Information to Bidder for the "Supply of Routers through GeM for RailTel Customer"

Ref: GeM Bid No. GEM/2021/B/xx dated: dd-mm-yyyy

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

(The technical specs which are not available on GeM portal for the required product, same will be uploaded in ATC as one time exercise. In future all the specs will be available on GeM portal.).

- 1. 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 mentioned in **Annexure-I**.
- 2. OEM or Authorized distributor/Partner of OEM 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 authorized dealer/distributor.
- 3. 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.
- 4. Equipment offered shall have complete data sheets and detailed description on OEM web sites.
- 5. Bidder shall submit the detailed BOM of the equipment offered duly verified and certified by the respective OEM.
- 6. GSTIN RC of vendor for state should be provided from where goods will be supplied.
- 7. Delivery Period, Consignee Address and inspection
 - **7.1Delivery Period:** The supplier will have to supply the material within 90 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/uninstalled quantity per week to the maximum to the 10% of the contract value will be levied.
 - 7.2Consignee Address: Senior Manager(Stores)/ New-Delhi
- 7.3 Inspection: Inspection will be carried out by authorised representative of RailTel.
- 8. Earnest Money Deposit (EMD)/ Bid Security: BID SECURITY DECLARATION (Annexure-V).
- **8.1** Estimated cost of tender: Estimated cost of the Tender is Rs.1,46,28,986/- (Incl. GST).
- **8.2 Earnest Money Deposit (EMD)/ Bid Security:** Bid Security Declaration as per Annexure-V
 - 8.2.1 All the bidders have to submit EMD declaration letter in given format in ITB (Annexure-V).

- 8.2.2. Action will be taken as per EMD declaration letter if a bidder withdraws his offer or modifies the terms and conditions of the offer during validity period and in the case of a successful bidder, if the bidder fails to accept the Purchase order/LOA and fails to furnish performance guarantee (security deposit) in accordance with clause no. 10.
- 8.2.3 Offers not accompanied with EMD declaration letter bid shall be summarily REJECTED.
- 9.0 This bid complies with "Public Procurement (preference to make in India) Policy Order, 2017 issued by DIPP and Public Procurement Policy for Micro and Small Enterprises (MSEs) order,2012" issued by Ministry of MSME."

 The bidders claiming the preference have to submit relevant documents prescribed under

10. Security Deposit/Performance Guarantee:

relevant order.

The successful tenderer shall submit security deposit in the form of DD/irrevocable BG from any scheduled bank for due fulfillment of contract as per the Performance Guarantee details given below:

- i. Security Deposit/Performance Guarantee @ 3% of total value of Purchase Order is required to be submitted within 30 days of issue of Purchase Order with validity of 3 months beyond warranty period, 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.
- ii. The security deposit/PG shall be submitted to RCIL/RO/NR, Shastri Park, Delhi.
- iii. A separate advice of the PG will invariably be sent by the PG 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 PG through SFMS to the RailTel's Bank.

The security deposit/Performance Guarantee shall be released after successful completion of Contract obligations under the contract, duly adjusting any dues recoverable from the successful tenderer. Payment of Security Deposit in the form of Pay Order/Demand Draft should be made in favor of "RailTel Corporation of India Ltd" payable at New Delhi.

Note: In case value of PG comes to Rs. 5 Lakhs or less, same should be submitted in the form of DD/Banker cheque only.

11. Eligibility Criteria for OEM (Routers):

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.

The OEM should have supplied at least 35% of the tendered quantity 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.

The OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing of **Routers** and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Repair, Service Center 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 center 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)

12. Eligibility Criteria:

12.1 Technical Eligibility for Bidder:

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# each costing not less than the amount equal to 30% of advertised value of the tender, or

Two similar works# each costing not less than the amount equal to 40% of advertised value of the tender, or

One similar work # each costing not less than the amount equal to 60% of advertised value of the tender.

Similar Work# Supply /Supply and installation of a work/project in the field of IT/ICT/Telecom for any Government department or Public Sector Units or public listed companies (as per note below).

Note: 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 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 or Bombay Stock Exchange, 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

12.2 Financial Criteria for Bidder:

The tenderer must have received total contractual payments/operating turnover in the previous three financial years and the current financial year up to the date of inviting of tender, 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 /Certificate from Chartered Accountant duly supported by Audited Balance Sheet. (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).

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Credentials if submitted in foreign currency shall be converted into Indian currency i.e., Indian Rupee as under: The conversion rate of US Dollars into Rupees shall be the daily representative exchange rates published by the Reserve Bank of India for the relevant date. Where, relevant date shall be as on the last day of month previous to the one in which tender is invited. In case of any other currency, the same shall first be converted to US Dollars as on the last day of month previous to the one in which tender is invited, and the amount so derived in US Dollars shall be converted into Rupees at the aforesaid rate. The conversion rate of such currencies shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date

12.3Bidder should have authorization specific to this tender from respective OEM (Routers) as per Annex-III.

13. **Splitting of Quantity**:

13.1 Deleted

13.2 In case bidder claims PMA, Government of India Guideline/Instruction regarding splitting of order to Local supplier shall be applicable. Govt. Guidelines in regard to MSME shall be followed.

14. Warranty:

14.1 The materials are to be warranted for **3 years** from date of delivery to the consignee. The tenderer shall warrant that stores 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 equipment 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.

