

**Bid Specific Additional Terms & Conditions (ATC)**

**Information to Bidder for the “Supply of Routers, Switches, Firewall, Access Point, and PoE Injector at Guwahati, Kolkata and Patna for RailTel Corporation of India Ltd., Eastern Region**

**Ref: GeM Bid No. GEM/2024/B/5080325**

**Dated: 22.06.2024**

1. The item/items in this bid should be quoted as per the technical specifications. The details of the specifications along with consignee/site details are also available on website [www.railtelindia.com](http://www.railtelindia.com).
2. 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. The technical specifications are given in Annexure-I.
3. OEM or Authorized dealer/ distributor/ Partner should have a registered office in India to provide sales and 24x7 support in India. The certificate to this effect should be submitted. The bidder should be either OEM or his authorised dealer/ distributor.
4. In case of the authorized distributor/partner certificate from the OEM to this effect should be submitted. If OEM is quoting, then OEM should submit the certificate. In the tender, either the manufacturer or its authorized dealer will be considered as valid bidders. In cases where the manufacturer has submitted the bid, the bids of its authorized dealer will not be considered and EMD will be returned.
5. The material offered shall have complete data sheets and detailed description on OEM websites. Bidder shall provide duly filled and signed Technical Compliance of the offered material, failing which the bid may get rejected.
6. Priced BOM/SOR shall not be submitted with technical bid, if submitted the bid will be summarily rejected.
7. Bidder shall submit the detailed BOM of the equipment offered duly verified and certified by the respective OEM.
8. GSTIN ID of vendor should be provided from where goods will be supplied.
9. **Delivery Period, Consignee, Inspection :**
  1. **Delivery Period :** The bidder has to complete the supply within 60 days from the date of issue of confirmed PO. If material is not supplied within the approved delivery period then penalty of 0.5% of undelivered quantity per week or part thereof for the undelivered portion of SOR subject to the maximum to the 10% of the contract value will be levied.
  2. **Consignee :** Consignee details are available at Annexure-II.
  3. **Inspection:** Inspection shall be carried out by authorized representative of RailTel.
1. Pre-dispatch factory acceptance inspection shall be carried out for the offered material by RailTel’s representative. The supplier/OEM should have test arrangements in India for the purpose of inspection.

2. Finished products shall be tested 100% by the factory QC personnel before being offered to RailTel for acceptance to ensure that it meets all quality requirements as per the relevant specifications. Duly filled in test formats indicating the results of such tests shall be submitted along with material offered for inspection to RailTel.

**10. Estimated cost and Earnest Money Deposit (EMD)/ Bid Security:**

1. Estimated cost : The Estimated cost of the GeM Bid is Rs. 34,67,050.87 (Incl. GST)
2. **Earnest Money Deposit (EMD):**  
Earnest Money Deposit (EMD)/ Bid Security :: Rs. 69,400/- EMD can be submitted in the form of Demand Draft/Pay Order/Banker’s Cheque drawn in favour of “**RailTel Corporation of India Ltd.**” payable at Kolkata The Bid received without EMD will be summarily rejected.
3. In addition to clause 10 (2) above, Tenderer has an option for online submission of EMD also. The EMD should be remitted in following account of RailTel Corporation of India Limited before the stipulated time and date of bid submission:

Name of the Bank and Address	Union Bank of India, Chowringhee Road Branch, 1/1 Camac Street, Ground Floor, Kolkata – 700016
Name of the account holder	RAILTEL CORPORATION OF INDIA LIMITED
Account No.	401601010519491
IFSC Code	UBIN0540161

Bidder to indicate bid no. and name of bidding entity in the transaction details field at the time of online transfer. Bidder has to upload scanned copy of Demand Draft/Pay Order/Banker’s Cheque /proof of the online payment transfer alongwith bid. If EMD is submitted in the form of Demand Draft/Pay Order/Banker’s Cheque, the original shall receive RailTel office at Salt Lake, Kolkata \_within 5 (five) days from the date of opening of the bid.

4. EMD shall be exempted to Micro & small Enterprises registered for the tendered items/ as per the latest Govt. of India guidelines. **Under MSE category, only manufacturers for offered goods in case of bid for supply of goods are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.** The bidders claiming the preference must submit relevant documents. **The Bid received without EMD /Documentary proof of Exemption of EMD, will be summarily rejected.**

**Sellers under Bid Security/Earnest Money exempted category shall submit “Bid Security Declaration”** as per Form No.3 accepting that if they withdraw or modify their bids during period of validity etc., they will be banned for the period of three-year and shall not be eligible to bid for future tenders in RailTel Corporation of India Ltd. for three years from the date of issue of such orders.

5. Earnest Money of the unsuccessful bidder will be discharged/ returned as promptly as possible.
6. The successful bidder’s EMD will be discharged upon the bidder’s acceptance of the LOA/ PO and submission of PBG.

## 11. Performance Bank Guarantee/ Security Deposit

1. The successful tenderer shall submit Performance Guarantee/Security Deposit in the form of bank guarantee issued from any of the scheduled commercial bank in India and not from any cooperative bank or NBFC, or online payment, safeguarding the purchaser's interest in all respects.
2. Security Deposit/Performance Bank Guarantee @ 10% of total value of contract rounded off to the nearest higher Rs.1,000/- (one thousand) is required to be submitted within 30 days of issue of notification of award and it should valid for a period of 90 (ninety) days beyond the date of completion of contractual obligations of the supplier, including warranty obligations allowing a claim period of one year (time period between expiry date and claim) on top of guarantee period.
3. The successful tenderer is required to furnish security deposit in the form of identified in para 11.1 above and the same should be submitted within 30 days of issue of LOA/PO failing which a penal interest of 15% per annum shall be charged for the delay period i.e. beyond 30 (thirty) days from the date of issue of LOA/PO. The performance security should cover warranty period as per the tender conditions
4. The Security Deposit/Performance Bank Guarantee shall be submitted to **RailTel Corporation of India Ltd.** Eastern Regional Office at Salt Lake City, Kolkata.
5. 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.  
  
Detail for online SFMS confirmation using the platform is as below:  
BG advising message – IFN 760COV/ IFN 767COV via SFMS  
To mandatorily send the Cover message at the time of BG issuance.  
IFSC Code of ICICI Bank to be used (ICIC0000007).  
Mention the unique reference (RAILTEL6103) in field 7037
6. The Security Deposit/Performance Bank Guarantee shall be released after successful completion of contract obligations under the contract, duly adjusting any dues recoverable from the successful tenderer.
7. Any Performance security up to a value of Rs. 5 Lakhs is to be submitted online transfer only.

## 12. Eligibility Criteria for OEM :

1. The equipment offered by the OEM or equipment of the same series/family from the same OEM should have been satisfactorily working in Government /PSUs/Telecom Service Providers network for at least 12 months as on opening of bid, in India or Abroad. The certificates from the actual users will have to be submitted online.
2. The OEM should have supplied at least 35% of the tendered quantity (rounded to the nearest whole number) of the equipment offered or equipment of the same series/family during last preceding 3 financial years (i.e. current year and three previous financial years) as on opening of bid to Government/PSUs/Telecom Service Providers. OEM should submit self-certificate with proper contact detail of clients along with quantities supplied (Firm Name, Contact person, Designation, Telephone Number, Fax, Official mail id etc.). The same should be issued by authorized signatory.
3. The OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing and basic facilities with respect to space, Engineering, Personnel, Test equipment,

Manufacture, Training, Repair, Service Centre Supports for at least past three years in the country from where the proposed equipment are planned to be supplied. In case OEM is located outside India, it should have training repair and service centre facilities in India also. The certificates/Undertaking for the same will have to be submitted online.

(The bidder will have to submit the proof of establishment for the facility)

**13. Technical Eligibility Criteria of Bidder:**

The Bidder/OEM {themselves or through reseller(s)}, should have executed project for supply and installation /commissioning of same or similar Category Products during preceding 3 financial years (i.e. current year and three previous financial years) as on opening of bid, as per following criteria:

- (i) Single order of at least 35% of estimated bid value; or
- (ii) Two orders of at least 20% each of estimated bid value; or
- (iii) Three orders of at least 15% each of estimated bid value.

Satisfactory Performance Certificate issued by respective Buyer Organisation for the above Orders should be uploaded with bid. In case of bunch bids, the Category related to primary product having highest bid value should meet this criterion.

