated Value of Work	Rs. 2, 80,35,106/- incl GST (2,37,58,565/- Excl GST)
6	EMD	Rs. 5,60,800/-
7	Tender document cost	Rs 2,950/- incl GST

 Eligible MSMEs are exempted from the cost of Bid Document and EMD only. No other exemption will be given.

The EMD and Bid Document cost 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 UTRNo. date and Bank along with the proposal. **Offers without applicable EMD and Tender document cost amount shall be summarily rejected.**

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.

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

Contact (1) : Sri Upendra Kumar Singh

Designation : Chief. Manager/Imp

Email : upendrakumarsingh@railtelindia.com

Mobile : +91 9007044144

Contact (2) : Sri Abhishek Mani Designation : DGM/Marketing

Email : abhishekmani@railtelindia.com

Mobile : +91 6289857500

NOTE: All firms are required to submit hard copy of their EoI submissions, duly signed by Authorized Signatories with Company seal and stamp.

The compete offer shall be submitted to Railtel, Eastern Region office:

Address: RailTel Corporation of India Ltd., 19th Floor, Aurora Waterfront Building,, Plot No. 34/1, Block GN, Sector-V, Salt Lake, Bidhannagar, Kolkata-700091

(UPENDRA KUMAR SINGH)
Chief Manager/Implementation
for RailTel Corporation of India Limited, Eastern Region

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1. RAILTEL - INTRODUCTION

RailTel Corporation of India Limited (hereinafter referred to as "RailTel" or "The Corporation"), a Public-Sector Undertaking under the Ministry of Railways, Government of India, is a national telecom Bidder having NLD, IP2 and ISP licenses and IP1 registration and have built nation-wide optical fibre network. RailTel's objective is to create a nation-wide broadband telecom and multimedia network.

RailTel is an ISO 20000-1:2011 and ISO/IEC 27001:2005 certified organization. The Corporation was formed in September 2000 with the objectives to create nation-wide Broadband Telecom and Multimedia Network in all parts of the country, to modernize Train Control Operation and Safety System of Indian Railways and to significantly contribute to realization of goals and objective of national telecom policy 2012.

RailTel is building a state-of-the-art multimedia telecom network using SDH/ DWDM based transmission systems and high-end MPLS-IP routers. RailTel has extensive expertise in building telecom networks. Moreover, RailTel draws its manpower from signal and telecom branch of Indian Railways which has been in the business of construction, operation and maintenance of telecom systems for more than 50 years.

RailTel has created countrywide state-of-the-art SDH/ DWDM backbone optical transport network using latest technology. More than 400 cities covering over 42,000 RKMs across the country are connected on the network with multiple STM-16 (n x 2.5 Gbps) connectivity. RailTel has also implemented ultra-high capacity DWDM network over 10,000 RKM to provide 400 Gbps which will be further upgradable to 800 Gbps in future.

RailTel's backbone Transport Network has been configured in multiple 'Self-Healing' Ring architectures which provide for redundancy by automatically redirecting and switching traffic from failed/ degraded routes for an uninterrupted service ensuring maximum up-time and service reliability. The network supports multiple ring protection schemes. The network has been designed in such a way that full redundancy is available for bandwidth between any two points. The whole network is managed by centralized network management system (NMS) and backup facilities located across India. RailTel has got unique advantage to offer the best quality service (QoS) from a single unified network with PAN India presence. This state of art network enables point and click provisioning of the bandwidth and other services from anywhere to anywhere in the country. It enables provisioning of traffic in any granularity from 2 Mbps to multiple of Gbps (n x Gbps) from its country-wide strong backbone network.

RailTel has implemented and currently implementing projects of national importance. Few of the Projects are as follows:

- National Optical Fiber Network (NOFN): Democratizing Information through Broadband to Panchayats. BBNL has allotted 11 states comprising of 36,000 panchayats to RailTel which includes the states of Gujarat, Daman & Diu, Dadar & Nagar Haveli in West, Tamil Nadu and Puducherry in South and Meghalaya, Mizoram, Tripura, Arunachal Pradesh, Manipur, Nagaland in North-East.
- **NE-I and NE-II under USOF:** The program envisages to lay OFC cable (at least 24F underground) and provide minimum 2.5 Gbps bandwidth capacity upgradeable up to 10 Gbps.
- National Knowledge Network: National Knowledge Network (NKN) envisages connecting all higher centres of learning and research by bringing together all stakeholders from science, technology, higher education, healthcare, agriculture and governance to a common platform. RailTel has been selected as one of the implementing partners of the network by providing high-capacity bandwidth pipes for the NKN project
- Enterprise Specific IT & ITES projects: RailTel has implemented numerous Telecom & IT related projects in the country for various customers across the spectrum (Govt./ PSU, Enterprises like CIL, BSECL, ECL, MCL, NCL, CMPDI).
- Railway Station Wi-Fi project: RailTel has implemented Free Wi-Fi services at 4000+ Railway stations in association with Google.

2. BACKGROUND OF WORK

Bharat Coking Coal Limited (BCCL), Dhanbad had issued a work order to RailTel Corporation of India Ltd for setting up/establishing a secured MPLS-VPN network at additional 70 locations in BCCL Command Area situated in Jharkhand. The network will comprise of a total of 406 links including these additional 70 links. Outof 406 links, all 404 user location will be connected to Centralized Data Centre (DC) at Tata Communication Limited, Delhi& Data Recovery Centre at Tata Communication Limited, Mumbai.

3. BHARAT COKING COAL LTD (BCCL) -

COMPANYOVERVIEW:

Bharat Coking Coal Limited (BCCL) is the largest coal producing company in the country. The coal reserves of Bharat Coking Coal Limited (BCCL) are spread over two States, namely, Jharkhand and West Bengal and the Company is operating 36 mines which include 11 underground, 16 open cast & 9 mixed mines.

Bharat Coking Coal Limited (BCCL)

Type Schedule – B Miniratna CPSE Public company

Industry Mining Founded 1972

Headquarters Dhanbad, Jharkhand, India

Area served India Products Coal

Owner Government of India

4. RAILTEL'S ROLE IN THE BCCL MPLS VPN PROJECT:

RailTel is providing MPLS VPN network for connecting BCCL HQ and projects/units through optical fiber cable and projects with Mines offices & weighbridges through optical fiber cable with Radio backup along with NOC setup with NMS to monitor the health & performance of Network Components and Facility Management Services in BCCL Commandarea in Jharkhand & West Bengal.

5. Detailed Scope of Work & EOI Evaluation process: -

It is a composite EOI consisting of SOR (SOR-A & SOR-B). Bidders must be bid for both SORs (SORA & SOR B). The evaluation of bid will be done on both SORs (SOR A & SOR B). The technically qualified L1 (lowest) bidder will be awarded works on lowest accepted rate.

The Scope of Work: "Supply, Installation, Configuration and commissioning of MPLS VPN Network, Data Comm Equipment, Network Rack, Online UPS, Earthing at 70 additional locations under BCCL command area including comprehensive maintenance for 3 (Three) Years". The scheduled of requirement (SOR) with details can be referred at Annexure VI. Locations will be provided later. The Datacom equipment needs to work in Mines environment. Necessary extra precaution is to be ensured so that the Datacom equipment works faithfully in dusty mines area.

Note:

In case of any discrepancy or ambiguity in any clause/ specification pertaining to scope of work area, the Work Order released by BCCL to RailTel for the work "Work Order for Establishment"

of MPLS-VPN network 2 Mbps link at 70 locations for BCCL on rental basis for 32 months" shall supersede and will be considered sacrosanct.

6. EOI Bidding Methodology:

Sealed Bid System - 'Two Part Bid (Technical and Financial) - Two Envelope': In this, bidder has to submit each the bid (Part I – Credential/ Techno commercial Bid and Part II - Price Bid) in separate envelope.

- a. In addition to the instructions given in above, the bids shall be processed through Two-part bidding method with two packets system. Two packets system shall be followed, which means that Techno-commercial bid will be opened first; and after deciding the suitability or otherwise of the technical bids, the financial bids of only those firms which are found to be suitable shall be opened.
- b. The financial bid of those firms whose technical bids have been found to be suitable shall be opened on or after scheduled date and time.

7. PROJECT DELIVERY PERIOD

Project Execution	Delivery Period
Completion of project in all respect;	90 days from the date of
	LOI

8. OTHER REQUIREMENTS

Performance Bank Guarantee:

The successful bidder shall submit 10% of total value of contract (including GST) as detailed in the Acceptance Offer towards security deposit in the form of FDR or online transfer or irrevocable Bank Guarantee within 30 days of issue of Advance purchase order/Sub Purchase, failing which a penal interest of 15% per annum shall be charged forthe delay period i.e. beyond 30 (thirty) days from the date of issue of LOA/APO/SPO, from any scheduled bank for due fulfillment of contract as per the details given below:

The security deposit/Performance Bank Guarantee shall be released after successful completion of Contract including warranty & AMC period obligations under the contract, duly adjusting any dues recoverable from the successful bidder, means after FAC.

In the event of the applicant being unable to service the contract for whatever reason, RailTel would evoke the PBG. 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 applicant's failure to complete its obligations under the Contract. RailTel shall notify the applicant in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the applicant is in default.

RailTel shall also be entitled to make recoveries from the applicant's bills, performance bank guarantee, 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.

Note:

- 1) A separate advice of the BG will invariably be sent by the BG issuing bank to the RailTel's Bank through SFMS and only after this the BG will become acceptable to RailTel. It is therefore in own interest of bidder to obtain RailTel's bank IFSC code, its branch and address and advise these particulars to the BG issuing bank and request them to send advice of BG through SFMS to the RailTel's Bank.
- 2) Any performance security upto a value of Rs. 5 Lakhs is to be submitted through online transfer only.
- 3) In case of submission of Security Performance in form of FDR then lien should becreated in favor of "RailTel Corporation of India Ltd".

Non-Disclosure Certificate:

The bidder will be required to sign a Non – Disclosure Certificate (NDC) with RailTeland submit it as part of EOI response. The NDC format is enclosed at Annexure XI.

Compliance Certificate:

All interested applicants must make their submissions by stipulated date.

Applicants are expected to submit Compliance Certificate as per the format given in Annexure V.

Service Level Agreement (SLA):-

 Bidder is required to ensure 99.9% availability at BCCL HQ and 99.5% for all the other Datacom Eqpts, Online UPS supplied under this EOI on monthly basis.
 Percentage of availability shall be maintained separately for each network components for all the links covered under the contract.

2. Penalty Charge:

a) During the contract period, AMC charges payable, after adjusting penalty if any, shall be computed every month as follows:

Bidder is required to ensure % availability as per SLA for the contracted materials on monthly basis separately for each network link covered under the contract. In case, the monthly availability falls below the % availability as per SLA for a link, penalty would be imposed on bidder and the same would be deducted from the monthly rental charges payable to them quarterly.

Computation of monthly average availability and penalty will be done separately for each link on monthly basis as follows:

Availability =	(Total no of Hours in month – Total outrage Hours in month – T		
		X100	
	(Total no of Hours in month)		

M/s Railtel shall give uptime guarantee of 99.9% of link availability at BCCL and Subsidiary HQ and 99.5% for all other links. In case availability falls below the above level for the respective Link a penalty of 10% of the monthly amount for each percentage below the guaranteed % for the respective Link.

Uptime	Penalty	Uptime	Penalty of
(Availability in %)	of (%) of	(Availability in %)	(%) of total
for CIL and	total	for other location	monthly
Subsidiary HQ.	monthly	except CIL &	payment
	payment	Subsidiary HQ.	
>= 99.9	0	>= 99.5	0
>= 98.9 and <	10	>= 98.5 and < 99.5	10
99.9			
>= 97.9 and <	20	>= 97.5 and < 98.5	20
98.9			
>= 96.9 and <	30	>= 96.5 and < 97.5 30	
97.9			
>= 95.9 and <	40	>= 95.5 and < 96.5 40	
96.9			
>= 95 and < 95.9	50	>= 95 and < 95.5 50	

Further, Datacom/UPS availability for any location during any month is less than 95%, RailTel will not make any payment of AMC for the month for that Link against Quarterly bill.

The network availability computation for the individual links within the various Areas / offices / establishments of the subsidiary will be duly certified by the SECL/Project In charge/RailTel or his authorized representative and must be furnished along with the bills.

b) It shall be the responsibility of bidder for maintenance / replacement of each and every spares / component including Battery in case of UPS, for entire rental period. If the faulty UPS in any case is not attended and restored within 72 hours, penalty @ 10% of the monthly AMC bills against the Maintenance charge of the Equipment for that respective location shall be deducted.

