

## **RailTel's Bid Specific Additional Terms & Conditions**

### **Information to Bidder for the "Supply of TDM over IP Solution, Servers, Switches, SFP and virtual route reflector".**

**Ref: Bid No: GEM/2023/B/4147911**

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 the website [www.railtelindia.com](http://www.railtelindia.com)*

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 the case of the authorized distributor/partner certificate from the OEM to this effect should be submitted as per Annexure-III.
4. The equipment offered shall have complete data sheets and detailed descriptions on OEM web sites. The bidder shall provide the complete details in their bid.
5. The bidder shall submit the detailed BOM of the equipment offered duly verified and certified by the respective OEM. Unpriced BOM shall be submitted by the bidder in their technical bid and priced BOM in their price bid. The bidder shall also attach unit Rate analysis of Schedule of Requirement (Cost of each sub-assembly, card, module, License, supervision of I&C charges etc.) in their Price bid. The quoted unit rates should correspond to the referred unit rate. Priced BOM/BOQ submitted with technical bid will be summarily rejected.
6. GSTIN ID of vendor should be provided from where goods will be supplied.
7. **Delivery Period, Consignee Address and inspection**
  - 7.1 **Delivery Period:** The supplier will have to supply the material within 120 days from the date of issue of the 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 10% of the contract value will be levied. The material will be delivered to CNOC for configuration. After configuration, it's the bidder's responsibility to dispatch/deliver the materials to the locations decided by RailTel.
  - 7.2 **Consignee Address:**

SI No	Consignee	Consignee Address	RailTel Region	Items to be delivered
1	Sr Mgr/Store	RailTel Office,NKG Building, 1st Floor, 14 Strand Road Kolkata-700001	Eastern Region	SOR Item No-1 & 2
2	AGM/CNOC	RailTel Corporation of India Ltd, 6th Floor, Block III, Delhi IT Park, <i>Shastri Park</i> , New Delhi-110053	Corporate office	SOR Item no-3 & 4
3	Sr Mgr/Store	Sr. Manager/store, Ist floor, Microwave Tower Complex, Railway Colony, Thompson Road, New Delhi- 110002.	Northern Region	SOR Item No-5, 6 & 7
4	Arun Tripathi/Kanpur	Arun Tripathi,RailTel Corporation Of india ltd, Digital Microwave Campus ,Near driver running room N.C.Railway Juhi , Govindnagar Kanpur, PIN 208006, Mob 097-948-46127	Northern Region	
5	Taj Hassan/Sr Mgr	Railtel corporation of India limited, 7 GHz Microwave Compound, DRM BUILDING ASANSOL,West Bengal - 713301	Eastern Region	
6	Bhubaneswar RailTel	1st Floor, Annex Building, A-Block, RailTel Territory, Rail Vihar, Chandrasekharpur, Bhubaneswar, Odisha 751023	Eastern Region	
7	Sr. Mgr/Store	Senior manager/Store, Railtel corporation of India Ltd, Western railway microwave tower,Sports complex,Senapati Bapat Marg, Mahalaxmi (W), Mumbai-400013.	Western Region	
8	Nagpur RailTel	RailTel Corporation of India Ltd.Room no. 415, 3rd floor,DRM office Compound,SEC.Railway,Kingsway , Nagpur- 440001. Mob: 9179044016	Western Region	
9	Secunderabad RailTel	RailTel Corporation of India Limited,Southern Region Office, 2nd Floor, B-Block, Rail Nilayam,Secunderabad - 500025, Telangana.	Southern Region	
10	Karthik/Erode	Karthik, RailTel Corporation of India Ltd, Railway digital microwave Room, Erode railway Calony, Near Railway School, Erode(diss) Tamil nadu-638002.	Southern Region	
11	Arvind Sharma/Sr Mgr	RailTel Corporation of India Ltd, 1st floor, 17 Raghunath nagar, E8 extension , Opp Shahpura Thana-462023 Bhopal, Mob: 9179044003	Western Region	
12	Secunderabad RailTel	RailTel Corporation of India Limited, Southern Region Office, 2nd Floor,B-Block, Rail Nilayam,Secunderabad - 500025, Telangana.	Southern Region	

**Note: Consignee ID and Zip code mentioned in BOQ, and consignee details are given in the GeM bid document are indicative. Above clause 7.2 should be considered by the bidder while quoting.**

### 7.3 Inspection:

**7.3.1** The supplier/manufacturer shall give a call for inspection considering delivery within the delivery period when the material is ready to be supplied and ready for inspection. The Inspection shall be carried out at supplier's/Manufacturer's facility in India by the Inspecting Authority. The supplier shall make available for inspection all types of equipment in sufficient numbers so as to create a test setup for carrying out various tests as per the approved test plan and test setup. If equipment is imported, equipment required for test setup only shall be brought to India in the first lot. Balance material shall be dispatched only after inspected material has been cleared and the inspection certificate issued.

**7.3.2** The supplier/manufacturer shall submit along with the inspection call the details of test procedures, test programs, test parameters together with permitted values, etc., and their Quality Assurance Plan.

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

**7.3.4** Travelling, lodging and boarding expenses of RailTel representative and charges for third party inspection if any shall be borne by RailTel, but necessary facilities to carry out test /witness inspection shall be provided by the manufacturer/supplier, free of cost.

**7.3.5** 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.

**7.3.6** Exemption of inspection at factory premises (FAT) will be at the sole discretion of RailTel, if RailTel decides not to conduct Factory Acceptance Testing (FAT) at the manufacturing facility, the equipment shall be accepted on the basis of the supplier's internal test report, guarantee and fitment certificate. In this regard, the written approval of the HOD of the Indenting department should be obtained recording the reasons for it.

## **8. Estimated cost of tender & Earnest Money Deposit (EMD)/ Bid Security:**

**Estimated cost of tender:** Estimated cost of the Tender is **Rs. 4,41,27,340/-**

### **8.1 Earnest Money Deposit (EMD)/ Bid Security:**

All the Bidders are required to deposit EMD amount of **Rs. 8,82,600/-** as "Earnest Money" through RTGS/Internet Banking.

The EMD may be forfeited 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 bank guarantee (security deposit). **Bids without EMD will be summarily rejected.**

- (i) Offers without a complete amount of Earnest Money shall be summarily rejected.
- (ii) Earnest Money of the unsuccessful bidder will be discharged/ returned as promptly as possible.
- (iii) The successful bidder's EMD will be discharged upon the bidder's acceptance of the LOA and submission of PBG against LOA.
- (iv) Bank Details for RTGS/Internet Banking is given below:

**Account number** : 340601010050446  
**IFSC Code** : UBIN0534064  
**Bank & Branch Name** : Union Bank of India, Yusuf Sarai Branch, New Delhi.  
**Account Holder Name** : RailTel Corporation of India Ltd.

(v) 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/proof of the online payment transfer along with bid.

## **9. Security Deposit/Performance Bank Guarantee:**

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

i. Security Deposit/Performance Bank Guarantee @ 10 % of total value of Purchase Order is required to be submitted within 30 days of issue of Purchase Order with validity of 4 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/PBG shall be submitted to the concerned Regional office/Corporate office.

iii. 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.

iv. No interest shall be paid on the amount of Performance Security held by RailTel, at any stage.

v. The Performance security shall be forfeited and credited to the RCIL account in the event of a breach of contract by the contractor. It shall be refunded to the contractor without interest, after he duly performs and completes the contract in all respects but not later than 60 (sixty) days of completion of all such obligations including the warranty under the contract.

vi. 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. 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 Concerned Region.

vii. This PBG would be released after satisfactory completion of contract including warranty period and only after submission of 10% PBG towards AMC as per clause 17 of ATC document.