14.2 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 with in 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.

14.3 Purchaser's Right to Vary Quantities:

The purchaser shall be at liberty to enhance or reduce the quantity mentioned in the LOA as indicated in below para without assigning any reasons. The bidder shall comply with such modifications unconditionally provided these are made before completion of the deliveries under the purchase order/LOA.

- (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.
- (C) AMC rates for items under Variation Order will be at same percentage as finalized in the main contract.

15. Long Term Maintenance Support:

Tenderer (OEM) shall provide maintenance support after successful completion of the warranty obligations for a minimum period of 5 years. The long term maintenance support shall be comprehensive and include all hardware and software of equipment supplied against this contract. RailTel should be extended the benefits of periodical software patches/updates made by OEM on the system from time to time for equipment security/performance without any additional cost to RailTel.

Buyer reserves the right to enter into AMC @ 3.5% of ordered value of equipment before 30 days of expiry of warranty period. In case bidder refuses to enter into AMC, PBG will be forfeited. Separate agreement for AMC (Long term Maintenance Support) before expiry of warranty period shall be entered into with OEM/the authorized partner of OEM by RailTel. A fresh Bank Guarantee valid for Five years and four months for 10% of the Long Term Maintenance Support cost of five years, shall be required to be submitted by bidder for due fulfillment of long term maintenance support obligation. 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.

Note: The acceptance of the above clause is mandatory and specific acceptance from OEM is required to be enclosed as per Annexure-II. Any deviation / non acceptance will lead to rejection of the bid.

16. Payment Conditions:-

- (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, he 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:

Original Tax Invoice. (With separate Tax amount, containing POS, RailTel GSTN and Supplier GSTN).

Delivery Challan.

Original Consignee receipt.

Original Inspection Certificate.

Transit Insurance Certificate.

Warranty Certificate of OEM.

Proof of SD/PG submitted.

Certificate of receipt of Goods in good condition & installation thereof from RailTel.

Declaration of non-applicability of e-invoicing, if applicable.

Declaration regarding 206AB/206CCA of IT act.

17. The tenderers 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 **Annexure-IV**. **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 railway thereunder.

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

18. On line Submissions:

The bidder is required to upload and submit the following d	locuments on line before	e due date
& time of bid. The due date & time for closing of the bid is bid will be opened at Hrs of	Hrs of	and the

- (i) EMD: Bid Security Declaration.
- (ii) BOQ of offered equipment.
- (iii) Clause wise compliance along with all mentioned documents/annexures for all clauses of GeM Bid and ATC documents.
- (iv) Data Sheet of offered equipment.
- (v) Financial (Certified copies of audited balance sheets/annual reports of last three preceding financial years) and Technical Eligibility Criteria documents.
- (vi) Technical Compliance of all Specification of items as per GeM Bid and ATC documents.
- (vii) Certificate from the End user against the Eligibility criteria for OEM para 10.

- (viii) Proof of document required against Eligibility criteria of OEM and Bidder vide para 11 & 12 respectively.
- (ix) deleted.
- (x) MAF/OEM Authorizationas per Annexure-III.
- (xi) Notarized affidavit on a non-judicial stamp paper as per Annexure-IV.

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 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:** _____.

In case, If any contradiction between GeM Additional Terms & Conditions and General Terms & Conditions, RailTel Terms & Conditions will prevails.

Technical Specifications

1. All Equipment should be:

- i. With 3 years warranty & 5 years AMC.
- ii. Equipped with necessary hardware/software to comply all above required / support features.
- iii. 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.
- iv. OEM (Router and Switch) should have its Service Centre at min 04 locations in major cities in India. Service center details to be shared along with address and contact no. and person.
- v. 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 are equivalent to UL,CE and FCC and meets all standard and specification of UL,CE and FCC.

2. SOR wise details are as:

SOR	Item Description	Unit	Qty.
SOR-1	Router Type-I as per technical specifications of SOR-1 of Information to Bidder	Nos.	8
SOR-2	Router Type-II as per technical specifications of SOR-2 of Information to Bidder	Nos.	5
SOR-3	Router Type-III as per technical specifications of SOR-3 of Information to Bidder	Nos.	14
SOR-4	Router Type-IV as per technical specifications of SOR-4 of Information to Bidder	Nos.	27
SOR-5	Router Type-V as per technical specifications of SOR-5 of Information to Bidder	Nos.	1