The Bidder is required to ensure a minimum availability (Uptime) of 99.9% & 99.5% for the contracted equipment(s) for the period of 3 (Three) Years, on monthly basis, separately for each network equipment covered under the contract. In case, the monthly availability falls below 99.9 % for BCCL HQ and 99.5% for other locations for an equipment, penalty would be imposed on the bidder and the same would be deducted from the residual amount payable to the bidder after the submission of FAC and/or may be encashed from the PBG submitted with RailTel or Quarterly AMC bills.

Note:

- The PENALTY will be decided on NOC report (where it will be mentioned that the same is attributable to LMC portion (not in the part of this EOI) or items/works covered under this EOI.
- The Availability will be calculated for each supplied equipment which is supplied to BCCL.
- Availability shall be calculated on monthly basis.
- Preventive maintenance is to be carried out on mutually agreed time.
- No. of days in the month will be calculated as per the no. of days in a calendar month.
- Penalty for non-functioning of device = (per day maintenance charge of the device under breakdown) X 2
- The downtime will be measured on monthly basis.
- The system down time should not exceed 4 hours from the time at which the complaint was made. In case, the link is not restored within stipulated time, the RailTel may

elect/choose to get the same repaired or replaced from any other outside agency and the cost & expenditure incurred therein shall be recovered from the BIDDER.

- BIDDER shall check each component under the respective SOR, installed at the BCCL atleast once in a month.
- In addition of the above, the SLA breach penalty will be applicable proportionately on theselected bidder. Any deduction by BCCL from RailTel payments on account of SLA breach will be passed on to the Partner proportionately.

Variation of Quantities:

RailTel reserves the right during the currency of contract to the signing of the agreement till the successful completion of the project to increase or decrease by up to (\pm) 25% of the quantity of supply and services specified in the Schedule of Requirements without any change in unit price of the ordered quantity or other terms and conditions. Variation beyond (\pm) 25%, PBG for the full amount to be submitted.

Purchaser's Right to Vary Quantities

- (A) Upto maximum extent of +/- 50% subject to following condition
- i. Upto +25% with no rebate.
- ii. From +25% to +40% with 2% rebate
- iii. From +40% to +50% with 4% rebate
- (B) For variation beyond +50% of the quantity mentioned in the SOR may be done after proper negotiation with the selected bidder.

Project kick-off/ Team deployment:

The selected bidder shall be required to deploy its project team of 4-5 personnel within a week from issue of LOI. In further 14 days the bidder shall be required to ramp up the project team size by 10-15personnel. The above are only indicative numbers. However, the Partner can increase or decrease the resource strength as per the requirement to maintain the service level agreement.

Liquidated Damages (LD):

If the Bidder fails to complete the installation and commissioning of captioned work within 120 days from date of issue of LOI, liquidated damages shall be recovered from the outstanding bills of the Bidder at the rate of 0.5% on the undelivered value of work per week delay subject to maximum 10% of the awarded value of contract OR the BG will be revoked as the case may be. In the event the progress of work is extremely poor or in the event of loss of RailTel's revenue from BCCL, RailTel will have right to get the work executed through its chosen vendor at your Risk & Cost.

Validity of Offer:

The bidder shall keep the offer open for a minimum period of 60 (Sixty days), from the

date of opening of the EoI. Within that period the bidder cannot withdraw his offer subject to the period being extended further, if required, by mutual agreement from time to time.

Manufacturer's Authentication Form:

Bidder should provide Manufacturer Authorization's Form and also compliance letter on OEM's letter head as per technical specification mentioned in SOR of this EoI document. The format for MAF's as per Annexure-XIV.

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/repaired free of cost by bidder.

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).

a. Final Acceptance Certificate (FAC)

The final acceptance of the works shall take effect after Three years i.e. 36 months of issue of Provisional Acceptance Certificates, provided in any case that the Bidder has compliedfully 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.

General Terms and Conditions

- a) Within 15 days of issue of Letter of Intent to the selected bidder(s), RailTel will enter into a Definitive Agreement (format attached at Annexure XII), incorporating technical specifications, financial conditions, service levels and related terms and conditions, with the selected bidder(s). The bidder(s) would need to sign an NDA with RailTel as per RailTel's policy.
- b) RailTel reserves the right to accept or reject any or all application(s) without assigning any reason whatsoever. RailTel's decision in this regard shall be binding and final.
- c) If any of the information, furnished by the bidder(s), is found incorrect at a later stage, the bidder(s) shall be liable to be barred from participating in current and subsequent bidding process with RailTel. RailTel reserves the right to verify the particulars furnished by the bidder(s) independently.
- d) The bidder(s) after submitting the response to this Invitation for EoI document, agree with RailTel for honouring all aspects of fair trade practices.
- e) The bidder(s) shall bear all costs associated with the preparation and submission of the response to this Invitation for EoI document.
- f) Any additional hardware/ licenses required directly or indirectly to meet the objective will be the responsibility of the Partner(s) without any extra cost to RailTel/ BCCL.
- g) RailTel's decision to meet the scope/ end objective will be final.
- h) Any change in solution/ OEM will require prior approval of RailTel. Both the Partners will support each other. A Joint Working Group (JWG) will be formed consisting of officials/ executives each from RailTel and the Bidder.
- i) Arrangement with RailTel and its Partner(s) will be governed by the terms mentioned in this Invitation for EoI document and the Work Order issued by BCCL. However, the terms mentioned in BCCL Work Order will supersede.
- j) The selected bidder shall abide by the provisions of Contract Labour (Regulation and Abolition Act, 1970) Settlement of dispute and arbitration.
- k) If any matter arises between the parties about this Invitation for EoI document, then the parties shall meet to discuss the matter and shall negotiate in good faith to endeavour to resolve the matter; however, if any matter arising has not been resolved by the parties within thirty (30) days after the date the party raising the matter gave notice of it to the other party then the matter shall be submitted by either party to Arbitration.
- 1) The arbitration shall be conducted by a sole arbitrator appointed by CMD/ RailTel.

- m) The arbitration proceedings shall be conducted in the English language.
- n) The decision of the arbitrator thereon shall be final, conclusive and binding on both the parties to the Agreement.
- o) Arbitration shall be held in New Delhi, India. The arbitration shall be conducted as per the provisions of Indian Arbitration and Conciliation Act 1996 and any statutory modification or re-enactment thereof.
- p) The arbitration shall be conducted by a sole arbitrator appointed by CMD/ RailTel.
- q) The arbitration proceedings shall be conducted in the English language.
- r) The decision of the arbitrator thereon shall be final, conclusive and binding on both the parties to the Agreement.
- s) Each party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the parties unless the award otherwise provides.
- t) Security Considerations & Security Agreement While evaluating the tender, regards would be paid to National Defence and Security considerations.

The directives issued from time to time by the Department of Telecommunications (DoT), Ministry of Communications and IT or any other Ministry of Govt. of India on security considerations shall be applicable to the present tender. Accordingly, as per the extent amendment of the National Long Distance (NLD) Service License Agreement for Security related concerns for expansion of Telecom Services in various zones of the country issued vide Department of Telecommunication, Ministry of Communication and IT, Govt. of India's letter no. 10-54/2010-CS-III (NLD) dated: 31.05.2011, the successful tenderer (OEM) shall comply with the provisions stated in the above mentioned directive of DoT and shall have to enter into an agreement with RailTel as per the mutual agreement between Telecom Service Provider and the vendor of equipment, product and services (based on template, available on DoT website), covering all relevant clauses. The tenderer must submit a declaration along with their bid in this regard.

R) **DETERMINATION OF CONTRACT**

Right of RailTel to determine the contract: The RailTel shall be entitled to determine and terminate the contract at any time, should in the RailTel's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing

from the RailTel of such determination and the reasons therefore shall be conclusive evidence thereof.

Payment on determination of contract: Should the contract be determined under sub-clause (1) of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the RailTel shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfactions of the Engineer. The RailTel's decision on the necessity and propriety of such expenditure shall be final and conclusive.

The contractor shall have no claim to any payment of compensation or otherwise, howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract.

TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:

If the Contractor should:

- (i) become bankrupt or insolvent, or lunatic
- (ii) make an arrangement with or assignment in favor of his creditors, or
- (iii) being a Company or Corporation, go into liquidation (other than voluntary), liquidation for the purpose of amalgamation or reconstruction, or
- (iv) have an execution levied on his goods or property on the works, or assign the contract or any part thereof otherwise than as provided in clause-5.15 of SCC, or
- (v) persistently disregard the instructions of the RailTel's Engineer with regard to work quality or progress during execution of work or contravene any provision of the contract, or
- (vi) fail to adhere to the agreed program of work by a margin of 10% of the Stipulated period, or fail to remove materials from the site or to pull down and replace the work after receiving from the Engineer's notice to the effect that the said materials or works have been condemned or rejected, or
- (vii) fail to take steps to employ competent or additional staff and labour as required.
- (viii) fail to afford the Engineer or Engineer's representative proper facilities for inspecting the works or any part thereof as required OR
- (xi) promise offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of RailTel or any person on his or on their behalf in relation to the execution of this or any other contract with the RailTel,
- (x) At any time after the tender relating to the contract has been signed and submitted by the contractor, being a partnership firm admit as one of its partners or employ under it or being an incorporated company elect or nominate or allow to act as one of its directors or employ under it in any capacity whatsoever any retired engineer of the gazetted rank or any other retired gazetted officer working before his retirement, whether in the executive or administrative capacity, or whether holding any pensionable post or not, in the Engineering Department of the Railways for the time being owned and administered by the President of India before the expiry of two years

from the date of retirement from the said service of such Engineer or Officer unless such Engineer or Officer has obtained permission from the President of India or any officer duly authorized by him in this behalf to become a partner or a director or to take employment under the contract as the case may be, or

(B) Fail to give at time of submitting the said tender:

- (a) The correct information as to the date of retirement of such retired engineer or retired officer from the said service, or as to whether any such retired engineer or retired officer was under the employment of the contractor at the time of submitting the said tender, or
- (b) the correct information as to such engineers or officers obtaining permission to take employment under the contractor, or
- (c) being a partnership firm the correct information as to, whether any of its partners was such a retired engineer or retired officer, or
- (d) being an incorporated company, the correct information as to, whether any of its directors was such a retired engineer or retired officer, or
- being such a retired engineer or retired officer suppress and not disclose at the time of submitting the said tender the fact of his being such a retired engineer or a retired officer or make at the time of submitting the said tender a wrong statement in relation to his obtaining permission to take the contract or if the contractor be a partnership firm or an incorporated company to be a partner of director of such firm or company as the case may be or to seek employment under the contractor. Then and in any of these said clauses, the Engineer on behalf of the RailTel may serve the Contractor with a notice in writing to that effect and if the Contractor does not, within 7 days after the delivery to him of such notice, proceed to make good his default in so far as the same is capable of being made good and carry on the work or comply with such directions as aforesaid to the entire satisfaction of the Engineer, the RailTel shall be entitled after giving 48hours' notice in writing under the hand of the Engineer to rescind the contract as a whole or in part or parts (as may be specified in such notice) and adopt either or both the following courses: A final termination notice will be issued by RailTelafter expiry of 48 hrs notice.

RIGHT OF RAILTEL AFTER TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:

In the event of any or several of the courses, referred in clause R.4 above, being adopted:

- (a) The Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and Contractor shall not be entitled to recover or be paid any sum for any works thereto not actually performed under the contract, unless or until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.
- (b) The Engineer or Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery or buildings on the works or on the property on which these are being or ought to have been executed, and to retain the employ the same in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.
- (c) The Engineer shall, as soon as may be practicable after removal of the Contractor fix and determine expert or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) has at the time of termination of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract what was the value of any unused or partially used materials, any constructional plants and any temporary works upon the site. The legitimate amount due to the contractor after making necessary deductions and certified by the Engineer should be released expeditiously.

8.13 INSPECTION:

Pre-shipment / pre-dispatch inspection shall be carried out at manufacturers/supplier's premises by RailTel's authorized representative. Traveling, lodging & boarding expenses of RailTel's representative and charges for 3rd party inspection, if any, shall be borne by RailTel but necessary facilities to carry out tests/inspection shall be provided by the manufacturer/supplier free of cost.

Along with inspection call, the supplier/manufacturer shall submit details of test procedures, program, parameters together with permissible values, etc., and their Quality Assurance Plan.

In case material/equipment fails during inspection, the fresh lot of material shall be offered without any extra cost, by the manufacturer/supplier. In such a case, total cost of re-inspection including travel, lodging & boarding of the inspecting officials shall be to manufacturer's /supplier's account.

During inspection bidder should provide certificate from OEM duly signed by the firm certifying that equipment/ material being supplied are new and conform to technical specification.