### **Note:**

- a) 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.
- b) Any performance security up to a value of Rs. 5 Lakhs is to be submitted through online transfer

only.

- c) In case of submission of Security Performance in form of FDR then lien should be created in Favor of “RailTel Corporation of India Ltd”.

**10. Eligibility Criteria for OEM (Hardware):**

**10.1 Eligibility Criteria Requirements for OEMs:**

S.N.	Eligibility Criteria Requirements	Documentation required
1	OEM should be a registered in India. In case of imported product also OEM should have a registered office in India to provide after sales service support from India itself.	The certificates/Undertaking for the same will have to be submitted.
2	OEM should be ISO 9001, 14001	Certificates to be submitted
3	The Equipment offered by the OEM or equipment of the same series/family from the same OEM should have received PO or supply record from any Government/PSUs/Govt Telecom Service Providers network in India.	The certificates (PO COPY or work completion certificate) from the actual users will have to be submitted and also submit self-certificate with proper contact detail of end clients along with quantities supplied (Firm Name, Contact person, Designation, Telephone Number, Fax, Official mail id etc.).
4	Clause wise technical specs compliance along with all mentioned documents/annexures for all clauses to be submitted along with bid by the bidder (i.e., OEM). Back-to-Back warranty with respective OEMs for both Hardware and Software.	(i) The equipment offered by OEM should be mentioned in BOM and signed by respective OEM. (ii) The certificates/Undertaking for technical specs compliance will have to be submitted along with bid from respective OEM.
5	OEM should have Service Centre at min 04 locations in major cities in India.	Service centre details along with GST no of each location to be shared along with address and contact no. and person.
6	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 in the country from where the proposed equipment are planned to be supplied. OEM should have training repair and service centre facilities in India.	The certificates/Undertaking for the same will have to be submitted.

7	<p>The OEM shall ensure that Intellectual Property Rights of Hardware (including MAC address) and Source Code and of Software must not reside in any Country that shares a Land Border with India. Moreover, OEM must ensure that they are not getting 3rd party manufacturing from any Country that shares a Land Border with India.</p> <p>Note – OEMs from country that shares a Land Border with India are allowed to offer their products’ provided OEM's is registered with DPIIT.</p>	<p>The certificates/Undertaking for the same will have to be submitted.</p>
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## 11. Eligibility Criteria for Bidder:

### 11.1 Technical Eligibility for Bidder:

SN	Eligibility Criteria Requirements	Supporting Document Required
1	<p><b>Legal Entity:</b> The bidder should be a Company registered in India under the Companies Act (India) with their registered office in India for the last three years.</p>	<ul style="list-style-type: none"> <li>• Certificate of Incorporation / Registration</li> <li>• Memorandum of Association (MoA)</li> </ul>

2	<p><b>Financial Capability:</b></p> <p><b>A. For Start-ups:</b></p> <p>The bidder should have a minimum cumulative turnover of 50% of tendered value or above during the last 3 financial years (i.e current year and/or three previous years). The bidder should provide Audited Balance Sheets/annual reports as documentary evidence and for current year, the statutory Auditor’s certificate for turnover of current year up to the date of bid opening for which Balance Sheet/P&amp;L may not be available. In case of photocopy of Balance Sheet/P&amp;L the same should be certified by Chartered Accountant as true copy.</p> <p><b>B. For Others:</b></p> <p>The tenderer must have received Contractual payments 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 duly certified by the Chartered Accountant/Certificate from Chartered Accountant duly supported by Audited Balance Sheet.</p> <p>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.</p>	<ul style="list-style-type: none"> <li>• 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 with UDIN No. duly supported by Audited Balance Sheet.</li> <li>• For startups, Certificate of Startup issued by Department of Industries Policy and promotions, Ministry of Commerce and Industries.</li> </ul>
3	<p><b>Technical Capability:</b></p> <p><b>A. For Start Ups:</b></p>	<ul style="list-style-type: none"> <li>• Completion certificates with Satisfactory working and value of the work completed from the User</li> </ul>

	<p>The Tenderer should have executed:</p> <p>(i) Single order of Supply/provision of similar work # costing not less than 35% of the tendered value during last preceding 3 financial years (i.e current year and three previous financial years) from the date of opening of tender,</p> <p style="text-align: center;">OR</p> <p>(ii) Two orders of Supply/provision of similar work # costing not less than 20% of the tendered value during last preceding 3 financial years (i.e current year and three previous financial years) from the date of opening of tender,</p> <p style="text-align: center;">OR</p> <p>(iii) Three orders of Supply/provision of similar work # costing not less than 15% of the tendered value during last preceding 3 financial years (i.e current year and three previous financial years) from the date of opening of tender.</p> <p>The bidder shall also furnish supply/ work completion certificate issued by customer/s for the Purchase Orders/Work Orders.</p> <p><b>B. For Others</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>• Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or</li> <li>• Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or</li> <li>• One similar work each costing not less than the amount equal to 60% of advertised value of the tender.</li> </ul> <p><b># Similar Work- Supply of Data Network Equipments with satisfactory working in</b></p>	<p>Organizations is required to be submitted.</p> <p>In case of substantially completed work, certificate from user for bidder share regarding total value of bidders share of work and value of completed work (minimum 80% of total value of bidders share of work) is required to be submitted.</p> <p>In case of composite work purchase orders, bidder shall submit CA certificate with UNIN No. certifying the actual amount pertaining to similar work definition as mentioned in the clause.</p> <p>(The set of document(s) submitted should clearly certify eligibility criteria and should be verifiable from the user/customer)</p>
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	<p><b>Government/PSUs/Telecom Service providers/Public Listed Company in India or outside India.</b></p> <p><b>Note:</b> 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.</p> <p>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.</p>	
4	The bidder (in case of consortium/JV, all members) including Sub bidders should not have been black-listed currently by Central Govt./State Govt./CPSU/any reputed Telecom service provider in India or anywhere globally by Government for the supply of material / security reasons.	<ul style="list-style-type: none"> <li>• Self-Declaration by the Bidder on Company's letter head</li> </ul>
5	The Bidder or their promoters having equity stake or operating partnership in bidder, should not be holding valid License for Telecom service provider/ISP/ NLD, Services License of Government of India for Telecom Operation.	<ul style="list-style-type: none"> <li>• Undertaking to be submitted by the Bidder</li> </ul>
6	Bidder should have authorization specific to this tender from respective OEM as per Annexure-III.	<ul style="list-style-type: none"> <li>• MAF as per Annexure-III</li> </ul>
7	The bidder should have Supply MPLS-Router/Metro Ethernet switch in Government /PSUs / Telecom Service Providers network / ISP Network / Public listed company during last 07 (seven) years, ending last day of month previous to the one in which tender is invited.	<ul style="list-style-type: none"> <li>• Completion certificates with Satisfactory working of the work completed from the User Organizations is required to be submitted.</li> </ul>
8	The tenderers shall submit a notarized affidavit on a non-judicial stamp paper stating that they are not liable to be	<ul style="list-style-type: none"> <li>• Notarized Affidavit as per Annexure-IV.</li> </ul>

<p>disqualified and all their state-ment/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. <b>Non submission of an affidavit by the bidder shall result in summarily rejection of his/their bid.</b> 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 here under nor will it affect any rights of the RailTel thereunder. In case of any wrong information submitted by tenderer, the contract shall be terminated. Earnest Money Deposit (EMD), Performance Bank Guarantee (PBG) and Security Deposit (SD) of contract forfeited and agency barred for doing business on RailTel (RCIL) for 5 (five) years.</p>	
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**Note:**

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

**11.2 Explanation for clause - Eligibility Criteria:**

- a) In case a contract is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.