SOR-1: Router Type-I

Aggre	gate MPLS Router
SN	Technical specification
1	MPLS Router shall have min. 8 Nos.of 10 Gigabit SFP+ ports & the ports should be fully
	populated with single mode optics. Use of third party optics should not be locked.
2	MPLS Router should have min. 2x100G optical ports on Day 1with DAC Cable and should have an option to support upto two additional 100G ports in the future at no additional cost to RailTel
3	Deleted
4	MPLS Router shall have minimum 400 Gbps forwarding bandwidth
5	MPLS Router shall have minimum 400 million packets (64 Byte packets) per second forwarding rate.
6	MPLS Router shall have a minimum of 128K MAC address space.
7	MPLS Router should support minimum 4K VLANs.
8	MPLS Router should have inbuilt redundant power DC supply (-48 V) and The Power (DC) shall be -48 V Telco nominal to -60V Telco nominal.
9	Should provide Dual Images.
10	Should support Optical Transceiver Digital Diagnostic Monitoring.
11	Should support port mirroring and jumbo frame.
12	Should support BFD for single hop and multihop sessions.
13	Should support following security features viz.:
	i) Web Management (HTTPS)/SSH,
	ii) Broadcast/Multicast/Unicast Storm Control,
	iii) DoS Attack Prevention
	iv) The MPLS Router should have mechanism to protect its control plane in case of volumetric attack.
14	MPLS Router should support following 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.
	v. Power Supply (Primary and Secondary) down and Up alarms in case of redundant power
	supply.
	vi. Threshold traps like CPU, Chassis Temperature and Memory.
	vii. CFM and LFM alarms.
15	MPLS Router should comply to following Temperature performance parameters :
	I) Operating Temperature - min -0 to 45 °C
	II) Storage Temperature - min -40 to 70 °C (-40 to 158 °F)

16	The MPLS Router shall be designed for continuous operations with have a dual fan system. The vendor shall state if it is a fan less architecture.
17	Should be IPv6 feature ready from day 1.
18	Device should have IP SLA monitoring (or equivalent functionality) for Latency, Packet drop, Jitter etc. and should also support SNMP polling for IP SLA monitoring.
19	MPLS Routers should support following Metro Ethernet Features.
	i. ITU-T G.8032 Ethernet Ring Protection designed for loop protection.
	ii Should support multiple Ring up to 8 ring (Main and Sub Ring) protection failover within 50 ms. Or ITU-T G.8032 v2.
20	The operating system of the MPLS Routers category/series/family should be MEF-9/14 or CE (Carrier Ethernet) Certified/compliant.
21	MPLS Routers should be NEBS certified.
22	MPLS Routers should support following MPLS/IP Features.
	i. The MPLS Router shall support E-Line and E-LAN MEF standards
	ii. The MPLS Router shall support MPLS-FRR and IP-FRR to ensure high availability
	iii. The MPLS Router shall support Ethernet protection based on ITU-T G.8032 with OAM (Ethernet OAM compliant with IEEE 802.3ah/Y.1731) features like LFM, CFM and Performance monitoring.
	iv. The MPLS Router shall support point to point VPWS and multipoint Virtual Private LAN service
	v. The LAN MPLS Router shall support an IGMP/IGMPv3 snooping function.
	vi. The MPLS Router shall support PIM-SM. Static RP/BSR/Auto-rp support is required.
	vii. The MPLS Routers hall support policy Qos including - policy based classification, bandwidth control and scheduling.
23	MPLS Routers should have following IPv6 features:
	a) IPv6 Ping
	b) IPv6 trace route
	c) OSPF v3
	d) IS-IS
	e) VRRPv3
	f) IPv6 CoS (classification & rewrite, scheduling based on TC)
	g) IPv6 ACL
24	MPLS Routers should support following features and Scaling values.
	i. Should support min 256K number of IPv4 Routes
	ii. Should support min 25K number of IPv6 Routes
	iii. Should support 5 level of MPLS Labels lookup
	iv. Should support maximum 32k number of MPLS Labels
	v. Should support maximum 1000 No of L3VRF/L2VPN
	vi. Should support MPLS label-MPLS switching router (LSR & LER) functionality
25	Interfaces of proposed MPLS Routers should have hardware support of synchronization protocols like SyncE & 1588v2 PTP and should be enabled by additional licenses or OS

	upgradation, if required.
26	Should support VPLS,H-VPLS and VPLS Multihomed Layer 2 MPLS Router Ring
27	Shall support GRE tunneling
28	Shall support HQoS along with the following features: i. Shall support at least 32K Queues ii. Policing iii. Rewrite iv. Two-Rate Tri-Color marking v. Classification vi. Filtering
29	Shall support following BRAS/BNG functionality and should be enabled by additional licenses purchased separately, if required:
	 i. 16 K IPOE subscribers for Wifi or Wireline connectivity. ii. Shall support 300subs/sec bring up rate iii. Shall support RADIUS authentication for services iv. shall support Delivery of service policies through RADIUS v. shall support service accounting and prepaid accounting vi. It shall provide support to AAA for Accounting and charging support viii. Periodic or Interim Accounting records generation shall be supported, configurable time intervals (minimum of ten minutes) shall be supported. Wifi GATEWAY shall provide RADIUS accounting based on volume and time. viii. BNG/BRAS shall support shall support URL redirection to captive portal ix. should be able to do portal based authentication with the support of AAA and captive portal server. x. shall support DHCP server and client functionality, it shall support DHCPv6 server/relay as well. xi. shall support DHCP based option 82 xii. shall be able to cater to Open SSID traffic. xiii. shall be able to provision different type of policies for free subscribers and premium subscribers with the support of AAA .
30	Management & SDN
	should support telemetry based on push model for monitoring network devices
	should support sending telemetry data to multiple consumers simultaneously
	shall support GPB/GRPC/KAFKA encoding for telemetry data
	The software model/sensors should be based on either yang, xml or openconfig
	The system should support streaming granularity of atleast 10 sec
	Some of the telemetery models/sensors the MPLS Router should support are: Chassis Environment, linecard utilization, WAG subscriber statisc, IP SLA/ RPM stats, routing/prefix sesnsor