# Similar Category of Product : “Products of Datacom/ IT /ICT /Telecom” for any Government department or Public Sector Units or public listed companies, Private TELECOs (as per note below).

(Separate completed works of minimum required values for each component shall also be considered for fulfilment of technical eligibility criteria).

**Note-1 :** In case a contract is started prior to 03 (three) years, ending on the date of opening of bid, but completed in last 03 (three) years, ending on the date of opening of bid, the completed work shall be considered for fulfilment of credentials.

**Note-2:** Separate completed works of minimum required values for each component shall also be considered for fulfillment of technical eligibility criteria. In such cases, what constitutes a component in a composite work shall be clearly pre- defined with estimated tender cost of it, as part of the tender documents without any ambiguity. To evaluate the technical eligibility of tenderer, only components of work as stipulated in tender documents for evaluation of technical eligibility, shall be considered. The scope of work covered in other remaining components shall be executed by tenderer himself.

**Note-3:** Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organization, PSU or any reputed Telecommunications company (TELCO), work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange (NSE) or Bombay Stock Exchange (BSE), incorporated/registered at least 5 years prior to the date of opening of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates.

In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS

certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate).

**14. Financial Eligibility Criteria:**

The bidder should have minimum cumulative turnover from operation in the previous three financial years and the current financial year, at least 150% of the advertised value of the tender. The tenderers shall submit Certificates to this effect which may be an attested Certificate from the concerned department / client or Audited Balance Sheet duly certified by the Chartered Accountant/Certificate from Chartered Accountant duly supported by Audited Balance Sheet. The contact details of CA/Statutory Auditor along with UDIN No. shall be mandatorily mentioned on copy of certified Balance Sheet/Certificate.

(Note: Client certificate from other than Govt. Organization should be duly supported by Form 16A/26AS generated through TRACES of Income Tax Department of India). The OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing of material and facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Repair, Service Centre Supports for at least past three years. In case OEM is located outside India, it should have manufacturing, repair, service centre facilities in India also. The certificates/Undertaking for the same will have to be submitted.)

The bidder should not have been blacklisted by any agency /purchaser during the past 5 years.

**15. Warranty:**

The material is to be warranted as follows:

S No.	Material	Period of Warranty
1	Router Type-I& Type-II	36 months from date of delivery
2	Switch Type I to Type-IV	36 months from date of delivery
3	Firewall	36 months from date of delivery
4	PoE Injector	12 months from date of delivery
5	Access Point	36 months from date of delivery

The tenderer shall warrant that materials to be supplied shall be new and free from all defects and faults in material, workmanship and manufacturing and shall be of the highest grade and consistent with the established and generally accepted standards of materials of the type ordered and shall perform in full conformity with the specifications and drawings.

The supplier shall be responsible for any defects that may develop under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion, inadequate quantity of material to meet item requirements, inadequate contact protection, deficiencies in design and/ or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty.

**16. SLA:**

After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within time limit of max. 7 days. If the Seller fails to complete service / rectification within defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller upto max. of 100% of Unit Price of the product. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG) or from the

running bills.

**17. Variation of Quantities at the Time of Award**

The purchaser reserves the right to increase or decrease the quantity to be ordered up to 30 percent at the time of placement of the contract. The purchaser also reserves the right to increase the ordered quantity by up to 30% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

RailTel reserves the right to cancel the tender for full or part quantity tendered without assigning any reason.

**18. Payment Terms:**

- (i) 100% payment on full supply.
- (ii) 80% payment against part supply of the ordered quantity. In case bidder completes the supply order for one SOR, they can claim part payment of 80% against each SOR's completed supply of the said SORs. Balance payment shall be made after full supply.

The following documents are to be submitted for payment:

- i. Original Tax Invoice
- ii. Delivery Challan
- iii. E-way Bill
- iv. Original Consignee's receipt for receipt of goods in good condition
- v. Original Inspection Certificate
- vi. Warranty certificate from OEM
- vii. Proof of PG/SD submission
- viii. Proof of insurance certificate, if material supplied through transporter
- ix. Bill passing Authorities :

For material supplied at Guwahati : Territory Manager, Guwahati

For material supplied at Patna : Territory Manager, Patna

For material supplied at Kolkata : Sr. Dy. General Manager/O&M/Kolkata

Bill paying Authority : Sr. Dy. General Manager/Finance/ER

19. The tenderer shall submit a notarized affidavit on a non-judicial stamp paper stating that they are not liable to be disqualified and all their statement/documents submitted along with bid are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as **Form No. 4. Non submission of an affidavit by the bidder shall result in summarily rejection of his/their bid.** And it shall be mandatorily incumbent upon the tenderer to identify state and submit the supporting **documents duly self-attested** by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. It will not be obligatory on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned.

The RailTel (RCIL) reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the RailTel (RCIL), 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 (RCIL) shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the RailTel thereunder.

In case of any wrong information submitted by tenderer, the contract shall be terminated. Performance Guarantee (PG) of contract forfeited and agency barred for doing business on RailTel (RCIL) for 3years.

**20. Marking of Material Supplied:**

The tenderer may indicate the RailTel, Manufacture's Name, Month and Year of manufacturing, Serial numbers by casting/stamping/etching/embossing, at an appropriate place of each piece supplied, without affecting the functional utility and structural stability of the components/material.

**21. Online Submissions:**

The bidder is required to upload and submit the following documents on line before due date & time of bid. The due date & time for closing of the bid is 15:00 Hrs of 08.07.2024 and the bid will be opened at 15:30 Hrs of 08.07. 2024

- (i) Offer letter as per Form No.1
- (ii) EMD submission details/ Documentary proof of exemption from submission of EMD alongwith Bid Security Declaration as per Form No.3.
- (iii) BoQ of the offered materials
- (iv) Clause wise compliance along with all mentioned documents/annexures for all clauses of GeM Bid and ATC (Information to bidder) documents.
- (v) Data Sheet of offered item/equipment.
- (vi) Financial (Certified copies of audited balance sheets/annual reports of last three preceding financial years) and Technical Eligibility Criteria documents.
- (vii) Technical Compliance of all Specification of items as per ATC documents.
- (viii) Certificate from the end user against Eligibility Criteria for OEM para 12
- (ix) Proof of document required against Eligibility criteria of OEM and bidder vide para 12 & 13 respectively.
- (x) MAF/OEM Authorization as per Form No.2
- (xi) Notarized affidavit on a non-judicial stamp paper as per Form No.4.
- (xii) Undertaking to Land Border (Form No.6)
- (xiii) Power of Attorney (Form No.7)

Note:

- 1) The bidder is required to give acceptance of all the clauses mentioned in the "Information to the Bidders" document is mandatory. Any deviation / non-acceptance may lead to rejection of the bid.
- 2) Information to Bidder viz. corrigendum /addendum/ amendments etc. for this bid shall be posted on [www.railtelindia.com](http://www.railtelindia.com) only.
- 3) This bid is governed by the Specific Additional Terms & Conditions and General Terms & Conditions laid down by the GeM against GeM Bid No.\_GEM/2024/B/5080325
- 4) In case, if any contradiction between GeM Bid, Additional Terms & Conditions, RailTel's Bid Specific Additional Terms & Conditions, RailTel's Bid Specific Additional Terms & Conditions will prevail.
- 5) After opening of the technical bid no correspondence/submission of document made at the initiative of the bidder will be entertained. However, the purchaser can, if required, ask for clarifications which need to be submitted before a target date. The clarifications submitted as required by the purchaser before the target date will be considered.

**22. Offline documents:**

Original copy of documents shall be submitted by tenderer offline at RailTel Corporation of

India Ltd., 19<sup>th</sup> Floor, Aurora Waterfront Building, Plot No. 34/1, Block GN, Sector-V, Salt Lake City, Bidhannagar, Kolkata-700091 at any point of time whenever asked for verification.