- b) If a contract is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such contract shall be considered for fulfillment of credentials.
- c) If a part or a component of contract is completed but the overall scope of contract is not completed, this work shall not be considered for fulfillment of technical credentials even if the cost of part completed work/component is more than required for fulfillment of credentials.
- d) In case a contract is considered similar in nature for fulfillment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.
- e) The value of final bill including PVC amount-if paid, or otherwise in case final bill is pending the contract cost in last approved variation statement plus PVC amount paid or cumulative amount paid up to last on-account bill including PVC amount and statutory deductions whichever is less, shall be considered as the completion cost of contract. In case of newly formed partnership firm, the credentials of individual partners from previous proprietary firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of  $0.3 \times 0.2$  value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
- f) In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm (e.g. in a partnership firm of partners A, B & C having share 30%, 30% & 40% respectively and credentials of Rs 10 crore; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs 6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
- g) In case of existing partnership firm if any other partner(s) joins the firm, the credentials of partnership firm shall get enhanced to the extent of credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc.
- h) Any partner in a partnership firm cannot use or claim his credentials in any other firm without leaving the partnership firm i.e., In a partnership firm of A&B partners, A or B partner cannot use credentials of partnership firm of A & B partners in any other partnership firm or proprietary firm without leaving partnership firm of A & B partners.
- i) In case a partner in a partnership firm is replaced due to succession as per succession law, the proportion of credentials of the previous partner will be passed on to the successor.
- j) If the percentage share among partners of a partnership firm is changed, but the partners remain the same, the credentials of the firm before such modification in the share will continue to be considered

for the firm as it is without any change in their value. Further, in case a partner of partnership firm retires without taking away any credentials from the firm, the credentials of partnership firm shall remain the same as it is without any change in their value.

- k) In a partnership firm “AB” of A&B partners, in case A also works as propriety firm “P” or partner in some other partnership firm “AX”, credentials of A in propriety firm “P” or in other partnership firm “AX” earned after the date of becoming a partner of the firm AB shall not be added in partnership firm AB.
- l) In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
- m) In case company A is merged with company B, then company B would get the credentials of company A also.

**13 Splitting of Quantity:** Deleted.

**14 Evaluation Criteria:**

- i. The bidder shall quote the equipment prices as per the price format given in the GeM portal.
- ii. Bidder should quote for all the items. The Offers will be evaluated on total cost including Long Term Maintenance Cost as quoted.
- iii. The offers for respective Item will be determined on Total Unit Rate on CIP destination basis which will include basic rate, GST, freight, insurance and any other charge or cost quoted by the tenderer.
- iv. Offers from the tenderers not meeting the eligibility criteria will not be considered.
- v. Any optional item/modules, accessories etc. required for meeting the tender criteria may be quoted separately, if required. The bidder should indicate brand name, type / model number of the material offered.

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

- a. Variation in tendered quantity can be increased or decreased by 25 (Twenty Five per cent) for ordering, if so warranted.
- b. If Variation in Quantity is increased beyond 25% upto 40% than Bidder should provide 2% rebate on price for increased quantity between 125% to 140%. Further variation increased beyond 40% to 50% than Bidder should provide 4% rebate on price for increased quantity between 140% to 150%. On further increase in quantity beyond 50%, than negotiation with bidder for further mutually applicable rebate on price.
- c. Variation will be operated **before** issue of RailTel confirmed PO.

**16. Warranty:**

The materials are to be warranted for **3 years** from the date of configuration by RailTel Central-NOC/Regional NOC delivery. The warranty for 3 years will be started after configuration of equipment by CNOC/RNOC. 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.

## **17. Long Term Maintenance Support:**

Bidder 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 given solution. supplied against this contract. RailTel should extend the benefits of software update/up-grades made by Bidder on the system from time to time to improve performance.

Bidder shall be paid @ 5% (minimum) + Applicable Taxes of overall Cost of (excluding Taxes and Duties) per annum towards Long Term Maintenance Support after completion of warranty period, to undertake maintenance, repairs and replacements of all type of equipment/module/card/assembly/subassembly and update/upgrade of software released during this period and /or which may fail in the system after the warranty. Taxes will be as per actual at the time of execution of the AMC i.e., issue of AMC's LOA.

If the bidder quotes a higher base rate for AMC, he will be paid at his quoted rate per annum. Total AMC cost for five years will be taken for evaluation purpose. AMC would have to be valid for minimum period of 5 years after completion of warranty. This period of 5 Years may be extended further with mutual consent of RailTel and Bidder/OEM.

In case a bidder quotes AMC rates lower than 5% and if the bidder wins the contract, his cost against supply items will be reduced by differential (w.r.t. 10%) of AMC rates & bidder will be paid accordingly against the cost of supply. AMC charges to him, however, will be paid only @ 10% per annum.

Separate LOA for AMC shall be issued by RailTel, and separate LOA shall be signed with the Bidder after completion of warranty period. A fresh Bank Guarantee valid for a period of 4 months beyond the completion of AMC of five years from the date of issue of LOA for AMC shall be required to be submitted by OEM/Tenderer for due fulfilment of long-term maintenance support obligation.

Value of PBG will be @10% of the total value of LOA for AMC of five years or as per Government of India guidelines applicable at the time of issue of LOA for AMC. This PBG of AMC shall be submitted by the bidder within 30 days from the date of issue of LOA for the AMC. In case bidder does not submit the PBG in the stipulated time period, RailTel may encash the PBG given with the original LOA.

Quarterly payment for AMC Charges as per the Service Level Agreement (SLA) at the end of every quarter would be made by RailTel after successful completion of AMC Services of that quarter and on the certificate furnished by CNOC In-charge RailTel through its concerned ED/GGM/GM.

**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.**

**18 Repair and Return Services applicable for Warranty Period (Clause No. 16) as well as Long Term Maintenance Support (Clause No. 17)**

**18.1 Repair**

**18.1.1 Contractor's Responsibility: -**

- The Contractor will take over the defective equipment/component from station/site and hand-over the repaired equipment/component at the same location. The following activities will be performed by the contractor:
- After receiving a defective part request through Welcome Centre (dedicated phone line or e-mail), the defective equipment/component will be taken over by the contractor from each station. All the documentation, including identification number (Serialnumber) will be provided by RailTel.
- There will be initial one time activity of all existing faulty equipment/component being repaired by Contractor before commencement of the AMC. AMC will cover only equipment which are in working condition.
- **Delivery Period:** The received defective part will be got repaired by the contractor within 30 days from the date of receiving and will be handed over to RailTel authorized representative at station/site. The contractor will also give probable reason for repeated failure of equipment/component/ modules.