	The solution should supportThe network configuration protocol (NETCONF) that provides mechanisms to install, manipulate, and deleteThe configuration of network devices, RFC 6241	
	The solution shall support provision for event based scripts that shall be capable of performing actions based on certain triggers	
	Should support RFC 6020, YANG - A Data Modeling Language for The Network Configuration	
	Should be able to act as Path computation client in The PCE architecture defined in RFC 4655.	
	Should support PCECP as defined in RFC5440.	
	Should support BGP link-state (BGP-LS), RFC 4655	
31	TEC-GR	
Note:1	The offered equipment should support the Compliance to TEC GR No. TEC/GR/IT LSW-001/05/MAR 2014 or Latest for CATEGORY-II LAN MPLS RouterES (Low Range: Metro Ethernet Access) & RailTel's Technical requirements.	
Note:2	OEM vetted Clause wise compliances to TEC GR should be submitted.	
Note:3	In case of a mismatch between tender clause and TEC GR clause, tender clause will prevail and in case of deviation from the TEC GR specifications, the compliance to relevant ITU-T specification shall be submitted by tenderer.	
Note:4	It may kindly be noted that 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.	
Note:5	Bidder should submit the vetted BOM from their respective OEMs	
Note:6	OEM should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid "OR" OEM should have figured in latest Gartner Report in field of Ethernet MPLS Routeres".	
Note:7	Following clauses of the said GRs are desired but not mandatory:	
	a) GR Clause no. 3.3.1 (xi), 3.3.5 (vii), 3.5.5 (vii), 3.3(iv), 3.5(iv)	
	b) GR Clause 3.6.4. (vi) to (xii) , (xvi) and (xvii), 3.3.6(ii), 3.6.4(xiii), 3.6.4(xv) (xviii) (xxi)	
	c) GR Clause 3.6.5 (viii), (ix) and (xiii).	
	d) GR Clause (b),(c),(d),(e) Chapter 5	
	e) GR Clause no Chapter 6 Note-3 – CISPR 11/ EN 55011	
	f) GR Clause (i) & (iii) Chapter 7 Safety Requirements	
	g) GR Clause no 8.2 (v), (a) and (c)	
	h) GR Clause 8.5, 9.3, 9.6	
	i) GR Clause no. 9.3	
	j) GR Clause no. 9.6	
	k) GR Clause 9.8 (d),(e),(f),(g),(j),(m)	

Note:8	NEBS Certification is not required for PMA. However they have to produce certificate from
	standard lab approved/ authorized by Govt. of India that their product are equivalent to
	NEBS and meets all standard and specification of NEBS.

SOR 2: Type II Routers:

SN.	Technical specification
1.	The router shall be designed for continuous operations. The bidder shall furnish the MTBF (Mean Time between Failures) and MTRR (Mean Time to Restore) and predicted and observed values along with calculations by manufacturer.
2	In case of full system failure, Router shall maintain a trace area in the NVRAM, which would be used for analysis /diagnosis of the problem.
3	Router shall have built in power on diagnostics system to detect hardware failures.
4	Router should have inbuilt power DC supply (-48 V).
5	Router shall have suitable Visual Indicators for diagnostics and healthy /unhealthy status of ports & modules.
6	Router shall have 4 Nos. of 10 Gigabit XFP/SFP+ ports and 2 Nos. of Gigabit ports with complying to IEEE 802.3, IEEE 803.3u and 802.3ab standard, supporting half duplex mode ,full duplex mode and auto negotiation on each port to optimize bandwidth
7	Router shall have minimum of 40 Gbps (full duplex) forwarding bandwidth at layer 2 and layer 3 switching fabric.
8	Router shall have minimum 60 million packets per second forwarding rate.
9	Router shall have a minimum of 16000 MAC address space.
10	Routers shall have a minimum of 12000 ipv4 and 2000 ipv6 routes support
11	Shall be operate at temp with a range of 0 to 40 C
12	It should be possible for the router to be mounted on a 19-Inch rack. All accessories required for this mounting should be supplied.
13	The following MPLS Features router shall be supported with OS/License up gradation
	a) It shall also support MPLS with RSVP and LDP signalling. It shall support MPLS FRR and L3VRF with up to 64 VRF.
	b) It shall support a scale of 500 VLAN and shall support Ethernet OAM features like BFD, 802.3ah, 802.1ag and Y.1731