9 A. PAYMENT TERMS:

SOR-A

Payment shall be made as per following criteria

1- For item no 1-4 & 22-25:

- a. 70% payment would be paid after supply of individual SOR item at respective site duly inspected by RailTel Nominated Officer.
- b. 20% payment will be released after successful Installation, Commissioning of the work at respective site & after the issue of PAC or after completion of last phase of work.
- c. The following document shall be attached along with the bills:
 - (i) Invoice in original and duplicate
 - (ii) Delivery challan
 - (iii) Inspection certificate
 - (iv) Warranty certificate of the OEM
 - (v) Bidders Certificate of Dispatch
 - (vi) E-way bill
 - (vii) Copy of Purchase Order
 - (viii) Insurance of the materials
 - (ix) PAN, GST Registration Certificates
 - (x) A certificate duly signed by the firm certifying that equipment/ materials being supplied are new and conform to technical specification.

d. Final Payment:

Final payment of 10% (Ten Percent) of the contract value shall be made after one year from the date of issue of PAC.

Payment against AMC bills:

Payment against AMC will start after completion of 1 year from the date of issue of PAC. Quarterly payment for AMC Charges would be made by RailTel after successful completion of AMC Services of that quarter and on the certificate furnished by concerned RailTel representative of the Executive Director of the Region and submission of OEM warranty certificate of that period. No payment is to be released unless Bank Guarantee and OEM warranty certificate is submitted.

2- For item no 5-21:

- a. 100% payment would be paid after supply of individual SOR item at respective site duly inspected by RailTel Nominated Officer.
- b. The following document shall be attached along with the bills:

- (i) Invoice in original and duplicate
- (ii) Delivery challan
- (iii) Inspection certificate
- (iv) Warranty certificate of the OEM if applicable
- (v) Bidders Certificate of Dispatch
- (vi) E-way bill
- (vii) Copy of Purchase Order
- (viii) PAN, GST Registration Certificates

Payment Term of SOR-B:

A. Payment shall be made as per following criteria

100% payment would be paid after supply, installation & commissioning of specific work as per SOR B. The asked quantity as per requirement within contract period.

Certification of Railtel's official require.

The following document shall be attached along with the bills:

- (ix) Invoice in original and duplicate
- (x) Delivery challan
- (xi) Inspection certificate
- (xii) Warranty certificate of the OEM wherever applicable
- (xiii) Bidders Certificate of Dispatch
- (xiv) E-way bill
- (xv) Copy of Purchase Order
- (xvi) PAN, GST Registration Certificates
- C. 1) Bill Passing Authority: Addl GM/P/Eastern Region
 - 2) Bill paying Authority: Addl.GM/Finance / Eastern Region

10. Evaluation Criteria & Eligibility Criteria:

10.1 <u>Selection Criteria:</u>

Step-I: Sealed proposals of only those bidders will be entertained who are empanelled with RCIL and had submitted PBG, in reference to their empanelment letter. The PBG should be valid on opening of the bids. A copy of PBG should be submitted along the technical-commercial bid.

Step-II: Those bidders whose PBG is in place i.e. those are complying with Step-I, will be further evaluated the financial bid of those firms whose technical bids

have been found to be suitable shall be opened on or after scheduled date and time The bidder quoting the lowest price shall be adjudged 'Successful Bidder'. No upward price revision is allowed at later stage regarding GST.

10.2 Eligibility Criteria:

(a) Eligibility Criteria Requirements for OEMs:

S.N.	Eligibility Criteria Requirements	Documentation required
1	OEM should be a registered in India. In case of imported product also OEM should have a registered office in India to provide after sales service support from India itself.	The certificates/Undertaking for the same will have to be submitted.
2	OEM should be ISO9001, 14001.	Certificates to be submitted
3	The Equipment offered by the OEM or equipment of the same series/family from the same OEM should have received PO or supply record from any Government/PSUs/Telecom Service Providers network in India.	The certificates (at least POCOPY) from the actual users will have to be submitted may also submit self-certificate with proper contact detail of end clients along with quantities supplied (Firm Name, Contact person, Designation, Telephone Number, Fax, Official mail id etc.).
4	Clause wise technical specs compliance along withall mentioned documents/annexures for all clauses to be submitted along with bid by the bidder (i.e.,OEM).Back-to-Back warranty with respective OEMs for both Hardware and Software.	The certificates/Undertaking for the same will have to be submitted along with bid from respective OEM.

(b) Eligibility Criteria Requirements for Bidders:

SN	Eligibility Criteria Requirements	Supporting Document Required
1)		Declaration from OEM and duly signed by bidder
4)	Financial Capability: The bidder should have received a minimum cumulative contract of 150% of advertised value or above i.e. Rs 4,20,52,659/- from the operations in the last three financial years plus current year upto the date of opening of tender. For Startups* (recognized by Department of Industrial policy and promotion, Ministry of Commerce and Industry) a minimum cumulative contract of Rs.1,40,17,553/- (50% of SOR value) is required.	 AuditedBalanceSheetdulycertified bytheCharteredAccountantorCertificatefromCharteredAccountantdulysupportedbyAuditedBalanceSheet. The Performa of certificate as per Annexure -XV of EOI. For startups, Certificate of Start up issued by Department of Industries Policy and promotions, Ministry of Commerce and Industries.

5) **Technical Capability:** The tenderer must have successfully completed any of the following during last 07 (seven)years, ending last day of month previous to the one in which tender is invited:

Three similar works#30% of SOR value (SOR-A+SOR-B) each costing not less than Rs.84,10,532/- incl GST

or

Two similar works#40% of SOR value (SOR-A+SOR-B) each costing not less than Rs.1,12,14,042/- incl GST,

or

One similar work#60% of SOR value each costing not less than Rs.1,68,21,064/-.

For Startups (recognized by Department of Industrial policy and promotion, Ministry of Commerce and Industry), the bidder should have completed in last three financial years plus current year upto the date of opening of tender:

Single order of similar work#35% of SOR Value costing not less than Rs. 98,12,287/- incl GST.

OR

Two orders of similar work#20% of SOR Value costing not less than Rs. 56,07,021/- incl GST.

OR

Three orders of similar work#15% of SOR Value costing not less than Rs. 42,05,266/- incl GST.

Similar Work: Bidder should have executed work like Supply, installation and commissioning of Datacom Equipment, online UPS, Earthing, LAN/WAN Networking in Mines /Rural Areas with multi locations, minimum 35 locations.

 Completion certificates with Satisfactory working and value of the work completed from the User Organizations is required to be submitted.

In case of substantially completed work, certificate from user for bidder share regarding total value of bidders share of work and value of completed work(minimum 80% of total value of bidders share of work) is required to be submitted.

In case of composite work purchase orders, bidder shall submit CA certificate certifying the actual amount pertaining to similar work definition as mentioned in the clause.

(The set of document(s) submitted shouldclearlycertifyeligibilitycriteriaan dshouldbeverifiablefromtheuser/customer)

Bidder	should	have	authorization	MAF as per Form no.11	
specific	to this to	ender fr	om respective		
OEM as	per Form	no.11.			

Explanation for clause - Eligibility Criteria:

- 1. In case a contract is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfilment of credentials.
- 2. If a contract is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such contract shall be considered for fulfilment of credentials.
- 3. If a part or a component of contract is completed but the overall scope of contract is not completed, this work shall not be considered for fulfilment of technical credentials even if the cost of part completed work/component is more than required for fulfilment of credentials.
- 4. In case a contract is considered similar in nature for fulfilment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.
- 5. The value of final bill including PVC amount-if paid, or otherwise in case final bill is pending the contract cost in last approved variation statement plus PVC amount paid or cumulative amount paid up to last on-account bill

including PVC amount and statutory deductions whichever is less, shall be considered as the completion cost of contract.

10.3 Submission of the bid:

The bidder is required to submit the Technical bid and Price bid before due date & time of submission of bids specified in this tender document.

Following documents shall be submitted in Technical and Price bid as given below:

- (a) "TECHNICALBID"; The bid shall consist of the following:-
 - 1) Offer Letter complete.
 - 2) Signed Copy of Tender Document/Corrigenda
 - 3) Receipt of EMD and Tender document cost
 - 4) Power of attorney to be submitted
 - 5) MAF
 - 6) Technical compliance of specifications from OEM
 - 7) Notarized affidavit
 - 8) Power of Attorney
 - 9) Complete technical data and particulars of the equipment offered, as specified in the Tender document together with descriptive literature, leaflets, Drawings, if any, complete with list etc.
 - Schedule of Requirements with quantities but with prices blanked out (this will be a replica of price bid with prices blanked out) and detailed un-priced Bill of Material including break up of common units/cards/backplane/Fan Tray unit etc. for building up the SOR items for supply.
 - **Price Bid"** Shall contain: The price bid for "Schedule of requirements" as per Note of Chapter 2 along with "Bill of Material" (BOM) for each item quoted exactly according to the performa, as also submitted along with "Technical Bid".

Note: (i) Offers without applicable EMD amount and Tender document cost shall be summarily rejected. (ii) Non submission of the above-mentioned documents may lead to rejection of the bid.

10.4 System of Verification of Bidder's Credentials:

- a. The bidder shall submit along with the EoI document, documents in support of his/their claim to fulfil the eligibility criteria as mentioned in the EoI document. Each page of the copy of documents/certificates in support of credentials, submitted by the bidder, shall be self-attested/digitally signed by the bidder or authorized representative of the advertising firm. Self-attestation shall include signature, stamp and date (on each page). Only those documents which are declared explicitly by the bidder as "documents supporting the claim of qualifying the laid down eligibility criteria", will be considered for evaluating his/their EoI.
- b. The bidders shall submit a notarized affidavit in original on a non-judicial stamppaper stating that they are not liable to be disqualified and all their statements/documents submitted along with bid are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as Annexure-
 - XIV. Non submission of an affidavit by the bidder shall result in summary rejection of his/their bid and It shall be mandatorily incumbent upon the bidder to identify, state and submit the supporting documents duly self-attested by which they/he is qualifying the Qualifying Criteria mentioned in the EoI Document. It will not be obligatory on the part of the RailTel to scrutinize beyond the submitted document of bidder as far as his qualification for the EoI is concerned.
 - c. The RailTel reserves the right to verify all statements, information and documents submitted by the bidder in his EoI offer, and the bidder shall, when so required by the RailTel, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the RailTel shall not relieve the bidder of its obligations or liabilities here under nor will it affect any rights of the RailTel there under.

In case of any wrong information submitted by the bidder, the contract shall be terminated, Earnest Money Deport (EMD), Performance Guarantee (PG) and Security Deposit (SD) of contract forfeited and agency barred for doing business on entire RailTel for 5 (five) years.

11. Long Term Maintenance Support/AMC:

a. The Bidder will submit a certificate from OEM (for the item as the case may be) towards maintenance support after successful completion of the warranty obligations for EoL of 8 (eight) years. The long-term maintenance support shall be comprehensive and include all hardware and software of equipment etc.

supplied against this contract. RailTel should be extended the benefits of software up-grades made by OEM on the system from time to time to improve performance. During this period the following terms and conditions shall be applicable.

- b. Material for replacement shall be handed over to/taken over from contractors engineer at the RailTel's NOC / Dhanbad or mutually agreed RailTel PoP location. The cost of replacement etc. shall be included in the quoted bid price during warranty period. During this period, the contractor shall remain responsible to arrange replacement within a week and for setting right at his own cost any equipment which is of defective manufacturing or design or becomes unworkable due to any cause whatsoever. The decision of the RailTel's representative in this regard to direct the contractor to attend to any damage or defect in work shall be final and binding on the Contractor.
- c. During this period the contractor shall be responsible to the extent expressed in this clause for any defects that may develop under the conditions provided for by the contract and under proper use, arising from faulty materials, design or workmanship in the plant, or from faulty execution of the plant by the contractor but not otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser's Engineer who shall state in writing in what respect the portion is faulty.
- d. **Bidder/OEM, shall be paid** @ **5% of supply cost per annum** towards Long Term Maintenance Support till EoL (8 years) after completion of warranty period, to undertake repairs/replacements of all type of module/ card/assembly/ subassembly and update/upgrade of software released during this period and /or which may fail in the network after the warranty. Only incremental cost in % over and above this, if perceived by the OEM and Bidder, may be indicated in Schedule of Requirement and shall be added towards evaluation of EoI. AMC would have to be valid up to the EoL i.e. 8 years after the warranty.
- e. Separate LOA/agreement for AMC for 2 years after warranty period shall be entered with OEM/ Bidder by RailTel. A fresh Bank Guarantee valid for two years for 10% of the Long-Term Maintenance Support per year as accepted by RailTel, shall be required to be submitted by Bidder for due fulfillment of long-term maintenance support obligation. AMC may be extended with same terms & conditions after 2 years AMC up to the EoL of the items and it is binding to bidder and its sole discretion of RailTel.

Bidder should submit their offer as per the bid format enclosed at Annexure-VI, Annexure VII& Annexure-VIII. Selection will be based on Technical & Financial evaluation and Commercials.