**Uninterrupted Network:** For smooth and uninterrupted traffic during the repair being carried out by the contractor.

1. RailTel will provide its own spares in the first instance for the defective equipment where spares have been procured as per the SOR. For remaining items the contractor shall make spares available at his own cost.
2. If contractor fails to return the repaired equipment/module/card/SFP/part within stipulated time of 30 days from the date of receipt, then the OK (good conditioned) equipment/cards/SFPs/parts etc. will be provided by the contractor for the subsequent time period free of cost till replacement is made with the repaired equipment/module/card/SFP/part.
3. All transportation, freight and insurance charges will be borne by the contractor.
4. Contractor will keep the record of repair on each defective equipment/part/cards/SFP/components with serial numbers (unique identification) particulars.

### 18.1.2 RailTel Responsibility

RailTel will hand over the equipment/defective card/SFP/Parts/etc. to the contractor's authorized representative at each of the station/site along with the following relevant information & documentation.

- Identification/serial number and location of use.
- Fault report document duly filled-in in a format as per requirements of Contractor.
- All relevant documentation including failure description, diagnostic tests results.
- Adequate packing material to protect against reasonable risk of damages.
- Provide all necessary government authorization and documentation necessary to facilitate custom clearance processing.
- Perform a physical check test on the repaired parts.

### 18.2 Return

If any part goes beyond repair due to Contractor at the time of repair being carried out, this is to be communicated to RailTel and after agreed upon, it will be labeled as "unworkable". If it will be required to deploy a new equipment/part on that location that will be provided by the contractor free of cost. To achieve this, contractor is required to always keep adequate spares with it during the period of AMC. However this excludes damaged, spoiled, rusted or misused equipment/parts. Any such equipment/parts will be not-repairable and no replacements shall be provided by contractor. RailTel will have to purchase fresh spares in case the equipment/cards are non-repairable due to any of these above mentioned reasons.

### 18.3 If the contractor fails to return the equipment/accessories within 30 days, the following penalties will be imposed:

Equipment	Duration of repair	Deduction/Penalties
All Equipment/Module and accessories	More than 30 days and up to 40 days (from the date of receipt)	10% of the cost of affected equipment/module
All Equipment/Module and accessories	More than 40 days and up to 50 days (from the date of receipt)	25% of the cost of affected equipment/module
All Equipment/Module and accessories	More than 50 days and up to 60 days (from the date of receipt)	75% of the cost of affected equipment/module
All Equipment/Module and accessories	More than 60 days (from the date of receipt)	Full cost of affected equipment/module

Contractor 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.

### 19. Payment Conditions: -

- (i) 80% payment against full supply under issued PO and remaining 20 % payment on configuration of Equipment by CNOC/RNC, CNOC/RNOC certificate should be produce in this regard or expiry of 6 months whichever is earlier .

(ii) In case of part supply, 75% payment against Part Supply and remaining 25% payment on configuration of equipment by CNOC/RNC, CNOC/RNOC certificate should be produce in this regard or expiry of 6 months whichever is earlier,

(iii) GM/NTP/CO shall be the paying authority.

(iv) 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/e-Way Bill.
- Packing List.
- Purchaser's Inspection Certificate.
- Transit Insurance Certificate.
- Warranty Certificate of OEM & in-house inspection certificate.
- Copy of BG/Proof of BG Submission.
- Certificate of receipt of Goods in good condition from RailTel.

(v) **Liquidate Damages**

The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent per week or part thereof for the undelivered portion of SOR subject to a maximum of 10% of the cost of the Purchase order/LOA for any reason whatsoever attributed to the failure of the bidder. RailTel will have the right to cancel the order, and place an order on alternative source besides levying the liquidated damages as above.

## **20 Rate Contract**

RailTel would also enter into Rate Contract with the firm to whom the contract is awarded for catering to additional requirement as per items covered in Schedule of requirements (SOR) as and when arise in future. Item wise rate Contract on the successful tenderer would be placed separately and would be operative from the date of configuration by CNOC of the 100 percent supplied items and would be valid for a period of 12 months. The validity of rate contract may be extended for further 12 months with mutual agreement. This Rate Contract would be at the same rates as finalized in main contract or Variation PO, whichever is lesser. During the validity of Rate Contract, RailTel will place Sub Purchase Orders for items detailed in SOR, as per requirement. The total value of all the Sub Purchase Orders under Rate Contract shall be restricted to 50% of the value of the respective package, however, there is no guaranteed offtake against this Rate Contract.

### **20.1 Security Deposit/Performance Bank Guarantee:**

A Performance Bank Guarantee of 10% value of the rate contract LOA for due fulfillment of the rate contract with validity of four months beyond contract period will be submitted by the tenderer within 30 days of issue of LOA/APO/SPO for Rate Contract from any scheduled bank for due fulfilment of contract as per the details given below:

- i) The security deposit shall be submitted within 30 days of issue of Advance purchase order/Sub Purchase Order.
- ii) 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.
- iii) Any performance security up to a value of Rs. 5 Lakhs is to be submitted through online transfer only. In case of submission of Security Performance in form of FDR then lien should be created in Favor of "RailTel Corporation of India Ltd".
- iv) The security deposit/Performance Bank Guarantee shall be released after successful completion of contract including warranty period obligations under the rate contract, duly adjusting any dues recoverable from the successful tenderer.

**20.2** Material supplied under rate contract should be under 3 years of warranty support.

**20.3** Material should be supplied within 90 days after issue of APO/SPO against Rate contract.

**20.4 Payment Conditions against Rate Contract.**

Payment of rate contract LOA/APO/SPO shall be as per clause-19 of original payment terms and conditions of tender.

**21 System Performance Guarantee**

**21.1** The Bidder shall give unqualified and unconditional guarantee that when the equipment/material supplied by him is installed and commissioned at site, it shall achieve the desired objective and that in the event of performance of the system when installed not complying with the end objective or with the specifications, he shall further strengthen the system to realize the end objectives with full compliance of the specifications contained in these documents and inform RailTel. No additional payment will be made to the contractor for the supply of any additional goods and services required in this regard.

**21.2** This certificate in the Performa given in Annexure-VI, shall accompany the final offer. The absence of this certificate which will form part of the agreement shall DISQUALIFY the bidder automatically.

**21.3** The OEM has also to give unqualified and unconditional guarantee that when the Hardware/Software supplied by him is installed and commissioned at site, it shall achieve the desired objective mentioned in this document. The certificate in the Performa given in Annexure-VI.

**22** 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. The 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. Performance Guarantee (PG) and Security Deposit (SD) of contract forfeited and agency barred for doing business on RailTel (RCIL) for 5 (five) years.

### **23 Online Submissions (Check list):**

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 as per GeM Bid and the bid will be opened as per GeM Bid.

- (i) OEM vetted bill of material (BOM), and bidder vetted technical compliance should be as per clause-5 should be submitted by bidder.
- (ii) Clause wise compliance of all the clauses of GeM Bid, Buyer added bid specific ATC and RailTel's bid specific ATC documents and all Corrigendum.
- (iii) Data Sheet of offered equipment as per clause-4.
- (iv) Financial and Technical Eligibility Criteria documents as per clause-11.
- (v) Technical Compliance of all Specification of items as per Annexure-I.
- (vi) Undertaking of Long Term Maintenance Support from OEM as per para Annexure-II as per clause-17.
- (vii) MAF/OEM Authorization as per Annexure-III as per clause-3.
- (viii) System Performance Guarantee (Annexure-VI). Original copy is needed to be submitted by the successful bidder before issuance of LOA.
- (ix) Notarized affidavit on a non-judicial stamp paper as per Annexure-IV.
- (x) Duly notarized Power of Attorney in name of authorized signatory as per Clause No.25 & Board Resolution.
- (xi) Nil Deviation Certificate.
- (xii) Compliance of GeM GTC clause 26 and undertaking from bidder.
- (xiii) Complete Tender documents (GeM Bid, Buyer added bid specific ATC and RailTel's bid specific ATC documents) and Corrigenda, duly signed & stamped on each page in token of acceptance.
- (xiv) Submission of certificate/documents as per Buyer Added Bid Specific Terms and Conditions.
- (xv) Compliance of MII Policy & GOI guidelines as per clause-28 should be submitted by bidder.