	c) It shall support LSP ping and trace
	d) It shall support 8 hardware queues per port and shall support ingress policing and egress shaping.
	e) Shall support MPLS based L3 and L2 VPN services.
	f) It shall also support SNMPv3
	g) Shall support ip routing features like Static , OSPF , ISIS and BGP.
	h) Shall support MPLS features like L3 VPN , L2 VPN,LDP and RSVP.
14	Shall support redundant power supply.
15	Deleted
16	For each Router , bidder has to quote four SFP-LX (10 km) of 10 GE single mode .
17	Shall have the following features. All software's/hardware's/License required for this must be supplied along with the router.
	i) Link Aggregation Control (LCAP) as per IEEE 802.3ad.
	ii) Support for IEEE 802.1Q VLAN on all ports.
	iii) Support for minimum 256 VLANs.
	iv) Support for IEEE 802.1 D spanning tree protocol.
	v) Support for IEEE 802.1 s MSTP
	vi) Support Dynamic Host Configuration Protocol (DHCP)
	vii) Support Auto – MDIX (Media Dependent Interface Cross over)
	viii) Support Inter VLAN IP routing for full layer - 3 routing
	ix) Support for IPv6.
	x) Support Strict Priority Queuing.
	xi) Support Network Time Protocol (NTP) / Simple Network Time Protocol (SNTP) based
	xii) RFC 1305 / 2030 for synchronization of date & time from the Central NTP Server.
	xiii) Support RADIUS protocol for console access restriction and authentication as per RFC 2138.
	xiv) Support 4 group of embedded RMON (history, static's and alarms).
	xv) Support multiple privilege level to provide different level of access on console port and telnet sessions.
	xvi) Support classification and scheduling as per IEEE 802.1P on all ports.
	xvii) Support Port Spanning functionally for measurements using a networks analyzer.
	xviii) Support all the standard MIBs (MIB-I&II).
	xix) Support for console port Interface for configuration and diagnostics purposes.
	xx) Support Port Spanning functionally for measurements using a networks analyzer.
	xxi) ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast convergence times (sub 50 ms) in ringtopologies.

	wii) Chauld aug part multiple Ding up to 0 ring (Main and Cub Ding) protection
	xxii) Should support multiple Ring up to 8 ring (Main and Sub Ring) protection failover
	within 50 ms (up to 10 Switches in ring). Or ITU-T G.8032 v2 (Confirmed roadmap
	within a year time is also acceptable for ITU-T G.8032 v2 with no additional cost to
	RailTel)
	xxiii) Should support Optical Transceiver Digital Diagnostic Monitoring.
	xxiv) Priority queues: Eight hardware-based queues per port for flexible QoS
	management
	xxv) Traffic prioritization: Flow-based QoS with internal and external (a.k.a.,
	remarking) prioritization.
	xxvi) Bandwidth management: Flow-based bandwidth management, ingress rate
	limiting; egress rate shaping per port.
	infilling, egress rate snaping per port.
	xxvii) Queue management: Configurable scheduling algorithms — Strict Priority
	Queuing
	(SPQ), Weighted Round Robin (WRR) and Deficit Round Robin (DRR).
	xxviii) The following Metro Ethernet features should support
	a) IEEE 802.1ad Provider Bridge
	b) Transparent LAN Services with Service VLAN (SVLAN) and Customer VLAN
	(CVLAN) concept
	a) CV// ANI to CV// ANI translation and economics
	c) CVLAN to SVLAN translation and mapping
	d) IEEE 802.1ag Ethernet OAM: Connectivity Fault Management (Support 32 MEPs)
	WEF5)
	e) Ethernet OAM compliant with IEEE 802.3ah
	f) ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast
	convergence times (sub 50 ms) in ring topologies.
	g) Should support Optical Transceiver Digital Diagnostic Monitoring.
	h) Router should support minimum of 4000 Ethernet flow points(EFP).
	i) L2 Protocol Tunnelling.
	j) Loopback Detection.
18	Router shall have support of following Standards
	i) IEEE 802.1D (STP)
	ii) IEEE 802.1p (CoS)
	iii) IEEE 802.1Q (VLANs)
	iv) IEEE 802.1ag (Connectivity Fault Management)
	v) IEEE 802.1s (MSTP)
	vi) IEEE 802.3x (Flow Control)
	vii) IEEE 802.3z (Gigabit Ethernet)

	viii) IEEE 802.3ab (1000Base-T)
	ix) IEEE 802.3ac (VLAN Tagging)
	x) IEEE 802.3ad (Link Aggregation)
	xi) IEEE 802.3ae (10 Gigabit Ethernet)
	xii) IEEE 802.ah (Ethernet first mile)
	xiii) ITU-T G.8032/Y.1344 2010: Ethernet Ring
19	Router shall have the following Certifications
	i) The operating system of the Router series shall have MEF-9 & 14 or higher certification from authorized agencies.
	ii) Router should be NEBS certified
Note:	NEBS Certification is not required for PMA. However, they have to produce certificate from standard lab approved/ authorized by Govt. of India that their product are equivalent to NEBS and meets all standard and specification of NEBS.

SOR 3: Type III Routers

SN.	Technical specification
1	The router shall be designed for continuous operations. The bidder shall furnish the
	MTBF(Mean Time between Failures) and MTRR (Mean Time to Restore) and predicted
	and observed values along with calculations by manufacturer.
2	In case of full system failure, Routers shall maintain a trace area in the NVRAM, which
	would be used for analysis /diagnosis of the problem.
3	Router shall have built in power on diagnostics system to detect hardware failures.
4	Router should have inbuilt power DC supply (-48 V).
5	Routers shall have suitable Visual Indicators for diagnostics and healthy /unhealthy status
	of ports & modules.
6	Router shall have 6 Nos. of Gigabit SFP ports and 4 Nos. 10/100/1000 Base –TX with 2
	Nos. of 10 Gigabit SFP+ ports complying to IEEE 802.3, IEEE 803.3u and 802.3ab
	standard, supporting half duplex mode, full duplex mode and auto negotiation on each
	port to optimize bandwidth.
7	Router shall have minimum of 30 Gbps (full duplex) forwarding bandwidth at layer 2
_	switching fabric.
8	Router shall have minimum 45 million packets (64 Byte packets) per second forwarding
	rate.
9	Routers shall have a minimum of 16000 MAC address space.
10	It should be possible for the routers to be mounted on a 19-Inch rack. All accessories
	required for this mounting should be supplied.
11	Should support jumbo frame.
12	Should support MPLS features like L2 VPN, L3VPN with OS/License up gradation
13	Deleted
14	Shall support redundant power supply option.
15	Bidder has to quote four SFP–LX (10 km) of GE single mode and two SFP+-LX (10 km)
	of 10GE single mode.
16	Shall have the following features. All software's/hardware's/License required for