12. Warranty clause:

- BIDDER shall provide onsite comprehensive warranty (wherever as applicable, warranty
 period mention with each items) from the date of PAC forall the components supplied and
 the responsibility for smooth functioning of the components shall rest upon BIDDER
 during this period of warranty.
- The comprehensive onsite warranty includes preventive maintenance/ regular services of the supplied Equipment/or replacement of all such hardware/items necessary for keeping the network in perfect working order and condition at all the times during the period of the warranty from any defects/ disturbance or any unscheduled call for corrective and maintenance services, by taking appropriate steps on time to set right the full functioning of the network.

Material for repair during the Warranty Period shall be handed over /taken over to the contractor's engineer/representative at RailTel's BCCL, NOC, Dhanbad locations or sites where equipments are installed. During the warranty period, the contractor shall remain responsible to arrange a replacement within 30 days and for setting right at his own cost any equipment installed by him which is of defective manufacture or design or becomes unworkable due to any cause whatsoever. The decision of the RailTel's

representative in this regard to direct the contractor to attend to any damage or defect in work shall be final and binding on the Contractor. In case contractor fails to replace any faulty part within 30 days period, following penalties will be imposed:

Equi	Equipment		Duration of repair	Deduction/Penalties
All	Modules	and	More than 30 days and upto	10% of the cost of affected item
acces	sories		40days (from the date of receipt)	
All	Modules	and	More than 40days and upto	25% of the cost of affected item
acces	sories		50days (from the date of receipt)	
All	Modules	and	More than 50days and upto 75% of the cost of affected i	
acces	sories		60days (from the date of receipt)	
All	Modules	and	More than 60 days (from the	Full cost of the affected item
accessories date of receipt)		date of receipt)		

9. Force Majeure:

Force majeure shall mean -

- War, hostilities (whether war be declared or not), invasion, act of foreign enemies.
- Rebellion, revolution, insurrection or military or usurped power, civil war or pandemics/Lockdown.
- Ionizing radiation, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or

- other hazardous properties of any explosive nuclear assembly or nuclear component thereof.
- Presume waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds.
- Riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the works.
- Loss or damage due to the use or occupation by the Employer of any section or part of the permanent works, except as may be provided for in the contract.
- Loss or damage due to the extent that it is due to the design of the works, other than any
 part of the design provided by the contractor or for which the contractor is responsible,
 and
- Any operation of the forces of nature against which an experienced contractor could not reasonably have been expected to take precautions.

10. For Micro and Small Enterprises (MSEs)

- 10.1. Certain benefits/preferential treatment shall be extended to the registered MSEs as per guidelines issued in the latest notification of Ministry of MSME/ Government of India.
- 10.2. MSEs who are interested in availing themselves of these benefits will enclose with their offer the proof (Udhyam Aadhaar Certificate) of their being MSE registered with any of the agencies mentioned in the notification of Ministry of MSME.
- 10.3. The MSEs must also indicate the terminal validity date of their registration.
- 10.4. Failing 10.2 and 10.3 above, such offers will not be liable for consideration of benefits detailed in the notification of Government of India.
- 10.5. The bidder seeking TDC/EMD exemption, must submit the valid supporting document for the relevant category with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from TDC/EMD. Traders are excluded from the purview of this Policy.

13. LIST OF ANNEXURES:

Annexure I : List of locationsAnnexure II : EoI Template

• Annexure III : Offer Letter format

• Annexure IV : Checklist of documents

• Annexure V : Compliance certificate format

Annexure VI : Commercial Bid Format for Zone -1
 Annexure-VII : Format for Nil Deviation certificate
 Annexure VIII : Format for Non-Disclosure certificate
 Annexure IX : Format for CONTRACT AGREEMENT
 Annexure X : Performa for Performance Bank Guarantee

• Annexure- XI : Format for MAF's certificate

Annexure XII : Format for Turnover & Profit & Loss Certificate
 Annexure XII : Format for Declaration for acceptance of all

Terms & Conditions

• Annexure XIV :Format for Verification of Bidder's Credentials

• Annexure XV :Technical Specifications

ANNEXURE-I: List of tentative 70 locations under BCCL Command Area

List of locations will be provided later. Some of the locations maybe shifted at the discretion of BCCL during the contract period. Such shifted locations will be made ready by the bidder at the accepted rate, but at extra cost within the admissible variation of quantity

ANNEXURE-II: EOI FORMAT

RailTel reserves the right to reject any response received after the mentioned deadline or received with incomplete/ partial details or not as per the formats specified below. The response to the Invitation for EoI should cover the following:

1. The bidders need to submit 1 (One) Hard copy and 1(ONE) Soft copy (In Hard disk) of their EoI, in sealed envelopes to the following.

Contact: Sri Maneesh Kaushal

Designation: General Manager /

Marketing Address: RailTel

Corporation of India Ltd.

19th Floor, GN 34/1; Block- GN

Aurora Water Front, Salt Lake, Sector-5,

Kolkata 700 091Email: maneeshk@railtelindia.com

Telephone: +91 33 4404 1440

Mobile: +91 9007044110

Fax: +91 33 4404 1490

- The sealed envelope should clearly mention on top of it in bold writing EOI
 No. withsoft copies in CD.
- 3. Offering letter in the format mentioned in Annexure III.
- 4. Checklist of documents for submission given at **Annexure IV**.
- 5. Compliance Certificate as per the format given in **Annexure V.**
- 6. Proposed project execution details containing the following:

Execution plan (sample) giving details of approach and methodology, equipment to beused, manpower, etc.

- 7. Commercials as specified in Annexure VI, Detailed Technical Specification in Annexure XV.
- 8. Nil-deviation certificate as per format in **Annexure VII.**
- 9. Copy of 'Invitation for EoI document' issued by RailTel, duly signed by the

authorized signatory of the bidder.

- 10. Non-disclosure certificate as per format in Annexure VIII.
- 11. Power of Attorney specifying authorized signatory of the bidder.
- 12. Format for Manufactures Authorization Form (MAF) certificate in Annexure XI.
- 13. Format for Turnover & Profit & Loss Certificate in Annexure XII.
- 14. Format for Declaration for acceptance of all Terms & Conditions in Annexure XIII.
- 15. The bidder should submit dummy invoices with the breakup of price for each item of SOR-A, & SOR -B in terms of Basic Unit Price, GST, Freight, Forwarding, Packing, Insurance and any other Statuary Taxes/Levies/Charges already paid or payable by the supplier shall also be quoted separately. The invoice no. should invariably contain GSTIN of each location and other statutory requirement as per GST Act. *
- 16. (PLEASE USE BLOCKLETTERSTOFILL THETABLE BELOW)

DETAILS OFPOINTOFCONTACT:				
FirstName	Last Name			
Designation				
Official Address				
Contact Number(Office Landline)				
Mobile Number				
Official Email ID				

^{*} Without GSTIN no. the invoice will not be entertained.

ANNEXURE-III: OFFER LETTER

OFFERLETTER

(To be on company letter head)

EoI Reference No: RAILTEL/EOI/ER/MKT/BCCL/2022- 23/017Date:
Γο,
The Executive Director
19th Floor, GN 34/1; Block- GN
Aurora Water Front, Salt Lake, Sector-5, Kolkata 700 091
Dear Sir,
SUB: Participation in the EoI process
Having examined the Invitation for EoI document bearing the reference number , dated xx. xx. xxxx 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 EoI document.
If our application is accepted, we undertake to abide by all the terms and conditions mentioned in the said Invitation for EoI document.
We hereby declare that all the information and supporting documents furnished as a part of our response to the said Invitation for EoI 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 EoI is liable to be rejected.
Date: Signature with seal –
(in the box)
Name:
Designation:

Annexure IV: Checklist of documents

Sl	Document	Submission
no		Format
	Submission of PBG which submitted against Empanelment with RailTel (Mandatory)	
	EMD & Cost of Tender document (Mandatory)	
	EoI Template	Annexure II
	Offer Letter format (Mandatory)	Annexure III
	Checklist of documents	Annexure IV
	Compliance certificate format (Mandatory)	Annexure V
	Schedule of Requirement (SOR-A)	Annexure VI
	Format for Nil Deviation certificate (Mandatory)	Annexure VII
	Format for Non-disclosure certificate	Annexure VIII
	Format for Contract Agreement	Annexure IX
	Performance Bank Guarantee Bond	Annexure X
	MAF's certificate (Mandatory)	Annexure XI
	Financial capacity (Mandatory)	Annexure XII
	Declaration for acceptance of all Terms & Conditions (Mandatory)	Annexure XIII
	Technical Specifications for Materials under SOR-A & SOR-B (Mandatory)	Annexure XV
	credential verification	Annexure XIV
	Signed 'Invitation for EoI document' (Mandatory)	
	Power of Attorney for authorized signatory (Mandatory)	
	Credentials (including work with RailTel/Similar work) against Eligibility criteria (Mandatory)	

Annexure V: Compliance Certificate

The Executive Director,

RailTel Corporation of India Ltd.

19th Floor, GN 34/1; Block- GN

Aurora Water Front ,Salt Lake ,Sector-5, Kolkata 700 091

Dear Sir,

Sub: EoI No: RAILTEL/EOI/ER/BCCL/MKT/2022-23/017

We hereby agree to comply with all the terms and conditions/ stipulations as contained in the Invitation for EoI document and the terms mentioned below:

Sl no	Clause no	Compliance (Yes /No)
1	PROJECT DELIVERY PERIOD	
2	Non-Disclosure Certificate	
3	Performance Bank Guarantee	
4	Service Uptime	
5	Variation of Quantities	
6	Manufacturer's Authentication Form	
7	Financial capacity	
8	Technical Eligibility	
9	Validity of Offer	
10	Liquidated Damages (LD)	
11	Technical Specification as per Annexure XVI	
12	Warranty and AMC Condition	

Date: Signature with seal –		
_	(in the box)	
	Name:	
	Designation:	

Annexure VI: Price Bid for BCCL

SOR-A:

S/N	items	Unit	Unit Rate, excl GST	Qty	Total Cost with 1 year warranty	AMC Amount for 2nd year	AMC Amount for 3rd year	Total AMC amount for 2 years	Total amount (Rs)
Sup	ply & Installation:								
1	Supply & installation at site -Type A Router; Detailed Specification at Annexue- XV	Nos	82782	75	62,08,650	3,10,433	3,10,433	6,20,865	68,29,515
2	Supply & installation at site -Type B Switch; Detailed Specification at Annexue- XV	Nos	41943.96	75	31,45,797	1,57,290	1,57,290	3,14,580	34,60,377
3	Supply & installation at site -Type C Switch; Detailed Specification at Annexue-XV	Nos	48995.28	10	4,89,953	24,498	24,498	48,995	5,38,948
4	Supply & installation at site -Type D Switch; Detailed Specification at Annexue- XV	Nos	45358	5	2,26,790	0	0	0	2,26,790
5	Supply of 10 G SFP - 80Km UD	Nos	17280	6	1,03,680	0	0	0	1,03,680
6	Supply of 10 G SFP - 60Km UD	Nos	8100	6	48,600	0	0	0	48,600
7	Supply of 10 G SFP - 20Km UD	Nos	3456	10	34,560	0	0	0	34,560
8	Supply of 10 G SFP - 80Km BD	Nos	17851.5	6	1,07,109	0	0	0	1,07,109
9	Supply of 10 G SFP - 40Km BD	Nos	7204	10	72,040	0	0	0	72,040
10	Supply of 10 G SFP - 20Km BD	Nos	5931	10	59,310	0	0	0	59,310
11	Supply of 10 G SFP - 40Km with same OEM of Router & UTM	Nos	39570.12	6	2,37,421	0	0	0	2,37,421
12	Supply of 1 G SFP - LX - 40Km with same OEM of Router & UTM	Nos	6262.92	6	37,578	0	0	0	37,578

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13	Supply of 1 G SFP - SX	Nos	5799	140	8,11,860	0	0	0	8,11,860
14	Patch Chord (LC-FC 10Mtr.)	Nos	170.77	20	3,415	0	0	0	3,415
15	Patch Chord (LC-LC 20Mtr.)	Nos	205	50	10,250	0	0	0	10,250
16	Patch Chord (LC-LC 10Mtr.)	Nos	162	50	8,100	0	0	0	8,100
17	Patch Chord (LC-LC 5Mtr.)	Nos	140	150	21,000	0	0	0	21,000
18	Patch Chord (LC-SC 20Mtr.)	Nos	205	50	10,250	0	0	0	10,250
19	Patch Chord (LC-SC 10Mtr.)	Nos	160	50	8,000	0	0	0	8,000
20	Patch Chord (LC-SC 5Mtr.)	Nos	140	50	7,000	0	0	0	7,000
21	Optical Attenuator-5 dB (LC type)	Nos	281	100	28,100	0	0	0	28,100
22	Online UPS- System 2 KVA (Supply and installation of Online UPS- System 2 KVA with single phase Input & Single Phase Output with 2 years Warrenty for Project Offices & Weigh Bridges: Inclusive of with 4 hrs backup, isolation Transformer)	Set	49627.08	70	34,73,896	0	1,73,695	1,73,695	36,47,590
23	Battery Set for 2KVA UPS against Item no 22 (Supply & installation of battery set (6 Nos of 12 V-42AH Battery) for 2KVA UPS against Item 5 with 2yrs Warranty. 2sets per location. The OEM should be reputed like Exide / Amraraja or equivalent / Amraraja or equivalent)	Set	26363.88	70	18,45,472	0	0	0	18,45,472
24	Customised battery rack (Customized Battery Rack with space for mounting UPS and Isolation Transformer)	Nos	3534.84	70	2,47,439	0	0	0	2,47,439
25	Supply, installation & commissioning of Surge protector for Class B & C (Supply, installation & commissioning of Single Phase Surge protector Class C Device for switching surge protection as per standard IEC 61643)	Nos	15058	70	10,54,060	0	52,703	52,703	11,06,763
	Total Amount (Rs)				1,83,00,328	4,92,220	7,18,618	12,10,838	1,95,11,166