### **24 Offline submission (Check list):**

Original copy of following documents shall be submitted by tenderer offline at RailTel Corporate Office, Plate-A, 6<sup>th</sup> Floor, Office Block – 2, East Kidwai Nagar, New Delhi – 110 053 as mentioned below:

- (i) Original Bid security declaration as per Annexure-VI.
- (ii) Original Notarized affidavit on a non-judicial stamp paper as per Annexure-IV.
- (iii) Original duly notarized Power of Attorney in name of authorized signatory as per Clause No. 25.

The packet containing the original copies as per above should be sealed by the personal seal of the bidder. The envelop shall bear name of work, the tender no. and the words "DO NOT OPEN Before" before due date and time as mentioned in GeM Bid.

## **25 Constitution of Firm and Power of Attorney.**

- 25.1** Any individual(s) signing the tender or other documents connected therewith should specify as per annexure-VII 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
- 25.2** 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.
- 25.3** The 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.
- 25.5** 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.
- 25.5** The duly notarized Power of Attorney shall be submitted in original at the time of bid submission as per Clause 22 above.

## **26 Compliance for procurement of Telecommunication equipment from trusted source.**

Department of Telecommunication (DOT) notification no. 20-1263/2021-AS-I Dated: 30.03.2021 regarding procurement of Telecommunications equipment from trusted source shall be applicable to this tender.

**Note:** 1) The bidder is required to give acceptance of all the clauses of **GeM bid**, Buyer added bid specific

ATC, RailTel's bid specific ATC documents and all Corrigenda . 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 and GeM 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/2023/B/4147911**

In case, If any contradiction between GeM Bid, Buyer added bid specific ATC , RailTel's Bid Specific ATC and General Terms & Conditions, RailTel's Bid Specific Additional Terms & Conditions will prevail.

## 27 Insurance

- i. The Contractor shall take out and keep in force a policy or policies of insurance from the date, the delivery of material starts (including the transit portion) against all liabilities of the contractor or the Purchaser. The contractor shall take out and keep in force a Policy or policies of Insurance for all materials covered in schedule of requirement irrespective of whether used up in the portion of work already done or kept for the use in the balance portion of the work until such material are provisionally handed over to RailTel. The contractor should ensure the stores brought to site, against risks as required under the Emergency Risk(Goods) Insurance Act in force from time to time up to contract value.
- ii. It may be noted that the beneficiary of the insurance policy should be RailTel or the policies should be pledged in favor of RailTel. The contractor shall keep the policy/policies current till the equipment are handed over to the purchaser.

## 28 Public Procurement:

**28.1 Preference to Make in India:** The provisions of the revised "Public Procurement (Preference to Make in India) Order 2017" dated 16.09.2020 (or subsequent revisions, if any till opening of tender) by Department of Promotion of Industry and Internal Trade (DPIIT), GoI shall apply to this tender.

- (i) Only Class-I local suppliers (meeting minimum 50% local content) & Class-II local suppliers (meeting minimum 20% local content) are eligible to participate in this tender.
- (ii) Minimum Local Content shall be 50% for purchase preference or as per the Notification No. 18-10/2017-IP dated 29th August 2018 issued by Department of Telecommunications, Ministry of Communications and Notification No. 33(1)/2017-IPHW dated 14.09.2017 issued by MeitY or latest notification issued till opening of tender.
- (iii) As per para 9 of PPP-MII order 16.09.2020, bidder shall be required to indicate percentage of local content and provide self-certification in his bid (without mention of any price) that the item offered meets the local content requirement for Class-I/Class-II local supplier, as the case may be and shall also give details of the location(s) at which the local value addition is made. In case of procurement for a value in excess of Rs. 10 Crores, the bidder shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or

from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content. Bidder shall upload the certificate along with their techno-commercial bid. The bidder shall also provide calculation of Local Content with price Break-up of “Local Content” and “Imported Content” for each SOR item as per DPIIT’s PMI Policy and its clarifications and same shall be uploaded by the bidder along with their price bid. In case of any false declaration, action shall be taken in line with the provisions of the PPP-MIII order. Performa for self-certification regarding local content is given in the Notification No. 18-10/2017-IP dated 29th August 2018 issued by Department of Telecommunications.

- (iv) Office Memorandum Dated 19.02.2020 (or latest) issued by Department of Telecommunications, Ministry of Communications shall be applicable for Clause 10(d) of Public Procurement (Preference to Make in India) Order, 2017.
- (v) Official website of Department of Promotion of Industry and Internal Trade (DPIIT) i.e. “<https://dpiit.gov.in/public-procurements>” may be referred by tenderers for above mentioned orders or any revision issued. Frequently Asked Question (FAQ) available there may also be referred by tenderers.
- (vi) Divisible/Indivisible as per PPP-MII policy office memorandum dt-18.05.2023 shall be applicable to this tender

**28.2 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 shall be submitted by all the bidders regarding their compliance with this order. If such 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.

**29 Updating of Labour data on Railway’s shramikkalyan Portal:**

Bidder is to abide by the provisions of Payment of Wages Act & Minimum Wages Act in terms of clause 54 and 55 of Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website ‘[www.shramikkalyan.indianrailways.gov.in](http://www.shramikkalyan.indianrailways.gov.in)’. Bidder shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/updation of Portal shall be done as under:

Bidder shall apply for one-time registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the bidder’s registration on the portal within 7 days of receipt of such request.

Bidder once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.

The bidder once registered on the portal, shall provide details of his Letter of Acceptance (LoA)/Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by bidder within 7 days of receipt of such request.

After approval of LOA by Engineer, bidder shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis. It shall be mandatory upon the bidder to ensure correct and prompt uploading of all salient details of

engaged contractual labour & payments made thereof after each wage period.

While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances' or 'Performance Guarantee / Security deposit', bidder shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till \_\_\_\_\_ Month, \_\_\_\_\_ Year."

## **29. For Micro and Small Enterprises (MSEs)**

- 29.1** MSEs who are interested in availing themselves of above benefits will enclose with their offer the proof of their being MSE registered with any of the agencies mentioned in the notification of Ministry of MSME.
- 29.2** The MSEs should submit valid Udyam certificate (UAM No.) along with the Bid. Failing 4.A.23.1 and 4.A.23.2 above, such offers will not be liable for consideration of benefits detailed in the notification of Government of India.
- 29.3** 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.
- 29.4** 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, Discounting Charges, Interest on financing, or any other charges known by any name shall be borne by MSE Vendor.
- 29.5** 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.
- 29.6** 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.
- 29.7** Latest MSME guidelines will be followed as issued by GOI for this tender.