**23 Constitution of Firm and Power of Attorney**

- 23.1 Any individual(s) signing the tender or other documents connected therewith should specify whether he is signing: -
- (a) As sole proprietor of the concern or as attorney of the sole Proprietor.
  - (b) As partner or partners of the firm.
  - (c) As a Director, Manager or Secretary in the case of Limited Company duly authorized by a resolution passed by Board of Directors or in pursuance of the authority conferred by Memorandum of Association.
- 23.2 In the case of a firm not registered under the Indian Partnership Act, all the partners or the attorney duly authorized by all of them should sign the tender and all connected documents. The original Power of Attorney or other documents empowering the individual or individuals to sign should be furnished to the Purchaser for verification, if required.
- 23.3 RailTel will not be bound by Power of Attorney granted by the tenderer or by the changes in the composition of the firm made subsequent to the execution of the contract agreement.
- 23.4 In case where Power of Attorney partnership deed has not been executed in English, the true and authenticated copies of the translation of the same by Advocate, authorized translators of Courts and licensed Petition Writers should be supplied by the contractor(s), while tendering of the work.
24. **DENIAL CLAUSE** - Supplier will not be entitled to any benefit of upward statutory variations in GST rates Announced after expiry of the original Delivery Period as per purchase order & in Case of reduction in GST rates if any, benefit will be passed on to RailTel at any stage of the contract.

**25. Contact Details for general Information:**

RailTel Contact-I : Shri Aneesh Pratap Singh, Asstt.GM ( Mobile No. : 8730007234)  
Shri Piklu Biswas Asstt.GM ( Mobile No. : 9007044119)  
Shri Deepak Kr. Choudhary Asstt.GM(Mobile No. 7463885512)

RailTel Contact-II :1. Shri Prakash Ratrey, Jt.GM/TM/Guwahati ( Mobile No. 8730007291)  
Shri Arbinnd Kumar, Sr. DGM/TM/Patna (Mobile No. 704482111)

**26.1 Public Procurement (Preference to make in India) :**

Public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products is applicable to this tender.

**26.2 Purchase preference to Micro and Small Enterprises (MSEs):**

Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises.

**26.3 Bidders sharing a land border with India:**

Office Memorandum F.No.6/18/2019-PPD dated 23.07.2020 by Ministry of Finance, Department of Expenditure, Public Procurement Division shall also apply to this tender. A certificate as per Form No.6 shall be submitted by all the bidders regarding their compliance with this order. If such a certificate given by a bidder whose bid is accepted is found to be false, this would be a

ground for immediate termination and further legal action in accordance with law. Registration should be valid at the time of submission of bids and at the time of acceptance of bids. In respect of supply otherwise than by tender, registration should be valid at the time of placement of order.

**27 Trade Receivables Discounting System (TReDS):**

TReDS feature is available on m1xchange portal, URL: <https://www.m1xchange.com>.

- i. RailTel is registered with m1xchange TReDS Platform having Buyer registration Number "BUYER00001496". The URL for m1xchange Platform is <https://www.m1xchange.com> MSE suppliers/vendors are required to register themselves on m1xchange Platform for availing the facility of bill discounting on TReDS portal. The bidder is mandatorily required to submit its TReDS registration number (as provided by M1xchange portal) and GRN (Goods/Service Receipt Note) Number (as provided by RailTel on delivery of Goods/ Service) while submitting the invoices if requires to avail TReDS facility.
- ii. MSE Vendor will bear all costs relating to availing the facility of discounting on TReDS platform including but not limited to Registration charges, Transaction charges for financing, DiscountingCharges, Interest on financing, or any other charges known by any name shall be borne by MSEVendor.
- iii. MSE Vendor hereby agrees to indemnify, hold harmless and keep RailTel and its affiliates, Directors, officers, representatives, agents and employees indemnified, from any and all damages, losses, claims and liabilities (including legal costs) which may arise from Sellers submission, posting or display, participation, in any manner, on the TReDS Platform or from the use of Services or from the Buyer's breach of any of the terms and conditions of the Usage Terms or of this Agreement and any Applicable Law on a full indemnity basis.
- iv. RailTel shall not be liable for any special, indirect, punitive, incidental, or consequential damages or any damages whatsoever (including but not limited to damages for loss of profits or savings, business interruption, loss of information), whether in contract, tort, equity or otherwise or any other damages resulting from using TReDS platform for discounting their (MSE Vendor's) invoices.

**Annexure-I**

**All Equipment should be:**

- i. Equipped with necessary hardware/software to comply all above required / support features.
- ii 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.
- iii. The OEM/Product should be ISO 9001:2015 certified.
- iv. The OEM/Product should be ISO 27001:2018 certified.
- v. The OEM/Product should be FCC part 15 Class A & FCC part 15 Class B certified.
- vi. The product should have safety certificate of UL
- vii. The product should have environmental certification of RoHS
- viii. The OEM/Product should be EN55022, EN55024, EN60950 certified.
- ix. The OEM/Product should be IEC 60950 certified.
- x. The OEM/Product should be ISO-IEC 13252\_1999 certified.
- xi. OEM of Routers, Switches and Access Point should be approved from National Security Council Secretariat as Trusted source.

**Note:**

1. UL, CE and FCC Certification is not required for PMA. However, they have to produce certificate from standard lab approved/ authorized by Govt. of India that their product is equivalent to UL, CE and FCC and meets all standard and specification of UL, CE and FCC.
2. If the offered equipment is not installed/used in the existing RailTel network, RailTel may ask for Proof of Concept (POC) for checking the Functional requirement/compatibility of the equipment. POC should be completed within 14 days from the date of advice received from RailTel. In case bidder fails either to arrange POC or to meet any functional requirement/ compatibility within given timeline, RailTel reserves the right to REJECT their bid

**SOR items are furnished below:**

SOR Item No.	Item Description	Item Quantity	Unit of Measure
1	Router Type-I as per technical specification of SOR- 1.	4	Nos.
2	Router Type-II as per technical specification of SOR-2.	6	Nos.

3	Manageable L2 Switch Type-I, as per technical specification of SOR-3.	4	Nos
4	Manageable L2 Switch Type-II as per technical specification of SOR-4.	14	Nos
5	Manageable Switch Type-III as per technical specification of SOR-5.	37	Nos
6	Manageable L2 Switch Type-IV as per technical specification of SOR-6.	8	Nos.
7	Firewall as per technical specification of SOR-7.	4	Nos.
8	Access Point as per technical specification of SOR-8.	10	Nos.
9	POE Injector as per technical specification of SOR-9.	56	Nos.

**SOR-1: Router Type-I**

ROUTER TYPE-I			
Srl. No	Technical Specification		Compliance Yes/No
1	Console	1	
2	USB2.0	1	
3	Port	Minimum 2x1G Optical and 4X1 G Electrical (100/1000Mbps )	
4	RST	1	
5	Encryption Engine	Built-in	
6	Throughput	≥ 2 MPPS or equivalent GBPS(Average Packet size 512 bytes)	
7	Flash	32 MB to 2GB or above	
8	DRAM	512 MB to 1GB or above	
9	NAT Concurrent Sessions	≥ 64 K or above	
10	Full Load	15W to 32W	
11	Power Supply	100-240VAC	
12	LAN	ARP, ARP proxy, Gratuitous ARP	
13	WAN	PPP, PPPoE (Client/Server)	
14	Routing	Static route, default route	
		RIPv1/v2, OSPFv2 & 3, BGPv4,IS-IS	
15	Multicast	IGMP V1,V2,V3	
		PIM-DM, PIM-SM	
16	IPv6	IPv6 ND, IPv6 PMTU, IPv6 FIB, IPv6 ACL,	
		IPv6 transition: NAT-PT, IPv6 tunnel, 4over6	
		IPv6 tunnel: IPSec v6,	
		IPv6 route: IPv6 static route, OSPFv3, BGP4+	
17	IP Service	ICMP, TCP, UDP, IP Option	
		NAT, PAT, Port-MAP	
		Ping, Trace Route, Nslookup	
		IP ACL,	
		DHCP Client/Serv/Relay	
		DNS, DNS host, DNS Proxy	
		UDP Helper	
		IP unnumbered, DDR	
		Keep alive, PDP	
		NetFlow, IP Accounting, IP SLA	
		TFTP Client/Serv, FTP Client	
SNTP/NTP			