	this must be supplied along with the router.			
	i) Link Aggregation Control (LCAP) as per IEEE 802.3ad.			
	ii) Support for IEEE 802.1Q VLAN on all ports.			
	iii) Support for minimum 256 VLANs.			
	iv) Support for IEEE 802.1 D spanning tree protocol.			
	v) Support for IEEE 802.1 s MSTP			
	vi) Support Dynamic Host Configuration Protocol (DHCP)			
	vii) Support Auto -MDIX (Media Dependent Interface Cross over			
	viii) Support Inter VLAN IP routing for full layer -3 routing			
	ix) Support for IPv6.			
	x) Support Strict Priority Queuing.			
	xi) Support Network Time Protocol (NTP) / Simple Network Time Protocol (SNTP)			
	based			
	xii) RFC 1305 / 2030 for synchronization of date & time from the Central NTP Server.			
	xiii) Support RADIUS protocol for console access restriction and authentication as per			
	RFC 2138.			
	xiv) Support 4 group of embedded RMON (history, static's and alarms).			
	xv) Support multiple privilege level to provide different level of access on console port			
	and telnet sessions.			
	xvi) Support classification and scheduling as per IEEE 802.1P on all ports.			
	xvii) Support Port Spanning functionally for measurements using a networks analyzer.			
	xviii) Support all the standard MIBs (MIB-I&II).			
xix) Support for console port Interface for configuration and diagnostics purpo				
xx) Support For Console port interface for configuration and diagnostics purpose xx) Support Port Spanning functionally for measurements using a networks anal				
xxi) ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast				
	convergence times (sub 50 ms) in ringtopologies.			
	xxii) Should support multiple Ring up to 8 ring (Main and Sub Ring) protection failov			
	within 50 ms (up to 10 Switches in ring). orITU-T G.8032 v2 (Confirmed roadmap			
	within a year time is also acceptable for ITU-T G.8032 v2 with no additional cost to			
	RailTel).			
	xxiii) Should support Optical Transceiver Digital Diagnostic Monitoring.			
	xxiv) Priority queues: Eight hardware-based queues per port for flexible			
	QoSmanagement			
	xxv) Traffic prioritization: Flow-based QoSwith internal and external (a.k.a.,			
	remarking)prioritization.			
	xxvi) Bandwidth management: Flow-basedbandwidth management, ingress ratelimiting;			
	egress rate shaping per port.			
	xxvii) Queue management: Configurablescheduling algorithms — Strict			
	PriorityQueuing (SPQ), Weighted Round Robin(WRR) and Deficit Round Robin (DRR).			
17	The following Metro Ethernet features should support			
	a) IEEE 802.1ad Provider Bridge			
	b) Transparent LAN Services with Service VLAN (SVLAN) and Customer VLAN			
	(CVLAN) concept			
	c) CVLAN to SVLAN translation and mapping			
	d) IEEE 802.1ag Ethernet OAM: Connectivity Fault Management (Support 32 MEPs)			
	e) Ethernet OAM compliant with IEEE 802.3ah			
	f) ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast			

	convergence times (sub 50 ms) in ring topologies.
	g) Should support Optical Transceiver Digital Diagnostic Monitoring.
	h) Router should support minimum of 4000 Ethernet flow points(EFP).
	i) L2 Protocol Tunnelling.
10	j) Loopback Detection.
18	Router shall have support of following Standards
	i) IEEE 802.1D (STP)
	ii) IEEE 802.1p (CoS)
	iii) IEEE 802.1Q (VLANs)
	iv) IEEE 802.1ag (Connectivity Fault Management)
	v) IEEE 802.1s (MSTP)
	vi) IEEE 802.3x (Flow Control)
	vii) IEEE 802.3z (Gigabit Ethernet)
	viii) IEEE 802.3ab (1000Base-T)
	ix) IEEE 802.3ac (VLAN Tagging)
	x) IEEE 802.3ad (Link Aggregation)
	xi) IEEE 802.3ae (10 Gigabit Ethernet)
	xii) IEEE 802.ah (Ethernet first mile)
	xiii) ITU-T G.8032/Y.1344 2010: Ethernet Ring
19	Router shall have the following Certifications
	i) The operating system of the Routers series shall have MEF-9 & 14 or higher
	certification from authorized agencies.
	ii) Routers should be NEBS certified.
Note:	NEBS Certification is not required for PMA. However they have to produce certificate
	from standard lab approved/ authorized by Govt. of India that their product are
	equivalent to NEBS and meets all standard and specification of NEBS.