SOR-B:

S/N	Items description	Unit	Unit Rate, excl GST	Qty	Total Cost with 1 year warranty	AMC Amount for 2nd year	AMC Amount for 3rd year	Total AMC amount for 2 years	Total amount (Rs)
1	LAN Cabling: LAN Cabling at all SECL site mentioned under SOR, as per site requirement with supply & installation of UTP CAT6 Cable, I/O Box, RJ45, Patch Panel, Patch Cord with Laying of CAT6 Cable in casing Capping including supply of Casing Capping. Typically but not limited to 5 I/O box per site. Detailed Specification for CAT 6 UTP Cable, Patch Panel	Nos	20606	70	14,42,420	0	0	0	14,42,420
2	Electrical works: Electrical fitting like 2 nos LED of 25 watts of standard make, fixing switch board with 3 (15/5 Amp) socket & 5 electrical switches and fuse and A/C indicator (if required) Restoration of floor, walls, door/window fittings of existing SECL sites (if required)	Nos	4418.5	70	3,09,295	0	0	0	3,09,295
3	Extention of AC Mains from Main Source to UPS Input point with 16 A dual pole MCB and UPS to Rack with provision of two nos distribution board with 3 nos 15 A socket and fuse in each board.	Nos	8448.5	70	5,91,395	0	0	0	5,91,395
4	Rack-19" 9U: Supply & Installation at site	Nos	7037.28	70	4,92,610	0	0	0	4,92,610
5	Maintenance Free Earthing: Supply, installation & commissioning of Maintenance Free Earthing system with earth resistance upto 01 ohm per site for SECL sites. The earthing material shall be inspected by RailTel official.	Nos	20166.8	70	14,11,679	0	0	0	14,11,679
	Total Amount (Rs)				42,47,398	0	0	0	42,47,398

Total Cost for SOR-A & SOR-B = Rs1,95,11,166/- + Rs. 42,47,398/- = Rs. 2,37,58,565/- (Excluding Taxes)

(Rupees Two Crore Thirty Seven Lakhs Fifty Eight Thousand Five Hundred Sixty Five Only)

<u>Bidder shall quote rates (percent)</u> <u>Both SOR A & SOR B</u>, but there should be break up of basic price and all type of applicable taxes including GST.

Note	place	e rate and amount shown in the Eol Document are rounded off to two decimal s. For calculation purpose actual decimal places will be taken into deration.						
i.	l/We	undertake to execute the work at % (in words: percent) (write 'at par with' or w' or 'above') the RailTel's total estimated cost of work as per schedule of						
	work mentioned above.							
ii.		It is certified that I/We have inspected the site of work and acquainted myself or ourselves with local conditions.						
iii	I/We have carefully gone through the specifications, additional special conditions etc. attached with the EoI document.							
iv.		undertake to keep this offer valid for period indicated in EoI document from the date ning of EoI and further not to revoke the same before the expiry of such period.						
[a] Bidder should quote single percentage rate in row (i) above only at par with/ab //below the RailTel's total estimated cost of work in the Eol SOR. [b] The single percentage rate should be quoted both in figures and words [d] If none of the 'at par with'/'below'/'above' is mentioned by the bidder in row (i) about the quoted single percentage will be treated below the RailTel's estimated cost of work rejected. The Eol will be decided based on the combined overall cost. In the event of any discrepancy between the rates in figures and in words, the quote shall be considerable taking into account the one written in words for evaluation purpose. The bidder is expected to submit a separate sheet, which includes the details of tax applicable each component of the SOR, the breakup of price for each item of SOR in terms of Basic Unit P GST, Freight, Forwarding, Packing, Insurance and any other Statuary Taxes/Levies/Charges alrepaid or payable by the supplier shall also be quoted separately. The tenderer shall make available the offered products if desired during the techn evaluation of offered equipment for testing and benchmarking at any testing faci approved by RailTel. RailTel is the agency that will confirm the successful working of product under testing. The tenderer shall provide all the required equipment and accesso for above testing at the testing facility. Tenderer shall bear all the cost of above test RailTel shall provide only rack space and power supply. In case, offered equipment already tested and approved by RailTel, it may be exempted from above testing. Decis of RailTel shall be final in this regard.								

RAILTEL/EOI/ER/Project/2023-24/029

During Technical evaluation, RailTel may asked of POC for offered equipment. Interoperability test with existing Network will also conduct during POC. POC may be exempted in case Offered Equipment or similar/higher capacity equipment of same OS is running in RailTel Network (In that case bidder/OEM request for exemption may be provided). For exemption of POC, RailTel decision will be final. Bidder should arrange material at NOC (Kolkata) for POC and POC should be completed within 21 days after intimation to bidder. In case of Bidder failed to complete POC successfully in that case offered equipment will be technical disqualified.

In case of Equipment series/family of offered Equipment is new to RailTel, In that case Bidder/OEM should provide professional training (5 Man week) and professional OEM support services for integration of equipment with existing Network.

Annexure VII: Format for NIL Deviation Certificate

(To be on company letter head)

NIL DEVIATION CERTIFICATE

To,		
The Executive Director,		
RailTel Corporation of India Ltd.		
19th Floor, GN 34/1; Block- GNAurora		
Water Front, Salt Lake,		
Sector-5, Kolkata 700091		
Dear Sir,		
SUB: NIL DEVIATION CERTIFICAT	<u>E</u>	
We have examined the Invitation for Equipment of the Equipment of the Sort of	•	el for the "Name of Work
We hereby confirm "NIL Deviation" f RAILTEL/EOI/ER/Project/2023-24/001		
Date: Signature with seal –	(in the box)	
	(in the box)	
	Name:	
	Designation:	

Annexure VIII: Format for Non-Disclosure Certificate

To, The Executive Director, RailTel Corporation of India Ltd. 19th Floor, GN 34/1; Block-GN, Aurora Water Front, Salt Lake, Sector-5, Kolkata 700 091

Dear Sir,

Sub: EoI Reference No: RAILTEL/EOI/ER/Project/2023-24/001 dt xx.xx.xxxx

This is in response to the Invitation for EoI for "xxxxxxxxxxx NAME OF THE WORK xxxxxxxxxxxxxxx" for SECL Project.

- **A.** During the course of the above negotiations RailTel (including its affiliates) may in conjunction with the said purpose and for our mutual benefit, disclose to us certain information being proprietary and/ or of confidential nature and/ or sensitive;
- B. We and our affiliates wish to ensure the protection and secrecy of RailTel's confidential information which may be disclosed, received or granted access to by RailTel and wish to reduce to writing, our confirmation in this respect.

With regard to the above said purpose, we hereby covenant, warrant and confirm as follows:

1. NON-DISCLOSURE & CONFIDENTIALITY

We agree and undertake to regard and preserve as Confidential Information provided by RailTel or which may be disclosed, received or granted access to by RailTel or cometo the knowledge of us in any manner in connection with the negotiations for the possiblebusiness relationship.

- (a) In maintaining the Confidential Information hereunder we agree that we shall not, without first obtaining the written consent of RailTel, disclose or make available to any person, firm or enterprise, reproduce or transmit, or use (directly or indirectly) for our own benefit or the benefit of others, any Confidential Information save and except that we may disclose any Confidential Information to its Directors, officers, employees, or advisors on a "need to know" basis to enable them to evaluate such "Confidential
- (b) We shall ensure that our employee(s) and/ or person(s) shall maintain confidentiality with regard to the disclosed Confidential Information, if any, and shall issue suitable instructions and/ or get suitable written undertakings or agreements executed to bind our employees and/or person(s) to the same obligations of confidence and safeguarding and to adhere to the confidentiality/ non-disclosure terms contained herein.
- (c) Save and except for the purposes mentioned in clause (a) above we further agree that we will not part with/ disclose any "Confidential Information" received by us to any other person directly or indirectly nor make copy(ies) or reproduce in any way (including without limitation store in any computer or electronic system any written material/ documents containing "Confidential Information" and such written material/

- documents will be retained under strict confidentiality by us.
- (d) We further agree to exercise the same degree of care that we exercise to protect our own Confidential Information of a like nature from unauthorized disclosure, but in no event shall a less than reasonable degree of care will be exercised by us.

We acknowledge and agreed that information shall not be considered "Confidential Information" to the extent, that such information:

- (a) at the time of disclosure was in the public domain; or
- (b) is already known to us free of any confidentiality obligation at the time it is obtained from RailTel; or
- (c) after disclosure is or becomes publicly known or available through no wrongful act of ours; or
- (d) is rightfully received from a third party without restriction; or
- (e) is approved for release, disclosure, dissemination or use by written authorization from RailTel; or
- (f) is required to be disclosed pursuant to a requirement of a governmental agency or law so long as we provide RailTel with timely prior written notice of such requirement and provide all reasonable co-operation in regard to taking protective action against such disclosure requirement; or
- (g) is disclosed after expiry of 5 (five) years from the date of signing of this certificate.

However, before we disclose any Confidential Information under clause 6, we (to the extent permitted by law) shall use our best endeavor to inform RailTel of any circumstances and the information that will be disclosed.

We further agree and undertake not to disclose the information marked "Confidential Information" of RailTel to our agents or Bidders without prior written approval from RailTel and without having first obtained from each agent or Bidder a separate written agreement or undertaking binding them to the same obligations of confidence and safeguarding.

We further agree that at the request of RailTel, we shall promptly (and in any case, within 15 days of request), deliver to the RailTel all copies of the Confidential Information in its possession or under its direct or indirect control or shall destroy all memoranda, notes and other writings prepared by us or our affiliates, Directors, officers, employees or advisors to the extent the same are based on the confidential information with a written statement to the effect that upon such return we have not knowingly retained in our possession or under our control, either directly or indirectly, any information or copies of such (other than Confidential Information embedded in our records).

The confidentiality obligations set out herein above shall survive any such return or destruction of Information.

Except as specifically provided herein, disclosure of confidential information by us pursuant hereto shall not be deemed to grant to us, any rights, interest or property in such confidential information and accordingly we agree that we will not directly or indirectly claim or submit any application for grant of any patent, copyright, design right or other

intellectual property rights in, to or on the basis of the confidential information.

We hereto acknowledge and agree that in the event of a breach or threatened breach by us of the provisions herein, RailTel may have no adequate remedy in money or damages and accordingly notwithstanding anything contained in clause 4 hereof, RailTel shall be entitled to seek injunctive relief against such breach or threatened breach by us: provided, however, no specification in this confidentiality certificate of a specific legal or equitable remedy shall be construed as a waiver or prohibition of any other legal or remedies in the event of a breach or threatened breach of this certificate and the remedies specified herein shall be in addition to all other reliefs and remedies available to RailTel under prevailing laws.