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18	Switching	802.1p CoS, 802.IQ VLAN	
		Keep alive, port mirror, broadcast/ multicast storm control	
		PTP, IEEE1588v2 (Optional)	
19	Network Safety	Authentication, Authorization, Accounting	
		Enable, local, Radius, Tacacs+	
		PAP, CHAP, MS-CHAP	
20	Network Security	ACL, NAT	
		SYN flood, UDP flood or ICMP flood	
		ARP attack protection, ARP-SCAN and DHCP-Snooping	
		Prevention of Ping of Death, PingSweep, ARP attack and IP-Spoofing	
		IKE, IPSec,	
		L2TP, PPTP, GRE,	
21	Reliability	Interface backup	
		Route backup	
		Keep alive Ethernet remote monitoring	
		VRRP, HSRP	
		BFD for RIP, OSPF, BGP, VRRP	
22	QOS	FIFO, PQ, CQ, WFQ, CBWFQ	
		ACL	
		IP Precedence	
		MAC	
		802.1p	
23	Management	Console, Telnet, SSH,HTTP/HTTPS,SSL	
		SNMP V1/V2/V3, SYSLOG, RMON	
24	Operating Temperature	0°C~40°C	
25	Operating Humidity	10%~85% (non-condensing)	
26	Storage Temperature	-40°C~85°C	
27	Storage Humidity	10%~95% (non-condensing)	

**SOR-2: ROUTER TYPE-II**

ROUTER TYPE-II			
Sr. No.	Technical Specification		Compliance Yes/No
1	Console	1	
2	USB2.0	1	
3	Ports	Minimum 4X1G Optical & 4X1G Electrical(100/1000Mbps)	
4	RST	1	
5	Throughput	3.5 MPPS or Equivalent GBPS ,( Average packet size 512 bytes)	
6	Flash	32 MB to 2GB or above	
7	DRAM	1GB or above	
8	NAT Concurrent Sessions	≥ 200 K	
9	Full Load	15 W to 25 W	
10	Power Supply	100-240VAC (1+1) Power Backup	
11	LAN	ARP, ARP proxy, Gratuitous ARP	
12	WAN	PPP, PPPoE (Client/Server)	
13	Routing	Static route, default route	
14		RIPv1/v2, OSPFv2, BGPv4,IS-IS	
15	Multicast	IGMP V1,V2,V3	
16	IPv6	IPv6 ND, IPv6 PMTU, , IPv6 ACL,	
		IPv6 transition: NAT-PT, IPv6 tunnel, 4 over 6	
		IPv6 tunnel: IPSec v6, ,	
		IPv6 route: IPv6 static route, OSPFv3, BGP4+	
17	IP Service	ICMP, TCP, UDP, IP Option	
		NAT, PAT, Port-MAP,	
		Ping, Trace Route, Nslookup	
		IP ACL, IMP filter, Fast-Access	
		DHCP Client/Serv/Relay	
		DNS, DNS host, DNS Proxy, DDNS	
		IP unnumbered, DDR	
		Keep alive, PDP	
		NetFlow, IP Accounting, IP SLA	
		TFTP Client/Serv, FTP Client	
		SNTP/NTP	
18	Switching	802.1p CoS, 802.IQ VLAN	
		Keep alive, port mirror, broadcast/ multicast storm control	
		PTP, IEEE1588v2 (Optional)	

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19	Network Safety	Authentication, Authorization, Accounting	
		Enable, local, Radius, Tacacs+	
		PAP, CHAP, MS-CHAP	
20	Network Security	ACL, NAT	
		SYN flood, UDP flood or ICMP flood	
		ARP attack protection, ARP-SCAN and DHCP-Snooping	
		Prevention of Ping of Death, Ping Sweep, ARP attack etc.	
		IP-Spoofing	
		IKE, IPSec, L2TP, PPTP, GRE,	
21	Reliability	Interface backup	
		Route backup	
		Keep alive Ethernet remote monitoring	
		VRRP, HSRP	
		BFD for RIP, OSPF, BGP and VRRP	
22	QOS	FIFO, PQ, CQ, WFQ,	
		WRED/RED	
		ACL	
		IP Precedence	
		MAC	
		802.1p	
23	Management	Console, Telnet, SSH,HTTP/HTTPS,SSL	
		SNMP V1/V2/V3, SYSLOG, RMON	
24	Operating Temperature	0°C~40°C	
25	Operating Humidity	5%~95% (non-condensing)	
26	Storage Temperature	-40°C~85°C	
27	Storage Humidity	5%~95% (non-condensing)	

**SOR-3 Managed Switch Type-I:**

<b>Managed L2 Switch Type-I : L2 Access Switch with 8 Port 10/100/1000 Base TX + 2 x 1G SFP Port</b>			
<b>Srl. No.</b>	<b>Technical Specification</b>		<b>Compliance Yes/No</b>
1	Interface	Minimum 8xGE-Tx POE & 2xGE-SFP	
2	Console (RJ45)	1	
3	Switching capacity	Minimum 20 Gbps or above	
4	Forwarding rate	Minimum 14.5Mpps or above	
5	MAC	Minimum 8K or above	
6	Jumbo Frame	9K	
7	Power consumption	<30W	
8	Power supply	AC: 100V-240V, 50Hz±10%	
9	POE/POE+	Support with min 120W POE Budget	
10	Environment	Operating temperature/humidity: 0°C-50°C, 10%-90% non-condensing	
		Storage temperature/ humidity: -20°C-70°C; 5%-95% non-condensing	
11	MAC switching function	Static configuration and dynamically learning of MAC address	
		Configuring of MAC address aging time	
		Limit on MAC address learning number	
		MAC address filtering function	
12	VLAN	4K VLAN entries	
		GVRP	
		1:1 and N:1 VLAN Mapping	
		Private VLAN	
13	STP	802.1D (STP), 802.1W (RSTP), 802.1S (MSTP)	
		BPDU protection, root protection and ring protection	
14	Multicast	IGMP v1/v2/v3	
		IGMP Snooping	
15	IPv4	Static routing, Maximum number of IPv4 unicast routes in hardware: 200 prefixes, Maximum number of ARP entries: 800	
16	IPv6	ICMPv6, DHCPv6 and IPv6 Telnet	
		IPv6 Neighbor Discovery	
17	QoS	Traffic classification of each field of L2/L3/L4 protocol headers	
18		Defend against DDoS attack, SYN Flood attack of TCP or UDP Flood attack	

		Suppression of broadcast, multicast and unknown unicast packet	
		Port isolation	
		Port security, IP+MAC+port binding	
		DHCP Snooping, DHCP Option 82	
		IEEE 802.1x authentication	
		Radius and TR Tacacs+ authentication	
		Command line authority control based on user levels	
19	Reliability	Static/LACP link aggregation	
20	Management and Maintenance	Console, Telnet, SSH 2.0	
		WEB based management style	
		SNMP v1/v2/v3	
		Upload and download of TFTP files	
		RMON	

**SOR-4: Managed Switch Type-II :**

<b>Managed Switch Type-II : Access Switch 24 Nos. 10/100/1000 Ethernet Ports + 4 Nos. of SFP+ based 10 GE Ports:</b>			
<b>Sr. No</b>	<b>Technical Specification</b>		<b>Compliance Yes/No</b>
1	Interface	Minimum 24xGE TX POE & 4x10GE/GE SFP+	
2	Console (RJ45)	1	
3	Switching capacity	Minimum 128 Gbps	
4	Forwarding Rate (Mpps)	Minimum 96 Mpps	
5	Power Consumption	≤48W	
6	Power Supply AC: 100V-240V & DC: -36V--72V	Yes	
7	POE Power Budget AC: 100V-240V	Minimum 370W	
8	POE Power Budget DC: 48V	Minimum 700W	
9	POE (IEEE802.3af)/POE+ (IEEE802.3at)	Yes	
10	Fan number	2	
11	Noise@25°C(dBA)	37.5	
12	MTBF(H)	> 200,000	
13	Forwarding mode	Store-forward Or equivalent	
14	Flash (MB)	Minimum 16 or above	
15	DRAM (MB)	Minimum 256 or above	
16	MAC	Min 16K	
17	Buffer size(MB)	Minimum 1.5 or above	
18	Jumbo frame	9K	
19		4K Active VLAN	

	VLAN	GVRP	
		QinQ and Selective QinQ	
		Voice VLAN	
20	Spanning Tree	802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP)	
		BPDU guard, root guard and loopback guard or equivalent	
21	Multicast	IGMP v1/v2/v3	
		IGMP snooping	
22	IP	Static route,	
		IPv4/v6 dual stack	
23	IPv6	ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet	
		IPv6 neighbor discovery	
		Path MTU discovery	
24	QOS	Yes	
25	Security features	Port isolation	
		Port security, and "IP+MAC+port" binding	
		IEEE 802.1x,Radius,TRTacacs+ authentication	
		L2/L3/L4 ACL flow identification and filtration Anti-attack from DDoS,TCP's SYN Flood, UDP Flood etc.	
		Broadcast/multicast/unknown unicast storm-control	
		MD5, SHA-256, RSA-1024, AES256 etc.	
26	DHCP	DHCP server/relay/client	
		DHCP snooping	
27	Reliability	Static/LACP link aggregation	
		Interface Backup	
		ISSU uninterrupted system upgrade	
		VRRP	
		UDLD	
28	Management	Console, Telnet, SSH, HTTP, HTTPS,RMON	
		SNMP v1/v2/v3	
		TFTP, FTP, SFTP	
		NTP	
		SPAN, RSPAN	
29	Environment	Operating temperature/humidity:0°C -45°C ,10%-99% non- condensing	
		Storage temperature/humidity:- 20°C -70°C , 5%-95% non- condensing	