**Technical Specifications****1. All Equipment should be:**

- (i) With 3-year warranty & 5 years of Long-Term Maintenance Support.
- (ii) Equipped with necessary hardware/software to comply with all the 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) UL, CE and FCC Certificate. These certificates are 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.
- (v) 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.
- (vi) OEM vetted bill of material (BOM), and bidder vetted technical compliance should be as per clause-5 should be submitted by

**2. SOR wise details are as:**

SI No	SOR Description	UOM	Qty	Unit Rate (Rs.)	Total Amount Excluding Tax	Total Amount Including Tax (Rs)
<b>Schedule (A)</b>						
1	Supply of Router/Metro Ethernet Equipment (minimum 4x10G SFP+ & 8x1G SFP Ports), including legacy TDM traffic (Channelized STM-1) over MPLS using Smart SFP transceivers as per technical specifications defined in annexure-I.	Nos	83			
2	Supply of Smart SFP modules (STM-4) supporting legacy TDM traffic (SDH) over MPLS using Smart SFP transceivers as per technical specifications defined in annexure-I	Nos	8			
3	Supply of Server for NMS as per technical specification defined in annexure-I	Nos	10			
4	Supply of Layer-2 Switches (2x40G and 12x10G) with SFP+(10KM) & SFP+ DAC Cable (5M) as per technical specification defined in Annexure-I	Nos	4			

5	Supply of virtual route reflector with 4M RIB Scale, with SVC Customer Support of 5 Years as per technical specification defined in annexure-I.	Nos	8			
6	Supply of virtual route reflector with No limit of RIB Scale, with SVC Customer Support of 5 Years as per technical specification defined in annexure-I.	Nos	2			
7	Supply of servers for Virtual route reflector as per technical specification defined in annexure-I.	Nos	10			
<b>Sub-total Cost excluding tax (In Rs)</b>						
<b>Schedule (B)</b>						
1	AMC of 5 Years after warranty for Items mentioned in Schedule-A except item no-5 & 6.	Year	5			

## 2.1 Technical Specification

### A. (SOR Item No-1) Technical Specification of Router/Metro Ethernet Equipment

SN	Technical Specification
1	Router/Metro Ethernet Equipment should support minimum 4x10G SFP+ port & 8x1G SFP Equipped with two no's of Single mode fiber optics of Long Haul (60km) and Smart SFP modules (Channelized STM-1).
2	Total throughput (Full duplex): Minimum 48 Gbps.
3	MAC Table Size : 16K
4	IPv4 RIB/FIB : Minimum 124K/30K
5	IPv6 RIB/FIB : Minimum 32K/7.5K
6	MPLS Labels : Minimum 12K
7	Label Stack : 5
8	L2 / L3 VPN VRF : Minimum L2 VPN: 128, Minimum L3 VRF: 128
9	Support of number of queues per system : Minimum 1K Queues or 8 Queues per sub interface
10	Number of VLAN / BVI support : 128
11	Operating Temperature : (0 to 55 degree C or better)
12	Storage Temperature : (-10 to 60 degree C or better)
13	Router/Metro Ethernet Equipment can be of either modular/fixed type and shall have modular Operating system where it shall support individual restart of critical processes without affecting other processes or rebooting the entire operating system.
14	All 10G interfaces should support LR, ER and ZR.
15	Router/Metro Ethernet Equipment shall have option checking configuration before committing and option of rolling back to at least five configurations.
16	Router/Metro Ethernet Equipment should support redundant DC ( with the operating range of -40VDC to -72VDC)
17	Digital Optical Monitoring (DOM) should be supported, optics information retrievable including RX/TX-power, threshold-monitoring/alarms, inventory.
18	It shall support role based privileges for the system access and radius authentication for the System admin.
19	The Router/Metro Ethernet Equipment should have a Console or Out-of-band Management.
20	Alerts for environmental or other hardware-based alarms should be visibly implemented on the chassis.

21	All interfaces shall support services like L2VPN, L3VPN, VPLS and multicast for both IPv4 and IPv6
22	The Router/Metro Ethernet Equipment should have mechanism to protect itself from DDoS attack.
23	The Router/Metro Ethernet Equipment should be IPv6 ready from day one.
24	The Router/Metro Ethernet Equipment should support filtering based on different parameters like: src ip, dst ip, src port, dst port, protocol etc
25	The Router/Metro Ethernet Equipment should support Netflow, Jflow or equivalent
26	The Router/Metro Ethernet Equipment should support IP SLA or RPM (or equivalent) for performance measurements.
27	Shall support QoS, option of traffic shaping per Interface based.
28	Shall support following class of service features:
	a) Classification, policing, marking, shaping, filtering
	b) Manage congestion using a weighted random early detection (WRED) algorithm
	c) RFC 2474, Definition of the Differentiated Services Field in the IPv4 and IPv6 Headers
	d) Single Rate Three Color Policer RFC 2697
	e) RFC 2698, A Two Rate Three Color Policer
	f) congestion Management through CBWFQ , Round-Robin or equivalent , WFQ or equivalent
	g) RFC 2597, Assured Forwarding PHB Group
	h) RFC 2598, An Expedited Forwarding PHB
	i) Router/Metro Ethernet Equipment should be able to classify based on 802.1 ad, 802.1 p, EXP and DSCP bits
	j) The Router/Metro Ethernet Equipment shall support traffic interface mirroring in both ingress & egress directions for both IPv4 & IPv6
29	The Router/Metro Ethernet Equipment shall support provision for event based scripts that shall be capable of performing actions based on certain triggers
30	The Router/Metro Ethernet Equipment shall support aggregated Ethernet and it shall be possible to bundle Upto 8 links.
31	Shall support following MPLS features
	a) LDP and RSVP signalling
	b) RFC 5036, LDP Specification
	c) RFC 3212 OR Constraint-Based LSP Setup using LDP or RFC 4684
	d) RFC 3215, LDP State Machine
	e) RFC 3478, Graceful Restart Mechanism for LDP
	f) RFC 2858, Multiprotocol Extensions for BGP-4
	g) RFC 3031, Multiprotocol Label Switching Architecture
	h) RFC 3032, MPLS Label Stack Encoding
	i) The Router/Metro Ethernet Equipment should be able to do load-balancing over multiple equal cost MPLS LSP
32	The Router/Metro Ethernet Equipment shall support MPLS Fast Reroute both link protection and Node protection.
33	MPLS Ping, MPLS Trace Route
34	Fast Reroute Extensions to RSVP-TE for LSP Tunnels
35	The Router/Metro Ethernet Equipment shall Support of Sync-E & PTP technology (License price to be quoted separately)
36	Shall support MPLS based VPN services
	a) L3VPN, L2VPN