Date:	Signature with seal – (in the box)	
	Name:	
	Designation:	_

Annexure IX: Format for Contract Agreement

(LOA (No.) (for of Eastern Req	"(Name gion"	of	W	ork):	_	
and twe having i	nty, by and its Register	between Rai ed office at 6	ITel Corpo 5 th Floor,	on this oration of India 3 rd Block, Delh n Floor, GN 34	a Limited (A (ni Technology	Govt. c / Park	f Ind	ia Ur	ndertaki	ing)
Executiv unless i	e Director /	Eastern Regi	on (hereii	5, Kolkata 700 nafter referred aning thereof	to as 'RailTe	l', whic	ch ex	pres	sion sho	oulc
should ι		gh gnant to the o	(her	s registered of eafter referred meaning the	d to as "Con	tractor	", wl	hich	express	sior
papers	at Annexur	e 'A' read w	ith Corrig	RailTel for the gendum	Issu				-	
Work" dated_ papers	of Eastern I complete as per Ar	Region" as p e with enclos nnexure-C h	er copy of sures at ereto at	ractor has been for Letter of Action the accepted contract valued accepted by the contract of	cceptance of rates and ague of Rs	EoI No greed	o. devia	tions	s from	Eo
made b supply a the Con and `C' purchas	y the Purch all equipmer tractor has hereto and er (RailTel)	naser (RailTe at and materia been accept upon such and the purc	l) to the als and ex ed strictly supply, o haser (Ra	consideration of Contractor proceeding to according to execute and payoff the provision of the provision	ovided for he form all work the various performance to the Contr	erein, ks for v provis to the	the (which ions sati	Contr the in Ar sfact	actor s said Eo nnexure tion of	hal I o E 'B the
		•		ve hereunto se vely mentione				•		
_		ed by Shri of India Ltd.				for	and	on	behalf	of
The con	tract within	named in the	e presenc	e of :						

1.	Signature		:			
	Date		:			
	Name in Block	Letters	3:			
	Address		:			
2.	Signature		:			
	Date		:			
	Name in Block	Letters	S :			
	Address		:			
			nrifor and on behalf of, the contractor within named in the presence of :			
1.	Signature		:			
	Date		:			
	Name in Block	Letters	5 :			
	Address		:			
2.	Signature		:			
	Date		:			
	Name in Block	Letters	5 :			
	Address		:			
Annex	ure – A	:	EoI Paper Nowith corrigendum, if any.			
Annex	ure – B	:	Firm's offer.			
Annex	ure – C	:	Letter of Acceptance Nowith all enclosures.			
Annexure – D :		:	Copy of Contract Performance Guarantee.			

Annexure- X: Performa for Performance Bank Guarantee

CONTRACT PERFORMANCE GUARANTEE BOND

(On Stamp Paper of Rs one hundred)

(To be used by approved Scheduled Banks)

In consideration of the RailTel Corporation of India Limited, 6 th Floor, IIIrd Block, Delhi Technology Park, Shastri Park, Delhi - 110 053 with Eastern Region office at 19th Floor, GN 34/1; Block- GN
Aurora Water Front ,Salt Lake ,Sector-5, Kolkata 700 091(Herein after called the RailTel) having agreed to exempt
dated
said Agreement, on production of a Bank Guarantee for Rs
We,
We,(name of bank) undertake to pay to the RailTel any money so demanded notwithstanding 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,

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).
We(the name of Bank) lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the RailTel in writing.
NOT WITH STANDING ANYTHING CONTAINED HEREIN ABOVE
(i) The liability of the surety under his Bank Guarantee shall not exceed Rs
(ii) This Bank guarantee shall be valid upto
(iii) We are liable to pay the guaranteed amount or nay part thereof under this Bank Guarantee only and only if you serve upon the bank, written claim or demand on or before
Dated theday of2021
for
(Indicate the name of the Bank)
Witness:
Signature :
Name :
Signature :
Name :
NOTE: The Guarantee shall be valid for a period of 90 days after the expiry of the service

period.

Annexure- XI: Performa for Format for MAF's certificate

MANUFACTURERS' AUTHORIZATION FORM (MAF)

(Letter to be submitted by the Manufacturer on firm's letter head) (Sample Performa)

The Executive Director RailTel Corporation of India Ltd 19th Floor, GN 34/1; Block- GN Au

Dear S	ir
Ref: E0	OIno Dated
i.	We
ii.	We confirm that we are the OEM (Original Equipment Manufacturer) of the active components having brand name that will be supplied by our Partner nominated above.
iii.	We hereby confirm that the dealer will enter into back-to-back service agreement with us for a period of. () years.
iv.	We also hereby confirm that bidder will supply (<u>Name of Product</u>) to meet the functional requirement as mentioned in Zone-1 of EOI.
V.	We also submit that the (a) EoL/EoSS dates for the equipment (<i>NAME of Products</i> as required against this EOI) under reference as on the date of issue of this letter has not been declared, and (b) the equipment shall not be EoL/EoSS for a period of Five years from the date of issue of LOA. However, if for reasons beyond our control, the EoL/EoSS dates are declared during the contract period and if those dates are prior to the date of end of contract period, then we will provide replacement of equipment with equivalent or higher specifications (working in SECL's environment) which will not reach EoL/EoSS for the remaining duration of the contract at no extra cost to the RailTel. This replacement must be completed 6 months prior to the date of EoL/EoSS of the current router model
	Yours faithfully
	A d : 1: d 1 16 COEM

Authorized signatory on behalf of OEM

Annexure- XII: Performa for Format for Turnover & Profit & Loss <u>Certificate</u>

(to be issued by practicing Chartered Accountant on its letter head)

TO WHOM IT MAY CONCERN

Ref No	Date:				
This is to certify that M/s at	having its office				
31 st March) and the date of incorporation is three years or from date of incorporation (March) are as given below:	is <u>.</u> Their annual financial Turi	nover during the preceding			
Financial Year	Turnover	Profit /			
	(in Rs Cr)	Loss			
		(in Rs Cr)			
2020-2021					
2021-2022					
2022-2023					
Average Annual Turnover for these Three Financial Years					
This is further certified that the above Turno the Firm in their Income Tax Returns filed u		•			
Place					
Signature					
Name					
(Seal)					

Annexure- XIII: Performa for Format for Declaration for acceptance of all Terms & Conditions

Declaration for acceptance of all Terms & Conditions of the EOI No:

We M	/s ()		

- 2. Agree to all the Terms & Conditions of the EOI No: RAILTEL/EOI/ER/Project/2023-24/001 dtd 20.04.2023 in to issued by RAILTEL.
- 3. Our offer will remain valid for 60 days from the date of opening of the EOI.
- 4. We confirm that we have the necessary resources & capabilities to undertake the work as specified in the schedule of work as per all terms and conditions given in the above EoI. We have also understood the process of submitting bid to RAILTEL and Instructions given in the above EoI. Further, we confirm that we shall execute the work against this price discovery for scope as specified in this EOI.
- 5. We also agree that RailTel has the right to reject all EOI, in part or in full without assigning any reason whatsoever.
- 6. This EOI along with other documents as stipulated in EOI together with your written acceptance thereof shall constitute a binding contract between us.

Date:-
Name of the Company:-
Signature &Seal:-

ANNEXURE – XIV: FORMAT FOR AFFIDAVIT TO BE SUBMITTED BY BIDDER ALONG WITH THE EOIBID 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 bidder)

I (Name and designation	on) **appointed as t	the attorney/authoriz	zed signatory o	of the bidder
(including its constituen	ts),M/s (hereinafter	called the bidder)	for the purpose	e of the EoI
documents for the work	of	as per the	EoI No	of
(_RailTel), do hereby se	olemnly affirm and	state on the behalf	of the bidder	including its
constituents asunder:				-

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

DEPONENT SEAL AND SIGNATURE OF THE BIDDER 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 BIDDER

Place: Date:

Annexure- XV: Technical Specification

A. <u>Technical Specification for TYPE-A UTM :-</u>

S/N	Feature Descri	ption	Complied- Yes/No
1		The device should be 19" rack mountable. All rack mounting accessories are to be provided.	
2		Should have minimum 4 Gig of RAM and 8 GB flash storage.	
3	Hardware Features	The device should have min 6 x 1000BaseT and 2 x SFP ports all capable of creating different security zone.	
4		The device should be RoHS complaint, NDPP/NDcPP certified	
5		The MTBF of the device should be at least 25 years to minimize device failure after deployment.	
6	Dorformana	The device should have minimum 150 Kpps of stateful firewall performance for 64 byte packet size.	
7	Performance	The device should support stateful firewall performance of 300 Mbps for IMIX packets	
8		The device should have IPv4 and IPv6 routing capabilities.	
9		The device should support OSPF, IS-IS, and BGP	
10	Device Routing Features	Multicast Support – IGMP, PIM-SM, SSM	
11		The device should support virtual routers for multi- tenancy in future	
12		The device should support ECMP and Policy based routing	
13	Switching features	The device should support VLAN, STP, RSTP and LLDP	
14		The device should support Site to Site and Multi-Site IPsec capabilities	
15	IPsec features	IPv4 and IPv6 IPEC VPN	
16		IPsec authentication algorithms: MD5, SHA-1, SHA-128, SHA-256	
17		The device should support DES and 3DES encryption capabilities	
18		The device should support GRE	
19	QOS Features	The device should support 802.1p, DSCP, WRED, Hierarchal shaping and policing	
20	MPLS Features	The device should support MPLS – L2 VPN, L3VPN, Pseudo wire, VPLS, RSVP-TE and FRR	
21	Application security Features	The device should support Application level visibility, Quality of service and security with control	

22	OAM Features	IEEE 802.3ah Link Fault Management (LFM) IEEE 802.1ag Connectivity Fault Management (CFM), IP Monitoring, Flow Monitoring, BFD	
23	Management	The device should support ZTP, SNMP, SSH, telnet capabilities	
24	Management	Should be manageable using CLI and GUI	
25	Features	Should support debugging capabilities and usage capabilities of bandwidth and application	
26	Role based	Multiple Hierarchical levels	
27	Access Control	GUI support for Administration, Operations and Management	
28	(RBAC)		
29		Should support at least 200 VPN tunnels	
30	SD-WAN	Should be capable to supporting at least 50 Mbps of SD-WAN throughput (measured with 44KB Page Size of HTTP traffic) with encryption and Application QoS.	
31	Scale and Support	The device should be capable of working as SD-WAN CPE for remote site only by adding license. In case this feature is not available with the device, the bidder must provide necessary hardware whenever customer decides to go for SD-WAN without any additional cost for hardware.	
32	- UTM Functionalities	1-year subscription to be included for stateful firewall, IPS, reputation-based / category-based URL filtering, gateway anti-virus, anti-SPAM, anti-Bot, advanced malware protection and application security.	
33		Application visibility of more than 3500 L3-L7 applications	
34		Support for advanced threat mitigation capabilities including advanced malware protection.	
35	Warranty & Other	The device should be provided with advanced hardware replacement warranty and ongoing software upgrades for all major and minor releases for a period of 1 year and AMC service with same service level for 4 years. OEM certificate to be produced confirming back-to-back support agreement with OEM.	

^{**} If the single device is not capable of providing any of these features, separate device(maximum - 01 nos) and subscriptions are to be provided free of cost."

B. <u>Technical Specification for TYPE-B SWITCH</u>:-

S. No	Technical Specification	Complied (Yes/No)
1	Should have 12 ports 10/100/1000 Mbps Base T	
2	Should have support for 2 ports 10G SFP+ Based Gigabit ports.	
3	Should have at least 64 (12x1x2 + 2x10x2 = 64) Gbps switching fabric.	
4	Should support at least 16K entries in the MAC table.	
5	Should support at least 1K ARP entries.	
6	Packet forwarding rates 45 million PPS	
7	Should Support 1000 minimum VLANs.	
8	Should have internal AC Power Supply 100 to 240 V AC with 50 to 60 Hz and equipped with 3 pin plug and Switch should have fanless design.	
9	Should support Dual Images.	
10	Should support port mirroring and jumbo frame.	
11	Should support following for min. 64 Groups :	
12	i) IGMP Snooping,	
13	ii) IGMP v1/v2/v3 awareness Snooping,	
14	iii) IGMP Snooping Queried.	
15	Should support RSTP, Spanning-tree root guard, Port Fast, Loopback Detection and BPDU Guard/Filter or similar functionalities.	
16	Switch should support:	
17	Switch should have IP SLA monitoring (or equivalent functionality) for Latency, Packet drop, Jitter etc. and should also support SNMP polling for IP SLA monitoring.	
18	Switch should have advance routing features like RIP NG, OSPF from Day 1	
19	Should support following security features viz.:	
20	i) Web Management (HTTPS),	
21	ii) Broadcast/Multicast/Unicast Storm Control,	
22	iii) Control plane DoS Attack Prevention	
23	Switch should support following SNMP traps or Syslog	
24	i) Interface UP & Down	
25	ii) Optical power SFP threshold alarms	
26	iii) STP Topology Changes and New root bridge	
27	iv) LLDP table changes	
28	v) Threshold alarms for Temperature.	
29	Switch should comply to following Temperature performance parameters :	
30	i) Operating Temperature - min -0 to 40 °C (23 to 122 °F)	
31	ii) Storage Temperature - min -0 to 70 °C (-40 to 158 °F)	

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32	It shall support MAC address notification to allow administrators to be notified of users added to or removed from the network.	
33	The switch shall be designed for continuous operations.	
34	It should support IPv6/v4-L3 and IPv6-Multicast functionalities/features	
35	Safety Requirement: -	
36	Switch should have safety compliance of UL.	
37	Electromagnetic Compatibility (EMC) Requirements: -	
38	Switch should have EMC compliance of CE and FCC.	
39	The LAN switch shall support a console port or auxiliary/Ethernet port for the purpose of local and remote configuration and diagnostics.	
40	IPv6 feature should be ready from day 1.	
41	Qualitative Requirements: -	
42	The equipment shall be manufactured in accordance with the international standards ISO 9000:2008 or later for which the manufacturer shall be duly accredited. A quality plan describing the quality assurance system followed by the manufacturer shall be required to be submitted	
43	ii. The MTBF (Mean Time Between Failure) and MTTR (Mean Time To Repair) predicted and observed values shall be furnished along with calculations by the manufacturer.	
44	The switch should be NDPP / NDcPP certified	
45	Note:- In the specification wherever support for a feature has been asked for, it will mean that the feature should be available without RailTel requiring any other hardware/software/licenses. Thus all hardware/software/licenses required for enabling the support/feature shall be included in the offer.	
46	Warranty: The device should be provided with advanced hardware replacement warranty and ongoing software upgrades for all major and minor releasesfor a period of 1 year and AMC service with same service level for 4 years. OEM certificate to be produced confirming back-to-back support agreement with OEM.	