30	Accessories	Power cord, rack mount kits, console cable	
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**SOR-5: Managed Switch Type-III**

<b>Managed Switch Type-III : Switch (24 x GE SFP, 4 x 10GE/GE SFP+)</b>			
<b>Srl. No</b>	<b>Technical Specification</b>		<b>Compliance Yes/No</b>
1	Interface	Minimum 24 x GE SFP based Ports, 4 x. 10 GE/GE SFP+ ports	
2	Management port	1 Console	
3	Switching capacity	Minimum 128Gbps or above	
4	Packet forwarding rate	Minimum 95Mpps or above	
5	MAC address table	Minimum 16K or above	
6	Buffer	Minimum 12M bit or above	
7	Fan number	2	
8	Noise@25°C(dBA)	<25db	
9	MTBF(H)	> 50,000	
10	Forwarding mode	Store and forward or equivalent	
11	Flash (MB)	Minimum 512	
12	DRAM (MB)	Minimum 256	
13	Jumbo frame	10K	
14	Power Supply AC: 100V-240V & DC: -36V--75V	Yes	
15	Power Consumption	≤40W	
16	Power Redundancy	Yes (Optional)	
17	Working Temperature & Humidity	Operating temperature and humidity: 0°C~50°C, 5%-95% non-condensing	
18	Storage Temperature & Humidity	Storage temperature & humidity:- 20°C~70°C, 5%-95% non-condensing	
19	Port aggregation	Static and dynamic aggregation	
20	Port features	IEEE802.3x flow control, Port traffic statistics, port isolation	
21		Network storm suppression based on port bandwidth percentage	
22	VLAN	Access, trunk and hybrid mode,4K VLANs	
23	VLAN Classification	Mac Based VLAN	
		IP Based VLAN	
		Protocol Based VLAN	
24	QinQ	Basic QinQ (Port-based QinQ)	
		Flexible Q in Q(VLAN-based QinQ)	

25	Port mirroring	Yes	
26	Layer 2 ring network protocol	STP,RSTP,MSTP, Spanning-tree root guard, Port Fast and BPDU Guard	
		G.8032 ERPS protocol, single ring, sub ring and other ring	
27	DHCP	DHCP Client	
		DHCP Server	
		DHCP Snooping	
28	ARP	ARP table aging	
29	Static routing	IPv4/IPv6 Static routing	
30	IPV6	IPv6 Management	
		ICMPv6	
		IPv6 Telnet	
		IPv6 neighbor discovery	
31	Multicast	IGMP V1,V2,V3	
		IGMP snooping	
32	ACL	IP Standard ACL	
		MAC extend ACL	
		IP extend ACL	
33	QoS	Policy-based QoS	
		CoS based on, Switch port , 802.1p priority , VLAN ID and MAC address	
34	Security	Dot1x, port authentication, MAC authentication, RADIUS, Tacacs+	
		Port-security	
		IP source guard, IP/Port/MAC binding	
		Arp-check and ARP packet filtering for illegal users	
35	Management and maintenance	Port isolation	
		LLDP	
		User management and login authentication	
		SNMPV1/V2C/V3	
		Web management, HTTP,HTTPS	
		Syslog	
		RMON (Remote Monitoring) alarm, event and history record	
		NTP	
		Temperature monitoring	
		Ping, Traceroute	
		TFTP	
		Telnet	
SSH			

		SSL	
		FTP	

**SOR-6: Managed L2 Switch Type-IV :**

Manager L2 Switch Type-IV : Layer-2 Access Switch with 24x10/100/1000 Mbps non PoE, 4x1G SFP port :			
Srl. No	Technical Specification		Compliance Yes/No
1	Ports	Minimum 24 x 10/100/1000Base-T + 4 x 100/1000Base-X (SFP)	
2	Switching Capacity	Minimum 56 Gbps or above	
3	Forwarding Rate	Minimum 41.7 Mpps or above	
4	MAC ADDRESS	Minimum 16K or above	
5	Jumbo Frame	Minimum 12K or above	
6	ACL Table	Minimum 2048 or above	
7	Queues per port	Minimum 8 or above	
8	VLAN TABLE	4K	
9	Power Input	100~240VAC, 50~60Hz	
10	Power Consumption	20w	
11	Temperature	Working 0°C~50°C, Storage -40°C~70°C	
12	Relative Humidity	5%~95%,non-condensing	
13	Physical Protection	Lightning Protection Level: 4KV	
14	Forwarding	Storage and Forwarding	
15	VLAN	Port-based VLAN, IEEE802.1Q, private VLAN, Protocol VLAN, Voice VLAN, MAC VLAN	
		Normal QinQ, Selective QinQ, Flexible QinQ	
		VLAN Translation, N:1 VLAN Translation	
16	DHCP	IPv4/IPv6 DHCP Client, IPv4/IPv6 DHCP Relay	
		Option 82, IPv4/IPv6 DHCP Snooping, IPv4/IPv6 DHCP Server	
17	Spanning Tree	802.1D STP, 802.1W RSTP, 802.1S MSTP	
		Root Guard, BPDU Guard, BPDU Forwarding	
18	LACP	Yes	
19	Security	IP ACL, MAC ACL, MAC-IP ACL, User-Defined ACL	
		Time Range ACL	
		ACL on VLAN interface	
		Storm Control based on packets and bytes	

		Port Security, MAC Limit based on VLAN and Port Anti-ARP-Spoofing , Anti-ARP-Scan, ARP Binding ND Snooping	
		IEEE 802.1x	
		Authentication, Authorization, Accounting	
		Radius, TACACS+	
20	Multicast	IGMP v1/v2/v3 snooping, IGMP Fast leave MVR	
21	QoS	Classification based on ACL, VLAN ID, COS, TOS, DSCP, Policing Based on Port and VLAN	
22	Maintenance and Operation Management	TFTP/FTP	
		CLI, Telnet, Console Web/SSL (IPv4/IPv6) SSH (IPv4/IPv6)	
		SNMPv1/v2c/v3 SNMP Trap	
		Public & Private MIB interface RMON 1,2,3,9	
		Ping, Trace Route Radius Authentication Syslog (IPv4/IPv6) SNTP/NTP (IPv4/IPv6)	
		Dual IMG, Multiple Configuration Files Port Mirror, CPU Mirror, RSPAN	
		sFlow OAM EFM VCT, DDM ULDP	
		LLDP/LLDP MED	
23	Green Energy	IEEE 802.3az (Energy Efficient Ethernet) LED Shut-off	

**SOR-7: Firewall:**

FIREWALL			
Srl. No	Technical Specification		Compliance Yes/No
1	Type	NGFW	
2	Form Factor (RU)	1	
3	Features (Multiple Selection)	Layer 3-Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, Next Generation Intrusion Prevention System (IPS), Web Security Essentials/URL Filtering.	
4	Throughput with all features enabled (Under Test/Real Condition) (Mbps)	Min 2200	
5	Should have 2.5 Gbps of NGFW throughput	Yes	
6	Concurrent Session/Concurrent Connection	5M	