	c) RFC 4762 Virtual Private LAN Service (VPLS) Using Label Distribution Protocol (LDP) Signaling
37	The Router/Metro Ethernet Equipment shall support the following routing features
	a) BGPv4 and route reflector
	b) Dynamic Host Configuration Protocol (DHCP) relay
	d) RFC 2328, OSPF Version 2
	e) RFC 3623, OSPF Graceful Restart
	f) RFC 3630, Traffic Engineering (TE) Extensions to OSPF Version 2
	g) RFC 1195, Use of OSI IS-IS for Routing in TCP/IP and Dual Environments
	h) RFC 2104, HMAC: Keyed-Hashing for Message Authentication
	k) RFC 3359, Reserved Type, Length and Value (TLV) Code points in IS-IS
	l) RFC 3373, Three-Way Handshake for IS-IS Point-to-Point Adjacencies
	m) RFC 5305, IS-IS Extensions for Traffic Engineering
	n) RFC 3847, Restart Signalling for IS-IS
	o) RFC 3590, Source Address Selection for Multicast Listener Discovery Protocol
	p) IGMP v2 and v3 as described in RFC 2236 and RFC 3376 with IGMP Routing Policies to filter IGMP requests.
38	The Router/Metro Ethernet Equipment shall support Virtual Router/Metro Ethernet Equipment Redundancy Protocol (VRRP) as per IETF RFC 3768
39	Router/Metro Ethernet Equipment shall support SNMP v2/v3 and NTP
40	Shall support BFD for both single hop and multihop sessions
41	Shall support the following OAM features and actions such as syslog and should be configurable on OAM event trigger:
	a) 802.3ah
	b) 802.1ag
	c) Y.1731
43	IPv6 Features
	a) IPv6 Ping
	b) IPv6 trace route
	c) OSPF v3
	d) IS-IS
	e) VRRPv3
	f) IPv6 CoS (classification & scheduling based on TC )
	g) IPv6 ACL
	h) 6VPE
44	Multicast Feature: It shall support following:
	a) It shall support IGMP snooping v2/v3
	b) The Router/Metro Ethernet Equipment shall support PIM Sparse Mode, RFC 4601(optional)
	c) Rendezvous Point (RP) - ability to be configured as an RP
	d) RFC 3569, Source Specific Multicast (SSM)
	f) RFC 3446, Anycast Rendezvous Point (RP) Mechanism using Protocol Independent Multicast (PIM) -
45	The proposed Router/Metro Ethernet Equipment should be NEBS level 3 compliant /ETS 300 019 -1-3 class 3.3 or any other equivalent certificate. NEBS Certification is not required for PMA. However OEM has to produce certificate from standard lab approved or authorized by Govt. of

	India that the supplied Products are equivalent to NEBS and meet all standard and specification of NEBS.
46	The device should comply to the following safety standards
	a) EN 55032 Class A Emissions (Europe)
	b) FCC Class A (USA) Radiated Emissions
	c) UL/EN 62368 Information Technology Equipment – Safety
	d) EN 60825-1 Safety of Laser Products
	e) EN-61000-4-11 Voltage Dips and Sags
	f) ETS-300386 Electromagnetic Compatibility Requirements
	g) The device will conform to the following EN/IEC standard:
	i. 61000-4-2 – ESD
	ii. 61000-4-3 Radiated Immunity
	iii. 61000-4-4 – EFT
	iv. 61000-4-5 – Surge
	v. 61000-4-6 – Low Frequency common immunity
47	The offered devices must support following functionalities to support 3rd party SDN (in future)
	(a) The Router/Metro Ethernet Equipment should support RFC 6020, YANG - A Data Modeling Language for the Network Configuration
	(b) Protocol (NETCONF)
	(c) The solution should support the network configuration protocol (NETCONF) that provides mechanisms to install, manipulate, and delete the configuration of network devices, RFC 6241
	(d) The Router/Metro Ethernet Equipment should be able to act as Path computation client in the PCE architecture defined in RFC 4655.
	(e) The Router/Metro Ethernet Equipment should support PCECP as defined in RFC5440.
	(f) The Router/Metro Ethernet Equipment should support BGP link-state (BGP-LS), RFC 4655
	(g) The Router/Metro Ethernet Equipment should support SPRING
48	Devices shall support following for Provisioning
	(a) Use NETCONF (RFC 6241, RFC 6242, RFC 5277)
49	The offered devices must support API/NBIs for auto discovery of Services and Physical & Logical Topology
50	Telemetry should be supported
	a) The Router/Metro Ethernet Equipment should support telemetry based on push model for monitoring network devices
	b) The Router/Metro Ethernet Equipment should support various software models/sensors for capturing different health parameters from the devices
	c) The Router/Metro Ethernet Equipment should support sending telemetry data to multiple consumers simultaneously
	d) The Router/Metro Ethernet Equipment shall support GPB/GRPC/KAFKA encoding for telemetry data
	e) The software model/sensors should be based on either yang, xml or open config
	f) The solution shall use either UDP or GRPC for transport of telemetry data
	g) The system should support streaming granularity of atleast 10 sec
	h) The Router/Metro Ethernet Equipment shall have the ability to interact with open standard based tools
	j) Enabling telemetry should not have any adverse impact on the performance of the device/Router/Metro Ethernet Equipment

	k) Some of the streaming models/sensors the Router/Metro Ethernet Equipment should support are:
	System
	Chassis Environment
	Line card utilization (memory , processor, QoS, Temp, Port utilization ), errors counters
	Controller Card sensors (memory, CPU, Temp etc)
	Fabric statistics
	Interface
	Interface statistics (Physical and logical interfaces)
	Interface optical diagnostic
	Congestion and latency
	Filter statistics
	RSVP Interface Statistics
	DHCP statistics
51	Router/Metro Ethernet Equipment should support Dual Image/Partition with USB flash drive booting option for OS recovery
52	Router/Metro Ethernet Equipment should support jumbo frame.
53	Router/Metro Ethernet Equipment should support port mirroring
54	Router/Metro Ethernet Equipment should support security features of Broadcast/Multicast/Unicast Storm control.
55	Router/Metro Ethernet Equipment should comply to following Temperature performance parameters:
	i. Operating Temperature: 0 to 55 degree C or better
	ii. Storage Temperature : -10 to 60 degree C or better
56	Router/Metro Ethernet Equipments should support following Metro Ethernet Features:
	i. ITU-T G.8032 Ethernet Ring Protection designed for loop protection or alternate mechanism to achieve ring protection in less than 50 ms.
	ii. Should support multiple Ring up to 2 ring(main and sub ring) protection failover with in 50 ms or ITU-T G.8032 v1.
57	The operating system of the Router/Metro Ethernet Equipments category/series/family should be MEF-9/14 or CE(Carrier Ethernet) Certified.
58	The Router/Metro Ethernet Equipment shall be designed for continuous operations with dual fan system.
59	Router/Metro Ethernet Equipment should support CFM and LFM alarms.
60	Shall support HQoS, option of traffic shaping per interface based.
	i. Shall support at least 1K Queues or 8 Queues per sub interface
	ii. Per-VLAN policing.
	iii. Per-VLAN rewrite
	iv. Per-VLAN two-rate tri-color marking.
	v. Per-VLAN classification
	vi. Per-VLAN filtering
61	Support for P and PE Router/Metro Ethernet Equipment functionality for MPLS on the same Router/Metro Ethernet Equipment simultaneously and on all the interfaces.
62	Router/Metro Ethernet Equipment shall support E-Line or E-LAN MEF standards.
63	Router/Metro Ethernet Equipments should be rack mountable to fit into a standard 19-inch rack
65	Segment Routing

ii	The Router/Metro Ethernet Equipment should support SR-MPLS dataplane and protocols OSPF,IS-IS and BGP Segment routing extensions
iii	Traffic Steering of SR policies with Autoroute Include and Segment Routing TI-LFA SRLG Protection
iv	LSP ping and trace-route
vi	TI-LFA with IGP (Link, Node, Local SRLG, Remote SRLG protection)
vii	Controller instantiated SR Policy (PCEP, BGP)
viii	Router/Metro Ethernet Equipment should have capability to calculate Bandwidth based path using centralized controller.
x	The Router/Metro Ethernet Equipment shall support dynamic point-to-point interface latency performance measurement. The measurement must be integrated in the IGP and BGP LS for SDN Controller Analysis.
xi	Label distribution protocol and segment routing should coexist and there should support option to prefer LDP over segment routing.
66	EVPN Features
i	Router/Metro Ethernet Equipment should have support of Ethernet VPN (EVPN with single homing, multi homing
ii	Router/Metro Ethernet Equipment should have support of following features on EVPN: EVPN-IRB, EVPN VPWS, EVPN VPWS Preferred Path over SR-TE Policy
67	Router/Metro Ethernet Equipment should support legacy TDM traffic (SDH) over MPLS using Smart SFP transceivers in case required in future. Router/Metro Ethernet Equipment should also support Ch Stm1,Stm-4 and Stm-16 Smart SFP transceivers for TDM traffic (SDH) over MPLS in case required in future.