C. <u>Technical Specification for TYPE-C (24-Port Switch)</u>:-

S.N	Technical Specification	Complied (Yes/No)
1	Should have 24 ports 10/100/1000 Mbps Base T	
2	Should have support for 4 ports 1/10G SFP+ Based Gigabit ports.	
3	Should have at least 128Gbps switching fabric.	
4	Should support at least 16Kentries in the MAC table.	
5	Should support at least 1K ARP entries.	
6	Packet forwarding rates 95million PPS	
7	Should Support 1000 minimum VLANs.	
8	Should have internal AC Power Supply 100 to 240 V AC with 50 to 60 Hz and equipped with 3 pin plug.	
9	Should support Dual Images.	
10	Should support port mirroring and jumbo frame.	
11	Should support RSTP, Spanning-tree root guard, Port Fast, Loopback Detection and BPDU Guard/Filter or similar functionalities.	
12	Switch should support:	
13	i) Switch should have IP SLA monitoring (or equivalent functionality) for Latency, Packet drop, Jitter etc. and should also support SNMP polling for IP SLA monitoring.	
14	Switch should have advance routing features like RIP NG, OSPF from Day 1.	
15	Should support following security features viz.:	
16	i) Web Management (HTTPS),	
17	ii) Broadcast/Multicast/Unicast Storm Control,	
18	iii) Control plane DoS Attack Prevention	
19	Switch should support following SNMP traps or Syslog	
20	i) Interface UP & Down	
21	ii) Optical power SFP threshold alarms	
22	iii) STP Topology Changes and New root bridge	
23	iv) LLDP table changes	

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24	v) Threshold alarms for Temperature.	
25	Switch should comply to following Temperature performance parameters:	
26	i) Operating Temperature - min -0 to 40 $^{\circ}$ C (23 to 122 $^{\circ}$ F)	
27	ii) Storage Temperature - min -0 to 70 °C (-40 to 158 °F)	
20	It shall support MAC address notification to allow administrators to be	
28	notified of users added to or removed from the network.	
29	The switch shall be designed for continuous operations.	
30	It should support IPv6/v4-L3 and IPv6-Multicast functionalities/features	
31	Safety Requirement: -	
32	Switch should have safety compliance of UL.	
33	Electromagnetic Compatibility (EMC) Requirements: -	
33	Switch should have EMC compliance of CE and FCC.	
	The LAN switch shall support a console port or auxiliary/Ethernet port for the	
34	purpose of local and remote configuration and diagnostics.	1
35	IPv6 feature should be ready from day 1.	
36	Qualitative Requirements: -	
37	The equipment shall be manufactured in accordance with the international standards ISO 9000:2008 or later for which the manufacturer shall be duly accredited. A quality plan describing the quality assurance system followed by the manufacturer shall be required to be submitted	
38	The MTBF (Mean Time Between Failure) and MTTR (Mean Time To Repair) predicted and observed values shall be furnished along with calculations by the manufacturer.	
39	The switch should be NDPP / NDcPP certified	
40	Note:- In the specification wherever support for a feature has been asked for, it will mean that the feature should be available without RailTel requiring any other hardware/software/licenses. Thus all hardware/software/licenses required for enabling the support/feature shall be included in the offer.	
41	Warranty: The device should be provided with advanced hardware replacement warranty and ongoing software upgrades for all major and minor releasesfor a period of 1 year and AMC service with same service level for 4 years. OEM certificate to be produced confirming back-to-back support agreement with OEM.	

$\frac{RAILTEL/EOI/ER/Project/2023-24/029}{\textbf{Technical Specification for TYPE-D Switch (Fiber switch AC+DC operated):-}$ D.

S. No	Specification	Complied (Yes/No)
1	Should have minimum 24 x GE SFP based ports.	
2	Should have minimum 4 nos. SFP+ based 10 GE ports.	
3	Should have at least 64 Gbps full duplex line rate traffic.	
4	Should have support for 802.3x flow control.	
5	Should support 802.1D spanning tree control/RSTP support and MSTP support.	
6	Should support management features viz. Web-based GUI/SSH, SNMP, TFTP Client System Log.	
7	Should support Auto MDI-II/MDI-X uplink for all the twisted pair ports.	
8	Should support 802.1Q VLAN, 802.1p Priority queues, Should support Dying Gasp for quick trouble shooting during power failures or system shut downs	
9	Should support port mirroring, jumbo frame & should have at least 16K MAC address	
10	Should support console port and telnet-based management.	
11	Should have AC power supply arrangement as given below in chassis without any external adaptors with redundant power supply (RPS): (i) AC power supply 100 to 240 V AC with 50 to 60 Hz (ii) -48 V DC Supply.	
	DC power supply should work as a redundant power supply to power on the switch in case failure of AC power supply.	
12	Should support Port-based VLAN, Guest VLAN, 802.1Q Tagged VLAN & Voice VLAN along with Management VLAN.	
13	Should support ITU-T G.8032 Ethernet Ring protection for Loop Protection and fast convergence time (Sub 50 ms) in ring topologies/ IEEE 802.1W RSTP for Sub Second failover. Industry Standard IEEE 802.1W RSTP is standard for Ring /STP topology.	
14	Switch should support Surge Protection on power input and on Ethernet ports as per EN61000-4-5.	
15	Should support Quality of Service (QoS) features viz. Priority Queue, Class of Service (CoS), Rate Limiting (Bandwidth Control), Strict Priority Queue (SPQ), Weighted Round Robin (WRR) or better, DOS attack prevention.	
16	IPv6 feature should be ready from day 1 and Static route	
17	Minimum Operating Temperature 0 to 50 degree.	
18	It should have safety certificates as per UL, LVD. The switch should have EMC certification as per CE/FCC standards. Must have CB, VCCi, BSMI Certification.	
19	Switch shall be with Rack Mountable clamps for standard 19-inch rack mountable.	
20	The Switch shall be designed for continuous operations. Supports 802.3ah link layer remote loopback and discovery.	
21	Should support port Trunking of at least 2 Nos. GE/10GE ports.	
22	Switch should support LLDP or similar functionality.	
23	Should support following security features viz.: i) SSL (HTTPS)/SSH, ii) Broadcast/Multicast/Unicast Storm Control, iii) DoS Attack Prevention/ DAI	
24	Switch should support following SNMP traps or syslog i) Interface UP & Down ii) Optical Power SFP threshold alarms iii) STP Topology Changes and New root bridge iv) LLDP table changes	

25	OEM Should be International certification for the ISO 45001 Health and Safety Management System, Information Security Management System: ISO 27001,	
25	Quality Management System: ISO 9001, Environmental Management System: ISO	
	14001, and Greenhouse Gas Inventory Standard: ISO 14064-1.	
	Note: - In the specification wherever support for a feature has been asked for, it	
26	will mean that the feature should be available without RailTel requiring any other	
20	hardware/software/licenses. Thus, all hardware/software/licenses required for	
	enabling the support/feature shall be included in the offer.	
	Warranty: The device should be provided with advanced hardware replacement	
27	warranty and ongoing software upgrades for all major and minor releases for a	
27	period of 3 year and AMC service with same service level for 4 years. OEM	
	certificate to be produced confirming back-to-back support agreement with OEM.	

E. <u>Technical Specification of 2KVA Online UPS :-</u>

S.N		SPECIFICATION	COMPLIANCE (YES/NO)
	UPS ratings		
1	KVA/ KW	2 KVA / 1.6 KW	
2	QT/Configuration	Standalone UPS Unit	
3	Back up	240 minutes on 500 watt load	
	Compatible		
4	Battery type / make	VDI A CME/L: : A D -:- //E: 1-	
4		VRLA SMF/Li-ion, AmarRaja//Exide	
5	Input/ OutputPhase	Single phase + Neutral	
6	Technology	True online UPS with double conversion tropology	
	Input Isolation	True offine of 5 with double conversion tropology	
	Transformer	Galvanic Isolation Transformer shall be provided	
8	(External)	Externally	
	Rectifier section		
9	Technology	DSP/IGBT Rectifier	
10	Input Voltage	110-276 V (Load Dependent)	
	Input Power		
11	Factor	0.99 @ Full restive load	
12	Input Frequency	40-70 HZ	
10	Input Current		
13	THDI	<5% on linear load	
15	Cold Start	UPS can be started on battery without mains	
16	Inverter Section	M. ADDI IDWA IODEL I	
17	Technology	Microprocessor/ DSP based PWM - IGBT based rectifier	
	UPS output		
18	Power factor	0.8	
10	Output voltage	220/220/240 X/ - G 1 - 4 11	
19	rating	220/230/240 V - Selectable	
20	Output voltage regulation	$\pm 1\%$	
20	Output	<u>-1/0</u>	
21	Frequency	0.1 hz or better (battery mode)	
22	Output Capacity	125%-150% - 30 seconds (battery mode)	
	Output Harmonic	in the second course, most,	
23	Distortion (Ph/N)	<3% on Liner load	
24	•	<5% on nonlinear load	
25	Crest factor	3:1	

26	Battery Placement	Suitable battery rack and accessories provided for battery interconnections and UPS to battery connections etc	
	Battery Ah		
27	ratings and QTY	42 Ah 6 no	
	END of battery		
	discharge voltage for battery		
28	calculation	1.7 to 1.75 / cell	
20	Carcaración	The Integral bypass performs an automatic transfer of	
	Automatic	the critical load from the inverter, in the events of	
	integral bypass	overload, over temperature or inverter failure with zero	
30		transfer time	
31	General		
	Acoustical noise		
32	@ 1 meter	less than 50 dB@ 1 meter	
22	operating	0.50 dec et 1.61mg	
33	Cutout ways	0-50 deg at 1.6kva	
34	Output wave form	Pure sine wave	
	Display and	Ture sine wave	
35	control		
	Metered		
36	Parameters	Input AC voltage	
37		Battery level, Load on battery, different fault conditions	
38		Input AC Frequency	
38 39		Output Ac voltage	
38 39 40		Output Ac voltage Output AC current in load%	
38 39 40 41		Output Ac voltage Output AC current in load% AC-AC efficiency	
38 39 40 41 42		Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage	
38 39 40 41	Audible Alarm	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload,	
38 39 40 41 42		Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage	
38 39 40 41 42	ECO Mode	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload,	
38 39 40 41 42 43	ECO Mode Efficiency	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature	
38 39 40 41 42 43	ECO Mode	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature	
38 39 40 41 42 43	ECO Mode Efficiency Efficiency	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged,	
38 39 40 41 42 43	ECO Mode Efficiency Efficiency (Normal Mode)	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged, without Transformer SNMP card to monitor and store all the data related. UPS software should be compatible to LINUX,	
38 39 40 41 42 43	ECO Mode Efficiency Efficiency	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged, withoutTransformer SNMP card to monitor and store all the data related. UPS software should be compatible to LINUX, WINDOWS. Required software like NMS, OS should	
38 39 40 41 42 43 44	ECO Mode Efficiency Efficiency (Normal Mode)	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged, without Transformer SNMP card to monitor and store all the data related. UPS software should be compatible to LINUX, WINDOWS. Required software like NMS, OS should be supplied with UPS. The following minimum	
38 39 40 41 42 43 44 45	ECO Mode Efficiency Efficiency (Normal Mode)	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged, withoutTransformer SNMP card to monitor and store all the data related. UPS software should be compatible to LINUX, WINDOWS. Required software like NMS, OS should be supplied with UPS. The following minimum perimeters should be monitored.	
38 39 40 41 42 43 44 45 46 47	ECO Mode Efficiency Efficiency (Normal Mode)	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged, without Transformer SNMP card to monitor and store all the data related. UPS software should be compatible to LINUX, WINDOWS. Required software like NMS, OS should be supplied with UPS. The following minimum perimeters should be monitored. 1. Battery health	
38 39 40 41 42 43 44 45 46 47 48	ECO Mode Efficiency Efficiency (Normal Mode)	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged, withoutTransformer SNMP card to monitor and store all the data related. UPS software should be compatible to LINUX, WINDOWS. Required software like NMS, OS should be supplied with UPS. The following minimum perimeters should be monitored. 1. Battery health 2. Input voltage	
38 39 40 41 42 43 44 45 46 47 48 49	ECO Mode Efficiency Efficiency (Normal Mode)	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged, without Transformer SNMP card to monitor and store all the data related. UPS software should be compatible to LINUX, WINDOWS. Required software like NMS, OS should be supplied with UPS. The following minimum perimeters should be monitored. 1. Battery health 2. Input voltage 3. Output voltage	
38 39 40 41 42 43 44 45 46 47 48	ECO Mode Efficiency Efficiency (Normal Mode)	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged, withoutTransformer SNMP card to monitor and store all the data related. UPS software should be compatible to LINUX, WINDOWS. Required software like NMS, OS should be supplied with UPS. The following minimum perimeters should be monitored. 1. Battery health 2. Input voltage	
38 39 40 41 42 43 44 45 46 47 48 49 50	ECO Mode Efficiency Efficiency (Normal Mode)	Output Ac voltage Output AC current in load% AC-AC efficiency Output frequency / voltage Required for different fault conditions such as: Overload, Short circuit, Load on battery, Over temperature 96% >88% @full load and battery fully charged, withoutTransformer SNMP card to monitor and store all the data related. UPS software should be compatible to LINUX, WINDOWS. Required software like NMS, OS should be supplied with UPS. The following minimum perimeters should be monitored. 1. Battery health 2. Input voltage 3. Output voltage 4. Battery voltage	