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7	New session/ Connection per second	60K	
8	If Yes, High Availability from day 1 (Multiple Selection)	NA	
9	OEM Warranty (Year)	1	
10	Packet Size (KB)	1024	
11	Number of 1GE Copper interface, 2.5 GbE copper interface.	12	
12	OPTIONAL Facelity ADD-ON MODULES 3G/4G module 5G module	Yes	
13	1 x COM RJ45	Yes	
	1 x Micro-USB (cable incl.)		
	1 x USB 2.0 (front)		
	1 x USB 3.0 (rear)		
14	Power-over-Ethernet (fixed)	Min 02 Nos	
15	Number of GE Small Form-Factor Pluggable (SFP) interface	Min 2	
16	Number of Lan /WAN Ports	Min 8	
17	Number of Ipsec VPN Peers supported (Site to Site)	1000	
18	Number of Ipsec VPN Peers supported (Client to Site)	1000	
19	Number of SSL VPN Peers supported (Client to Site)	200	
20	Type of Storage Disk	SSD or Equivalent	
21	Storage Capacity (GB)	64	
22	Type of Processor (Multiple Selection)	x86 or equivalent	
23	High Availability Support (Multiple Selection)	Yes	
24	Interface Expansion slots supported	Yes	
25	Dual processor architecture with a minimum of 6 GB of RAM and a dedicated network processing unit (NPU) with a minimum of 4 GB RAM for hardware acceleration or equivalent	Yes	
26	Security Intelligence (Multiple Selection)	IP, URL, Domain	
27	Certification (Multiple Selection)	Common Criteria/NDPP /NSS/ ICSALabs	
28	Minimum Operating Temperature (Degree C)	0	
29	External auto-ranging AC-DC	Yes	
	100-240VAC,		
	2.5A@50-60 Hz		

	12VDC, 12.5A, 150W		
30	Optional second redundant power supply		
31	Maximum Operating Temperature (Degree C)	40	
32	Minimum Operating Humidity (%RH)	10	
33	Maximum Operating Humidity (%RH)	90	
34	IPv6 Ready from day 1 (Multiple Selection)	Yes	

**SOR-8: Wireless Access Point:**

<b><u>WIRELESS ACCESS POINT:</u></b>		<b>Compliance Yes/No</b>
Srl. No.	Technical specification	
<b>Hardware Parameters:</b>		
1	Access Points proposed must include radios for both 2.4 GHz and 5 GHz.	
2	Must have a robust design for durability, without visible vents	
3	Must include dual band antennas to support both the 2.4GHz and 5GHz operations simultaneously.	
4	Proposed access point shall support MDO ( Mobile Data offload)	
5	Mounting kit should be standard which shall be used for mounting access point	
6	Must support operating humidity of 10 to 90% (noncondensing)	
<b>Wireless Standard Parameters:</b>		
1	Must support 2X2 multiple-input multiple-output (MIMO) with TWO spatial streams	
2	Must support simultaneous 802.11n on both the 2.4 GHz and 5 GHz radios and must support 802.11ac Wave 2 on 5 GHz .	
3	Must support data rates upto 800 Mbps on 5Ghz radio and 140mbps on 2.4Ghz radio.	
4	Must support 40 MHz and 80 MHz wide channels in 5 GHz.	
5	Antenna Gain of Access Points must be +2dBm or better.	
6	Must support following minimum transmit power for both 2.4Ghz and 5Ghz radios.	
	(i) 2.4-Ghz band : +21dBm	
	(ii) 5.0-Ghz band: +24dBm	
7	AP should support VLAN trunking (802.1q) and VLAN based SSID for user traffic.	
<b>RF Parameters:</b>		
1	The Wireless AP should have the technology to improve downlink performance.	
2	The AP shall be able to load-balance between 2.4Ghz and 5Ghz band.	
3	Must have -90dB to -100dB or better Receiver Sensitivity.	
4	Must incorporate radio resource management for power, channel, coverage hole detection and performance optimization	
5	Should support configurable carrier sense threshold	
<b>Mesh Parameters:</b>		
1	The Wireless Backhaul shall operate in 5Ghz	

2	Support Encrypted and authenticated connectivity between all backhaul components	
3	Access point shall have wired uplink interfaces i.e. 1X10/100/1000 BASE- T Ethernet	
<b>Roaming Parameters:</b>		
1	Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.	
<b>Security Parameters:</b>		
1	Must support Management Frame Protection.	
2	Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI) or preinstalled certs on AP for authentication	
3	Provision of Wireless IPS to filter malicious traffic	
<b>Encryption Parameters:</b>		
1	Access Points must support a distributed encryption/decryption model.	
2	Access Points must support hardware or software based encryption	
<b>Monitoring Parameters:</b>		
1	Must support the ability to serve clients or monitor the RF environment.	
2	AP model proposed must be able to be both a client-serving AP and Parallel monitor- Intrusion Prevention services.	
<b>Flexibility Parameters:</b>		
1	Should support mesh capabilities for temporary connectivity in areas with no Ethernet cabling.	
2	Should support QoS for voice over wireless.	
3	Must support Controller-based and standalone (autonomous) deployments	
4	Must support 16 WLANs per AP for SSID deployment flexibility.	
<b>Operational Parameters:</b>		
1	Must support telnet or SSH or console login to APs directly for troubleshooting flexibility.	
2	Must support automatic detection of dropped connection to controller,	
3	Must support automatic failover to secondary controller, upon detecting lost connection to controller	
4	Must support DHCP Option 82, defined in RFC 3046, including support for Sub-option 01 (Circuit-Id) and Sub-option 02 (Remote Id) fields.	
5	With Controller APs (from a data-plane perspective) must support:	
	- Ethernet over GRE IPv6 tunnel	
	- Automatic detection of failed tunnel termination, with configurable connection retry and timeout. - Automatic failover to secondary tunnel termination address.	
6	Support for basic AP monitoring statistics for each radio: Bytes Sent, Bytes Received, Packets Sent, Packets Received, Radio Channel Utilization, Noise.	
7	Must support data-plane split tunneling in which ACLs may be configured to enable a range of destination net blocks and/or IPs to bypass the data-plane tunnel and be bridged on the wired interface.	
8	AP should have capability to split tunnel for both IPv4 and IPv6 tunnel to segregate the management and data traffic.	

9	AP should have capability to split tunnel for specific destination IP/Subnet (For implementing policy based Caching solutions) using local NAT and forward user traffic.	
10	The AP shall support 200 concurrent Clients per AP	
11	APs shall support SNMP v1 Or higher (V2/V3)	
<b>Power :</b>		
1	Must support Power over Ethernet/PoE+/UPoE/Power Injector/AC/DC .	
<b>Quality of Service:</b>		
1	Shall have the support of 802.11e and WMM	
2	Should be Wi-Fi Alliance certified and WPC Approved and ETA Certified	
3	Must support QoS to prioritize video ,voice and Data traffic	
<b>Environmental and Electrical Specifications:</b>		
1	Must support QoS and Video Call Admission Control capabilities.	
2	Access point shall support powering from POE/PoE+/UPoE /Power Injector/AC/DC.	
3	Access point shall support pole, wall, and roof mounting options.	
4	Geographic orientation flexibility – tilt angle for pole, wall, and roof mounting units	
5	The equipment shall support up to 100 MPH sustained winds & 140MPH wind gusts.	
6	The Access point shall be IP67 certified.	
7	The Access point shall be rated for operation over an ambient temperature range of 0C to +55 C	
8	Should Support Surge Protection on Ethernet Ports to meet the requirement at High Voltage Transmission Line running across the Railway Platform. If any OEM/Bidder can't provide inbuilt surge protection in AP, external surge protection must be proposed. Surge protection of ± 2 kV on copper Ethernet ports.	
	<b>Note:</b> Wireless Access Point offered should compatible with the Cisco 8540 /Ruckus VSZ-H WLC on existing MPLS network. If the vendor is offering Wireless Access Point non-compatible with above WLC non-compatible Wireless Access Point then the vendor has to supply WLC without any additional cost to RailTel.	

**SOR-9: POE INJECTOR:**

<b>POE INJECTOR: Plug and play non configurable 1 port Gigabit PoE Injector:</b>		
<b>Sr. No</b>	<b>Technical Specification</b>	<b>Compliance Yes/No</b>
	i) <b>Power over Ethernet feature compatible with the existing Switch .</b>	
	ii) Ethernet IEEE802.3af/at	
	iii) Voltage boost up to 48V DC for PoE	
	iv) Power output upto 15.4W	
	v) Distance supportable upto 100mtrs.	

	vi) LAN Port: 10/100/1000Mbps Auto-Negotiation RJ45 LAN port (LAN In), (1) 10/100/1000Mbps Auto-Negotiation RJ45 PoE port (Power + Data Out), (1) power socket (DC In),auto negotiation	
	vii) Power Supply: AC Adapter 230v. 1 mtrs, Cat6 cable with both ends terminated on Rj45 connector.	