SOR 4: Type IV Routers

SN	Description
1	Architecture:
1.1	Proposed Routers should support SDWAN ready
1.2	The router should be a single box configuration for ease of management.
1.3	It shall support hardware based VPN (3DES/AES) Encryption, MD5, SHA, SHA-256
1.4	The router shall support complete Firewall features.
1.5	Router shall support minimum 200K IPv4 and 50K IPv6 routes.
	The Router shall have enough "High-performance multicore processors capacity and 4 GB DRAM and
	4GB Flash Memory from Day1. so as to efficiently meet all the functionalities laid down in the
1.6	specifications.

1.7	It shall have integrated USB port.			
	It shall be supplied with necessary power cards, data cables, connectors, bracket accessories, wire			
	managers and other appropriate accessories.			
1.8	Routers shall be capable of working with 110 – 240 Volts AC nominal at frequency 50 +/- 2 Hz.			
2	Performance:			
	It shall support high performance traffic forwarding with con-current features like firewall and			
2.1	encryption.			
2.2	Router shall support aggregate WAN throughput of 200Mbps from Day-1			
2.3	It shall support variety of Ethernet Interfaces – 2 SFP GigE ports & 4 port LAN 10/100/1000 Mbps port.			
2.4	It shall support other IP Services like GRE tunneling, ACLs, IPSEC VPNs, Firewalling, NAT services.			
3	High Availability:			
3.1	It shall support non-stop forwarding for fast re-convergence of routing protocols.			
3.2	It shall support VRRP or equivalent			
4	Protocol Support:			
4.1	The router shall have routing protocols like IS-IS, RIP ver1 & RIP Ver.2, OSPF ver2, BGP4.			
4.2	It shall support multicast routing protocols IGMPv1/ v2/v3, PIM			
4.3	It shall support DHCP, IPv6 QoS and IPv6 Multicast, OSPFv3			
5	Quality of Service (QoS) Features:			
5.1	The router shall support the following:			
5.1.1	Classification and Marking: Policy based routing, IP Precedence, DSCP.			
5.1.2	Congestion Management: WRED, Priority queuing, Class based weighted fair queuing.			
5.1.3	Traffic Shaping and Policing for QoS			
6	Security Features:			
6.1	The router shall support GRE Tunneling & NAT Services.			
6.2	It shall support MD-5 route authentication			
6.3	It shall support AAA support using Radius.			
6.4	It shall support DoS prevention			
6.5	It shall support IP Access list to limit Telnet and SNMP access to router.			

]					
	It shall support multiple privilege level authentications for console and telnet access through Local				
6.6	database or through an external AAA Server.				
6.7	It shall support IEEE 802.1x support for MAC address authentication.				
7	Debug, Alarms & Diagnostics:				
7.1	The router shall have display of input and output error statistics on all interfaces.				
7.2	It shall have display of dynamic ARP table.				
7.3	Trace-route and Ping shall be available.				
8	It should support Network Time Protocol.				
9	Management:				
9.1	The router shall have support for CLI, Telnet and SNMPv3.				
9.2	It shall support Secure Shell for secure connectivity.				
	It shall have to have dedicated console for Local management / login through USB port / RJ45 port /				
9.3	Serial				
	Event and System logging: Event and system history logging functions shall be available. The Router				
9.4	shall generate system alarms on events. Facility to put selective logging of events onto a separate				
	hardware where the analysis of log shall be available.				
10	Certification Requirements:				
	"Router/ Router OS should be tested and certified for EAL 2 / NDPP (Network Device Protection				
	Profile) or above under Common Criteria Program for security related functions or under Indian				
	Common Criteria Certification Scheme (IC3S) by STQC, DEIT, Govt. of India."				

SOR 5: Type V Routers

SN	Description		
1	Architecture:		
1.1	Proposed Routers should support SDWAN ready		
1.2	The router should be a single box configuration for ease of management.		
1.3	It shall support hardware based VPN (3DES/AES) Encryption, MD5, SHA, SHA-256		
1.4	The router shall support complete Firewall features.		
1.5	Router shall support minimum 100K IPv4 and 50K IPv6 routes.		
1.6	The Router shall have enough "High-performance multicore processors capacity and 4 GB DRAM and 4GB Flash Memory from Day1. so as to efficiently meet all the functionalities laid down in the specifications.		

1.7	It shall have integrated USB port.			
	It shall be supplied with necessary power cards, data cables, connectors, bracket accessories, wire managers and			
	other appropriate accessories			
1.8	Routers shall be capable of working with 110 – 240 Volts AC nominal at frequency 50 +/- 2 Hz.			
2	Performance:			
2.1	It shall support high performance traffic forwarding with con-current features like firewall and encryption.			
2.2	Router shall support aggregate WAN throughput of 100 Mbps from Day-1.			
	It shall support variety of Ethernet Interfaces -1 RJ45 GigE and 1 SFP GigE port & 4 port LAN $10/100/1000$ Mbps port.			
2.4	It shall support other IP Services like GRE tunneling, ACLs, Firewalling, NAT services.			
3	High Availability:			
3.1	It shall support non-stop forwarding for fast re-convergence of routing protocols.			
3.2	It shall support VRRP or equivalent			
4	Protocol Support:			
4.1	The router shall have routing protocols like IS-IS, RIP ver1 & RIP Ver.2, OSPF ver2, BGP4.			
	It shall support multicast routing protocols IGMPv1/ v2/v3, PIM			
4.3	It shall support DHCP, IPv6 QoS and IPv6 Multicast, OSPFv3			
5	Quality of Service (QoS) Features:			
5.1	The router shall support the following:			
5.1.1	Classification and Marking: Policy based routing, IP Precedence, DSCP.			
5.1.2	Congestion Management: WRED, Priority queuing, Class based weighted fair queuing.			
5.1.3	Traffic Shaping and Policing for QoS			
6	Security Features:			
6.1	The router shall support GRE Tunneling & NAT Services.			
6.2	It shall support MD-5 route authentication			
6.3	It shall support AAA support using Radius.			
6.4	It shall support DoS prevention			
6.5	It shall support IP Access list to limit Telnet and SNMP access to router.			
	It shall support multiple privilege level authentications for console and telnet access through Local database or through an external AAA Server.			
6.7	It shall support IEEE 802.1x support for MAC address authentication.			
7	Debug, Alarms & Diagnostics:			
7.1	The router shall have display of input and output error statistics on all interfaces.			
7.2	It shall have display of dynamic ARP table.			
7.3	Trace-route and Ping shall be available.			
	It should support Network Time Protocol.			
9	Managamanti			
	Management:			
	The router shall have support for CLI, Telnet and SNMPv3.			