53		7. Load %	
54		8. Alert on high Load	
55		9. Alert on low voltage input/ output and low battery voltage	
56		10. Back up ability in terms of hours and minutes	
57		11.Alert on battery disconnect and etc	
58		12. UPS	
59		13. Fault	
60		14. Real Time Data log	
61		15. Real Time Event log	
62	Ingress Protection	IP-20	
63	Transient Voltage Surge Suppressor	The UPS shall have Surge current capacity of min 10 KA	
64	Operating Voltage	The Unit shall have a maximum Continuous Operating Voltage (MCOV) rating of min 230 Volt	
65	Two Mode of Protections	The Unit should have two modes of Protections (L-N & N-G) & '<0.5 ms response time	
66	Surge	Type 2, Single phase Two pole, AC-SPD	
	Protection	Suitable for TNS System (1Ph+N)	
	Device (SPD)	Un – 230VAC	
		Uc – 320V	
		Imax – 40kA	
		In – 20Ka	
		Up-<=1.5kV	
		Should have reversible installation facility: reversible chassis to allow cable entry from above or below	
		Should have clear display of protection end of life of cartridge.	
		Two types of terminal: for rigid or flexible cable and for fork type comb bus bar	
		Should have thermal disconnection system	
		Should have Cartridge security system: vibration proof insertion 'click' effect.	
		Should have individual Mechanical cartridge coding for safety system to avoid possible cartridge replacement error.	
67	Warranty	2 Years on UPS & battery	
68	EPO/REPO	Emergency power off contact required in UPS to switch off UPS in the event of emergency	
69	Communication	USB/ Relay card / SNMP/MODBUS card should be available	
70	OEM Certification	OEM Should have certification of ISO 9001 ,ISO 14001,ISO45001	

F. Technical Specification of Class B & Class C surge protection device:-

1. Stage 1 protection (at the entry point of input 230V AC supply in the power/equipment room)

(a) The stage 1 protection shall consist of coordinated Class I/B & II/C type SPDs at the entry point of input 230V AC supply in Power/Equipment room in TT configuration in a separate wall mountable box. The Class I/B SPD shall be provided between Line to Neutral & Neutral to Earth. They shall be spark gap type voltage switching device and tested as per IEC 61643 with the following characteristics and features-

		Limits	
SN	Paramet	Between Line	Between Neutral
	ers	&	& Earth
		Neutral	
1	Nominal Voltage (U₀)	230V	230V
2	Maximum Continuous operating voltage (Uc)	≥255V	≥255V
3	Lightning Impulse current 10/355 μs (I _{mp})	≥25KA	≥50KA
4	Response time (T _t)	≤100 ñs	≤100 ñs
5	Voltage protection level (Up)	≤2.5 KV	≤2.5 KV
	Short circuit withstand and follow up current		
6	extinguishing capacity without back up fuse (I $_{sc}$ & I $_{t}$)	≥ 3 KA	≥ 100 A
7	Temporary Over Voltage (U _T)	334 V min. for	1200V min. for
/	Temporary Over Voltage (O _T)	05	200 ms
		secs.	
8	Operating temperature / RH	-25°C to +80°C /	-25°C to +80°C /
0	Operating temperature / KH	95%	95%
9	Mounted on	din rail	din rail
10	Indication	Mandatory	Optional
11	Pluggability	Optional	Optional
12	Potential free contact for remote monitoring	Optional	Optional
13	Encapsulation	Encapsulated	Encapsulated
14	Degree of protection	IP20	IP20
15	Housing	Fire retardant	Fire retardant as
13	Housing	as per UL 94	per UL 94

(b) The Class I/B SPD will be followed by Class II/ C SPD adjacent to it and connected between Line & Neutral. The device shall be a single compact varistor of proper rating and in no case a number of varistors shall be provided in parallel. It shall be voltage clamping device, thermal disconnecting type and shall be tested as per IEC 61643 with the following characteristics and features-

SN	Parameters	Limits (between Line & Neutral)
1	Nominal Voltage (U₀)	230V
2	Maximum Continuous operating voltage (U _C)	≥ 300V
3	Nominal discharge current 8/20 μs (In)	≥ 10KA
4	Maximum discharge current 8/20 μs (I _{max})	≥ 40KA
5	Response Time (T _r)	≤ 25 ns

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6	Voltage Protection level (U _p)	≤ 1.5
		KA
7	Operating temperature / RH	-25'C to +80'C / 95%
8	Mounted on	Din rail
9	Indication	Mandatory
11	Pluggability	Mandatory
12	Potential free contact for remote monitoring	Mandatory
13	Degree of protection	IP20
14	Housing	Fire retardant as per UL94

(C) Class I/B and class II/C SPDs of Stage I Shall be so coordinate that the voltage protection level of the coordinated devices is ≤ 1.5 KV. As such , these devices shall be from the same manufacture and necessary test certificate in this regard shall besubmitted by the manufacture/Supplier.

1. Stage 2 protection (at the output side inside the distribution panel)

The stage 2 protection shall consist of class II/C type SPDs for ≥24V-110V AC/DC supplies at the output side inside the rack of IPS. These Shall be provided for external circuits i.e Relay external circuit, Axle counter circuit, point machine circuit and at inverter output. The Class II/C type SPD shall be a single compact varistor of proper rating and in no case a number of varistors shall be provided in parallel. It shall be voltage clamping device and thermal disconnecting type. They shall be tested as per IEC 61643 with the following Characteristics and features-

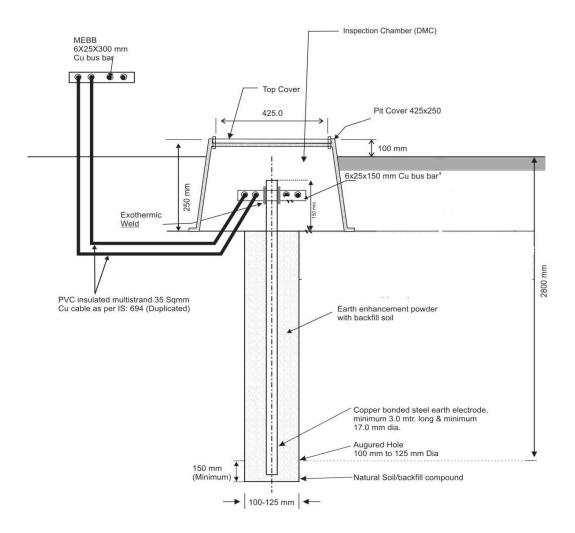
SN	Parameters	Limits (between L1	Limits (between L1 & L2, L1 & E, L2 &	
		E)		
1	Nominal Voltage	60V-110V AC/DC	24V-60V AV/DC	
2	Maximum continuous operating	≥150 (AC) ≥200	\geq 75 (AC) \geq 100	
	voltage	(DC)	(DC)	
3	Nominal discharge current 8/20	≥10KA	≥ 10KA	
4	Maximum discharge current 8/20	≥40KA	≥40KA	
5	Response time	≤25 ñs	≤25ñs	
6	Voltage protection level	≤ 1.0 KV	≤ 0.5	
7	Operating temperature/RH	-25°C to +80°C/	-25° C to $+80^{\circ}$ C/	
		95%	95%	
8	Mounted on	Din rail	Din rail	
10	Indication	Mandatory	Mandatory	
11	Pluggability	Mandatory	Mandatory	
12	Potential free contact for remote	Mandatory	Mandatory	
	monitoring		-	
13	Degree of protection	IP20	IP20	
14	Housing	Fire retardant as per	Fire retardant as per	
		UL 94	UL 94	

Length of all cable connection from SPDs to earth equi-potential busbar shall be kept less than 0.5 mtrs. for this, sub earth equi-potential busbar shall be installed at approx. 20 CM from the SPD box.

Batch test report of OEM should be submitted by the manufacturer/ suppliers of Lightning & surge protection devices to the IPS manufacturer at the time of supply of these devices.

G. <u>Technical Specification of Maintenance Free Earthing:</u>

Maintenance Free Earthing system for SECL which consists of earthing kit-1 set consisting (i) Earth electrodes of copper clad steel alloy of 10 feet (3 mtr)long, 17 mm dia and copper thickness of 250 microns -01 nos (ii) Earth enhancing compound in 30 kg pack -01 no (iii) copper tape of 25mmX6mmX300 mm with 99% purity - 02 nos and another of 25mmX6mmX150mm to terminate on earth electrode. The earthing material shall be inspected by RailTel official. The material should be procure from RDSO approved vendor.



H. <u>Technical Specification of 9U Rack:</u>

TECHNICAL SPECIFICATION OF 9U INDOOR RACK

Sr No	SPECIFICATION	COMPLIANCE (YES/NO)
1	19" Rack: 9U 600mmwidth/500mm depth, Steel frame structure design, metal top cover with 2 fan provision and cable entry provision covered with edge protected rubber grommet, bottom cover with cable entry provision covered with edge protected rubber grommet provide, Powder coated finish Texture Matt – 60 to 80Um	
2	Corrosion Resistance: Salt spray test according to ISO 9227 (NSS test) and IEC EN 60068-2-11 (Ka test) for 168 hours: degree of Rusting Ri1 according to ISO 4628-3, propagation ≤1 mm according to ISO 4628-8.	
3	Front glass single door with cam lock & key	
4	Front panel mounting hardware. – 1 No.	
5	Cantilever Tray 255mm D – 1 No.	
6	230V A/C 90 CFM fan mounted on top cover - 2 Nos.	
7	PDU 6 sockets 6A Sockets- 1 No.	
8	Horizontal Cable Manager 1U with PVC loops – 1 No.	

I. <u>Technical Specification of CAT6 UTP Cable:-</u>

SI no	SPECIFICATION	COMPLIANCE (YES/NO)
1	The 4 pair Unshielded Twisted Pair cable shall be UL® Listed.	
2	This cable well exceeds the requirements of TIA/EIA-568-C.2 and ISO/IEC 11801	
3	Nominal Outer Diameter of Cable should be 5.9+/-0.01mm and Conductor Diameter 0.56 mm (23 AWG)	
4	Construction: 4 twisted pairs separated by internal PE Cross Separator. Full separator. Half shall not be accepted. Rip Cord is must.	
5	Conductor Solid bare Copper and Outer jacket sheath FRPVC and UL approved CM rated cable. Jacket color: Light Grey	
6	Insulation :High Density Polyethylene Solid	
7	Dielectric Strength of cable should be1000 V RMS	
	Bending Radius :< 4X Cable Diameter at -20°C +/- 1°C	
8	Pulling Force: 25.35 LBS	
9	Electrical Parameters Pair – to – pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR.	
10	Insertion Loss of 32.8 db/100m at 250 MHz	
11	Cable should support operating Temperature from -20° to +70°C	
10	Cable support Conductor Resistance < 9.38 Ω /100m	
11	Mutual Capacitance of cable should be < 5.6nF/100m	
12	Max Resistance Unbalance of cable should be 5% Max	
13	Capacitance Unbalance of cable should max 330pF/100m	
14	Cable support Delay Skew: < 45nS, Operating Voltage: 72VNVP: 69% and Current Rating: MAX 1.5A	
15	Printed sequential Length Counter of each meter on Outer Jacket	
16	Category 6 UTP cables shall Supports Gigabit Ethernet (1000 base-T) standard and Operates at bandwidth of 250MHz	

-----End of EOI -----