**OFFER LETTER**

**Form No-1**

**Principal Executive Director, Eastern Region,  
RailTel Corporation of India Limited,  
19<sup>th</sup> Floor, Aurora Waterfront Building,  
Plot No. 34/1, Block GN,  
Sector-V, Salt Lake City,  
Kolkata – 700 091.**

Ref: GeM Bid No.: GEM/2024/B/5080325 Dated: 22.06.2024

1. It is hereby confirmed that we have understood the terms and conditions of the Tender, have thoroughly examined the specifications, are aware of the nature of the goods & services required and our offer is to supply goods & services strictly in accordance with the requirements, terms & conditions of this Tender. We agree to abide by the terms and conditions of the tender if the contract is awarded to us.

2. We hereby offer to supply the goods and services detailed above or such portions thereof as you specify in the purchase order at the price quoted and agree to hold this offer open for acceptance for a period of 60 days from the date of opening of the bid.

3. Online payment vide transaction No. \_\_\_ dated \_\_\_ for Rs. \_\_\_ in favor of RailTel Corporation of India Ltd, towards EMD has been paid through the details as mentioned in tender notice/ tender document. The full value of Earnest Money shall stand forfeited without prejudice to any other rights or remedies if, I/We withdraw or modify the offer within validity period or do not deposit the security deposit (Performance Bank Guarantee) within 30 days after issue of Purchase Order.

SIGNATURE OF SUPPLIER (S)  
Date:

CONTRACTOR (S) ADDRESS

SIGNATURE OF WITNESS:

- 1.
- 2.

**Format of Manufacturer Authorisation form (MAF)**

Principal Executive Director, Eastern Region,  
RailTel Corporation of India Ltd.  
19<sup>th</sup> Floor, Aurora Waterfront Building,  
Plot No. 34/1, Block GN,  
Sector-V, Salt Lake City,  
Kolkata – 700 091.

**Subject: Manufacturer Authorisation form (MAF) to M/s ..... for .....**

**Ref: GeM Bid No. GEM/2024/B/5080325 dated:22.06.2024**

Dear Sir,

We, M/s....., are established and reputed manufacturer and service provider of  
.....(Product details) having our registered office at .....

We hereby authorise M/s ..... (bidder name), Office  
..... to participate in the above referred bid and subsequently upon  
award of the bid to execute the “Supply of SFPs,” our range of products against your above said bid.

We further extend our warranty for ..... years for our range of products offered by M/s  
.....against the above-said bid.

Thanking you,

Best regards,

**Authorised Signatory**

\*\*\*\*\*

**FORMAT BID SECURITY DECLARATION**

(On Non-judicial stamp paper of Rs. 100/-)

Whereas, I/We \_\_\_\_\_ (Name of Agency) has submitted bid for \_\_\_\_\_ (Name of Work and Tender No.) and whereas Earnest Money Deposit is being exempted in the aforesaid tender to give relief to the bidders as per Govt. of India guidelines as the bidder being \_\_\_\_\_

I/We hereby submit the following “Bid Security Declaration” in lieu of exemption from submitting Earnest Money Deposit :-

1) If I/We withdraw or modify my/our bid during the bid validity period (including extended validity of tender) specified in the tender documents;

Or

2) If, after the award of work, I/We fail to accept LOA/PO, or to sign the contract agreement or fail to submit performance guarantee or fail to commence the work within stipulated time period prescribed in tender documents;

Or

3) If I/We furnish any incorrect or false statement / information/ document;

Or

4) If I/We hide any relevant information or do not disclose any material fact in the tender;

Or

I/We may be disqualified and banned for a period of three years and shall not be eligible to bid for future tenders in RailTel Corporation of India Ltd. for the period of three years from date of issue of such orders.

(Signed by the Authorized Representative of Firm)

Name of Authorized Representative

Name of Firm

Date

**Form No.4**

**FORMAT FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONG WITH THE TENDER DOCUMENTS**

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

I..... (Name and designation)\*\* appointed as the attorney/authorized signatory of the tenderer (including its constituents), M/s. \_\_hereinafter called the tenderer) for the purpose of the Tender documents for the work of \_\_\_\_\_ as per the tender No. \_\_\_\_\_ of RailTel Corporation of India Ltd., Eastern Region, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

- (i) I/We the tenderer (s) am/are signing this document after carefully reading the contents.
- (ii) I/we the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
- (iii) I/We hereby declare that I/We have downloaded the tender documents from RailTel's website www.railtelindia.com or GeM Portal www. gem.gov.in. I/We have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenderer's, 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.
- (iv) 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.
- (v) **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.**
- (vi) **I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents submitted by us.**
- (vii) 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 tenders, it shall lead to forfeiture of the tender EMD besides banning of business for five year on entire RailTel Corporation of India Limited. Further, I/we (*insert name of the tenderer*) \*\* \_\_\_\_\_ and all my/our constituents understand that my/our offer shall be summarily rejected.
- (viii) 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 and Performance Guarantee besides any other action provided in the contract including banning of business for five year on entire RailTel Corporation of India Limited.

**DEPONENT SEAL AND SIGNATURE  
OF THE TENDERER**

VERIFICATION

I/We above named tenderer 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 TENDERER**

Place:

Dated:

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

**Form No. 5**

**PROFORMA FOR PERFORMANCE BANK GUARANTEE BOND**

(To be in accordance with Stamp act)

**[To be used by approved scheduled commercial bank, (either Private or PSU) but not from any cooperative Bank or NBFC]**

1. In consideration of the RailTel Corporation of India Limited 19th Floor, either private or Aurora Water Front Building, GN. 34/1, Block GN, Sector-V, Salt Lake City, Bidhannagar, Kolkata-700091 (Herein after called RailTel) having agreed to exempt .....  
.....(Hereinafter called “the said Contractor(s)”) from the demand, under the terms and conditions of an Purchase Order/LOA No.....dated.....made between.....  
.....and..... for (hereinafter called “ the said Agreement”) of security deposit for the due fulfillment by the said Contractor (s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs.  
.....(Rs ..... only). We ..... (indicate the name of the Bank) hereinafter referred to as “the Bank”) at the request of .....  
..... Contractor(s) do hereby undertake to pay the RailTel an amount not exceeding Rs.  
..... against any loss or damage caused to or suffered or would be caused to or suffered by the RailTel by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement.
2. We,.....(name of the Bank) and our local branch at Kolkata (indicate detail address of local Kolkata branch with code no.) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on demand from the RailTel stating that the amount is claimed is due by way of loss or damage caused to or would be caused to or suffered by the RailTel by reason of breach by the said Contractor(s) of any of terms or conditions contained in the said Agreement or by reason of the Contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs . .....
3. We,.....bank undertake to pay to the RailTel any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) / Bidder(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) / Bidder(s) shall have no claim against us for making such payment.
4. We,..... Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this Guarantee. Unless a demand or claim under the Guarantee is made on us in writing on or before the ..... We shall be discharged from all liability under this Guarantee thereafter.
5. We,..... (indicate the name of Bank) further agree with the RailTel that the RailTel shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the Agreement or to extend time of 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 affect of so relieving us.

- 6. This Guarantee will not be discharged due to the change in the Constitution of the Bank or the Contractor(s) Supplier(s).
- 7. We, ..... (indicate the name of Bank) lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the RailTel in writing.
- 8. We, the.....Bank further agree that this guarantee shall be ivokable at our place of business at ..... /Kolkata (indicate detailed address of local Kolkata branch with Code No.). The branch at Kolkata being advised accordingly.
- 9. Notwithstanding anything contained herein,
  - 1. Our liability under the Bank guarantee shall not exceed Rs. .... (In Rupees)
  - 2. This Bank Guarantee shall be valid up to .....and
  - 3. We are liable to pay the guaranteed and or any part thereof under this Bank Guarantee only and only if you serve upon is a written claims or demand or before ..... (date of expiry of guarantee).

Dated the                      day of                      2024

for .....  
(indicate the name of the Bank)

**Witness**

- 1. SignatureName
- 2. Signature Name

\*\*\*\*\*

**Form No. 6**

**Undertaking for Land Border**

**Certificates related to Guidelines issued by Ministry of Finance through OM no.  
6/18/2019-PPD dated 23.07.2020**

- (i) Certificate to be provided by Tenderer on their letter heads:

“I have read the clause regarding restrictions on bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority, I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]”

**Form No.7**

**Format for Power of Attorney**

**POWER OF ATTORNEY**

[To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant Stamp Act. The stamp paper to be in the name of the company who is issuing the power of attorney.]