9.3	It shall have to have dedicated console for Local management / login through USB port / RJ45 port / serial
9.4	Event and System logging: Event and system history logging functions shall be available. The Router shall generate system alarms on events. Facility to put selective logging of events onto a separate hardware where the analysis of log shall be available.
10	Certification Requirements:
	"Router/ Router OS should be tested and certified for EAL 2 / NDPP (Network Device Protection Profile) or above under Common Criteria Program for security related functions or under Indian Common Criteria Certification Scheme (IC3S) by STQC, DEIT, Govt. of India."

PROFORMA FOR THE LONG-TERM MAINTENANCE SUPPORT (To be signed by the O.E.M.)

Deputy General Manager/IMP-II RailTel Corporation of India Ltd.	Dated:
Kan Ter Corporation of India Ltu.	
•••••	
•••••	
I / We	, there is a requirement of confirm that Long Term Maintenance ad partner, as the case may be based on
(Signature of Firm's Authorized Officer)	
Seal	
Signature of witness:	
1 2	

Deputy General Manager/IMP-II RailTel Corporation of India Ltd.	Dated:	
Subject: Manufacturer Authorisation form (MAF) to	M/s for	
Dear Sir, We, M/s, are established and reputed manufacturer(Product details), having our reg	gistered office at	
We hereby authorise M/s	idder name), Office and subsequently upon nissioning of our range of	
Thanking you, Best regards,		

Annexure-III

Authorised Signatory

FORMAT FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

•	ecuted in presence of Public notary on non-judicial stamp paper of the value of The stamp paper has to be in the name of the tenderer)**		
attorney/au	(Name and designation)** appointed as the athorized signatory of the tenderer (including its constituents), (hereinafter called the tenderer) for the purpose der documents for the work of		
of the Ten	der documents for the work of		
on the beh	tender No of (Railway), do hereby solemnly affirm and state alf 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 electronic-tender portal. 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 tenderers, execution of work or final payment of the contract, the master copy available with the railway 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 alongwith the offer and same shall be binding upon me/us.		
(vi)	I/We declare that the information and documents submitted alongwith 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(if any) besides banning of business for five year on entire IR. Further, I/we (<i>insert name of the tenderer</i>)** 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, alongwith forfeiture of EMD(if any)/SD and Performance Guarantee

besides any other action provided in the contract including banning of business for five year on entire IR.

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.

Format for Bid Security Declaration

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

Where	as, I/We	(Name of Agency) has	s submitted bid for	(Name
of Wor	k and Tender No.) and w	hereas Earnest Money per Govt. of India guide	Deposit is being exempted in elines due to severe financial o	the aforesaid tender
	nereby submit the follow t Money Deposit :-	wing "Bid Security De	claration" in lieu of exempt	ion from submitting
1)	If I/We withdraw or mo of tender) specified in t		the bid validity period (includ	ling extended validity
2)	-	guarantee or fail to c	LOA/LOI, or to sign the contrommence the work within st	•
3)	If I/We furnish any incom	rrect or false statemen	t / information/ document; Or	
4)	If I/We hide any relevan	t information or do no	t disclose any material fact in Or	the tender;
5)	If I/We commit any brea	ach of integrity Pact;		
	-	-	nree years and shall not be elig of three years from date of iss	_
			(Signed by the Authorized Re	presentative of Firm)
Name (of Authorized Representa	itive		
Name	of Firm			
Date				

Performa for Performance Bank Guarantee

PERFORMANCE BANK GURANTEE BOND

(On Stamp Paper of Rs. One Hundred) (To be used by approved Scheduled Banks)

	onsideration of the RailTel Corporation of India Limited, Delhi IT Park, Block-III, 6 TH , Shastri Park, New Delhi-110053 (Herein after called RailTel) having agreed to exempt (Hereinafter called "the said").			
	Contractor(s)") from the demand, under the terms and conditions of an Agreement 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, or production of a Bank Guarantee for Rs			
1.	We,			
1.	We, 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,			

		in writing on or before the (1)	We shall be	
	We,			
	Dated the	day of 2021		
		for	•••	
Witn	ess	(Indicate the name of the Bank)		
1.	Signature Name			
1.	Signature Name			