We, M/s. \_\_\_\_\_ (name of the firm or company with address of the registered office) hereby constitute, appoint and authorize Mr. or Ms. \_\_\_\_\_ (Name and residential address) who is presently employed with us and holding the position of \_\_\_\_\_, as our Attorney to do in our name and our behalf all or any of the acts, deeds or things necessary or incidental to our RFP for the Project \_\_\_\_\_ (name of the Project), including signing and submission of the RFP response, participating in the meetings, responding to queries, submission of information or documents and generally to represent us in all the dealings with Client or any other Government Agency or any person, in connection with the works until culmination of the process of bidding till the Project Agreement is entered into with \_\_\_\_\_ (Client) and thereafter till the expiry of the Project Agreement.

We hereby agree to ratify all acts, deeds and things lawfully done by our said Attorney pursuant to this power of attorney and that all acts, deeds and things done by our aforesaid Attorney shall and shall always be deemed to have been done by us.

(Add in the case of a Consortium)

Our firm is a Member or Lead bidder of the Consortium of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

Dated this the \_\_\_\_\_ day of \_\_\_\_\_ 2024

(Signature and Name of authorized signatory)

\_\_\_\_\_

## Annexure- II

## Consignee Details

SOR Srl. No.	Item Description	Qty. to be supplied to consignee at Guwahati	Qty. to be supplied to consignee at Patna	Qty. to be supplied to consignee at Kolkata	Total Quantity
1	Router Type-I			4	4 Nos.
2	Router Type-II			6	6 Nos.
3	Manageable L2 Switch Type-I	4			4 Nos.
4	Manageable Switch Type-II	4		10	14 Nos.
5	Manageable Switch Type-III	3	18	16	37 Nos.
6	Manageable L2 Switch Type-IV		8		8 Nos.
7	Firewall			4	4 Nos.
8	Wireless Access Point			10	10 Nos.
9	POE Injector			56	56 Nos.

**Consignee Address at Kolkata:**

Chief Manager/Tech/Store,  
 RailTel Corporation of India Ltd.,  
 C/o. Central Warehousing Corporation,  
 Kishori Mohan Banerjee Avenue,  
 Panihati, Dhankal, Kolkata - 700114  
 Shri Surajit Roy, Mobile No. 9007044137

**Consignee Address at Guwahati:**

Sr. Manager(Tech.)/Stores,  
 RailTel Corporation of India Ltd.,  
 3<sup>rd</sup> Floor, Ramanand Tower,  
 (FederalBank Building)  
 Opp. Hotel Nandan, GS Road,  
 Palton Bazar, Guwahati - 781008  
 Mob No. 8730007291

**Consignee Address at Patna:**

Asstt.GM, RailTel Corporation of India Ltd.,  
 2<sup>nd</sup> Floor, Telecom Hub/Patna,  
 Near RRI Building,Karbigahia,  
 End of Patna Jn. Railway Station,  
 Patna – 800 001.

**General Conditions:**

**1. Tenderers Address**

Tenderer shall state in the tender his postal address fully and clearly. Any communication sent to the Tenderers by post at his said address shall be deemed to have reached the tenderer duly & timely, not withstanding the fact the communication could not reach the tenderer at all or in time for whatever reason. Important documents shall be sent by Registered post.

**2. Law governing the contract.**

The contract shall be governed by the law for the time being in force in the Republic of India. Compliance to regulations and bye-laws-The contractor shall conform to the provision of any statute relating to the works and regulations and bye-laws of any local authority and of any water and lighting companies or undertakings, with whose system the work is proposed to be connected and shall before making any variation from the drawings or the specifications that may be necessitated by so confirming give to the Engineer notice specifying the variation proposed to be made and the reason for making the variation and shall not carry out such variation until he has received instructions from the Engineer in respect thereof. The Contractor shall be bound to give all notices required by statute, regulation or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

**3. Force Majeure clause:-**

If at any time, during the continuance of this contract, the performance, in whole or part, by either party, of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, act of the public enemy, Civil Commotion, Sabotage, Fires, Floods, Earth quakes, explosions, strikes, epidemics, quarantine restrictions, lockouts, any statute, statutory rules/regulation, order of requisitions issued by any Government Department of Competent Authority or acts of God (here-in-after referred to as event) then provided notice of the happening of any such event is given by either party to the other within twenty one days from the date of occurrence thereof, neither party shall, by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damage against the other in respect of such non- performance or delay in performance, and the obligations under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, Provided further that if the performance in whole or part of any obligation under this contract of prevented or delayed by reason of any such event beyond a period as mutually agreed to by the RailTel and the Contractor after any event or 60 days in the absence of such an agreement whichever is more, either party may at its option to terminate the contract provided also that if the contract is so terminated under this clause the RailTel may at the time of such termination take over from the Contractor at prices as provided for in the contract, all works executed or works under execution.

#### **4. Illegal Gratification:**

Any bribe, commission, gift or advantage given, promised or offered by or on behalf to the contractor or his partner, agent or servant or anyone on his behalf to any officer or employees of the RailTel, or to any person on his behalf in relation to obtaining or the execution of this or any other contract with the RailTel shall, in addition or any criminal liability which he may incur, subject the contractor to the rescission of the contract and all other contracts with the RailTel and to the payment of any loss or damage resulting from such decision and the RailTel shall be entitled to deduct the amounts so payable from any moneys due to the Contractor (s) under this contract or any other contracts with the RailTel. The contractor shall not lend or borrow from or have or enter into any monetary dealings or transactions either directly or indirectly with any employee of the RailTel and if he shall do so, the RailTel shall be entitled forthwith to rescind the contract and all other contracts with the RailTel. Any question or dispute as to the commission or any shall offence or compensation payable to the RailTel under this clause shall be settled by the Regional General Manager of RailTel, in such a manner as shall consider fit and sufficient and his decision shall be final and conclusive. In the event of rescission of the contract under this clause, the contractor will not be paid any compensation whatsoever except payment for the work done up to date of rescission.

#### **5. LABOUR**

Wages to Labour- The contractor shall be responsible to ensure compliance with the provisions of the Minimum Wages Act, 1948 (hereinafter referred to as the "said Act") and the Rules made there- under in respect of any employees directly or through petty contractors or sub contractors employed by him on road construction or in building operations or in stone breaking or stone crushing for the purpose of carrying out this contract. If in compliance with the terms of the contract, the contractor supplied any labour to be used wholly or partly under the direct orders and control of the RailTel whether in connection with any work being executed by the contractor or otherwise for the purpose of the RailTel such labour shall, for the purpose of the clause, still be deemed to be persons employed by the contractor. If any moneys shall as a result of any claim or application made under the said Act be directed to be paid by the RailTel, such moneys shall be deemed to be moneys payable to the RailTel by the Contractor and on failure by the contractor to repay any moneys paid by it as aforesaid with seven days after the same shall have been demanded, the RailTel shall be entitled to recover the same form any moneys due or accruing to the contractor under this or any other contractor with the RailTel.

#### **6. TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:**

The purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the Tenderer, terminate this contract in whole or in part.

- a) If the tenderer fails to deliver any or all of the goods within the time period(s) specified in the contract.
- b) If the tenderer fails to perform any other obligation(s) under the contract; and
- c) If the tenderer, in either of the above circumstance(s) does not remedy his failure within a period of 30 days (or such longer period as the Purchaser may authorize in writing) after receipt of the default notice from the Purchaser.

**7. RIGHT OF RAILTEL AFTER TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:**

- 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 further execution 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 use 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. SETTLEMENT OF DISPUTE AND ARBITRATION:**

Any dispute or difference whatsoever arising between the parties out of relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by a sole arbitrator in accordance with provisions contained in Arbitration and Conciliation Act, 1996 as amended and the award made in pursuance thereof shall be binding on the parties. The venue of such arbitration or proceedings thereof shall be New Delhi.

- All arbitration proceedings shall be conducted in English. Resources against any Arbitral award so rendered may be entered into court having jurisdiction or application may be made to such court for the order of enforcement as the case may be.
- The arbitrator will be appointed by the Chairman & Managing Director of RailTel Corporation of India Ltd.
- Each of the parties agree that notwithstanding that the matter may be referred to Arbitrator as provided therein, the parties shall nevertheless pending the resolution of the controversy or disagreement continue to fulfill their obligation under this agreement so far as they are reasonably able to do so.

\*\*\*\*\* (END OF TENDER DOCUMENT) \*\*\*\*\*