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.

#### **B. (SOR Item No-1) Technical Specification of Smart SFP modules (Channelized STM-1)**

<b>SN</b>	<b>Technical Specification</b>
<b>1</b>	Smart SFP modules (Channelized STM-1) should comply with multi-source agreement (MSA) and compatibility with offer Router/Metro Ethernet Equipment.
<b>2</b>	Smart SFP modules should support TDM traffic over Packet switched networks using Smart SFP transceivers.
<b>3</b>	Should support 10 km optical distance (1550 or 1310 nm).
<b>4</b>	Should have LC type connector
<b>5</b>	Should have SDH STM-1 capacities on single mode fiber.
<b>6</b>	Should support DDMI feature.
<b>7</b>	Should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.
<b>8</b>	Should have CE and FCC regulatory compliances.
<b>9</b>	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

#### **C. (SOR Item No-2) Technical Specification of Smart SFP modules (STM-4)**

<b>SN</b>	<b>Technical Specification</b>
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1	Smart SFP modules (STM-4) should comply with multi-source agreement (MSA) and compatibility with offer Router/Metro Ethernet Equipment.
2	Smart SFP modules should support TDM traffic over Packet switched networks using Smart SFP transceivers.
3	Should support 10 km optical distance (1550 or 1310 nm).
4	Should have LC type connector
5	Should have SDH STM-4 capacities on single mode fiber.
6	Should support DDMI feature.
7	Should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.
8	Should have CE and FCC regulatory compliances.
9	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

#### **D. (SOR Item No-3) Technical specifications of Server**

- (a) It should be possible to rack mount the server on a standard 19” rack and 600mm x 1000mm. All mounting hardware for the same shall be supplied by the contractor.
- (b) It should be equipped with a 2x Ten core or higher Intel/AMD processor.
- (c) It should have 256GB of DDR4 RAM working at 2400 MHz or higher.
- (d) It should have a 2x10 Gbps SFP + Ethernet Port and be equipped with SFP+ module of single mode OFC.
- (e) It should have a minimum of 2xUSB 3.0 ports and shall support booting from the USB port. It should be equipped with 6x960GB SSD nvme enterprise disks suitable for working on a 24x7 basis. It should be supporting RAID 0/1 and 5.
- (f) The server should support Ubuntu and Debian OS.
- (g) It should have Dual, Hot -Plug, Fully Redundant Power Supply (1+1).
- (h) OEM should be ISO 9001:2015 and ISO 14001:2015 certified.
- (i) Server should have ILO/IPMI Interface for remote management.

#### **E. (SOR Item No-4) Technical specifications of Layer-2 Switch (2x40G and 12x10G SFP+)**

- (a) Should have 2x40Gbps QSFP+ port and 12x10G SFP+ ports.
- (b) Should equipped with 6 nos SFP+(10KM) module and 6 nos SFP+ DAC Cable (5M).
- (c) Should be non-blocking with the switch fabric support at least 400Gbps.
- (d) Should be possible to mount it on a standard 19” rack and 600mm x 600mm. all mounting hardware for the same shall be supplied.
- (e) Should be manageable using telnet/ssh/HTTP.
- (f) Should support SNMP v1 and SNMP v2.
- (g) Should support STP, RSTP, MSTP and Link aggregation as per standard RFCs.
- (h) Should support Ethernet Link OAM as per IEEE 802.3ah.
- (i) Should support sFlow version 5.
- (j) Should have mechanism for handling broadcast storms and to protect against self-loops.
- (k) Switch shall support IEEE 802.1X Port Authentication, MAC-based Port Authentication and RADIUS According.
- (l) OEM should be ISO 9001:2015 and ISO 14001:2015 certified.
- (m) Should have regulatory compliance of UL/FCC/CE/TEC.
- (n) Should have EMC certification from any NABL accredited lab which is designated by TEC for safety testing of Telecom & IT Products.

**F. (SOR Item No-4) Technical specifications of SFP+ (10Km)**

SN	Description
1	Should be compatible with OEM equipment's like Cisco, Juniper, D Link, Zyxel, Edge Core and Extreme.
2	Should support 10 km optical distance (1550/1310 nm).
3	Should have LC type connector.
4	Should have 10 Gigabit Ethernet capacity on single mode fiber.
5	Should support DDMI feature.
6	OEM Should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.
7	Should have CE and FCC and UL regulatory compliances.
8	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)
9	Should support link budget of 10db (Link budget will be measure on 1310 nm wavelength )

**G. (SOR Item No-4) SFP+ DAC Cable (5 Meter)**

SN	Description
1	Should be compatible with OEM equipment's like Cisco, Juniper, D Link, Zyxel, Edge Core and Extreme.
2	Should support 5 meter distance .
3	Bidder shall offer SFP+ DAC with 5 meter distance OR 10GBASE-T SFP+ with 5 meter Copper RJ-45 patch cord supporting 10Gbps.
4	Should have 10 Gigabit Ethernet capacity .
5	Should be compatible with two different OEMs equipment's of same DAC cable at both end of connectors (in case of DAC cable).
6	OEM Should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.
7	Should have CE and FCC and UL regulatory compliances.
8	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

**H. (SOR Item No-5 & 6) Virtual route reflector with SVC Customer Support of 5 Years.**

SN	Feature	Description
1	Software Requirement	The software must have all the features to administer, manage, maintain and troubleshoot the network through the CLI/Netconf
		It must be possible to verify the software and firmware version of the system using CLI.
		The RR must support software version check using file size and check sum.
		The software must support audit logs for all activities carried out on the system like user logins, failed access attempts with source.
		Proposed solution should be Container based
		Software should be malware free and should have mechanism to detect the malware while uploading and downloading the OS versions

2	Protocol Support	RR must support dual-stack (IPv4 & IPv6)
		IS-IS (Intermediate system to intermediate system) support
		BGP4, Multiprotocol Extensions for BGP4
		LDP (Label Distribution Protocol)
		BGP-LU Support(RFC-3107)
		MVPN (Multicast VPN),EVPN Address family support
		BGP-MPLS VPN: (RFC 2547-bis, RFC 4364, RFC4659): It is required for carrying label information in MPLS & BGP-MPLS IP Virtual Private Network (VPN) Extension for IPv4/IPv6 VPN,L2VPN Support
		RR must support Bidirectional Forwarding Detection mechanism for all IGP, BGP, LDP
		RR must support Graceful Restart support for (ISIS, BGP, LDP)
		RR must support LDP-IGP Sync
		Support for BGPMON(BGP Monitoring) Protocol as per the RFC standard
		RR must support BFD for all routing protocol (IPv4/IPv6 transport) with min 10ms Hello Interval
		RR must support BGP <b>sharding</b> for faster Convergence
		RR must support Multi-Hop BFD Feature for ISIS,LDP,BGP
3	Feature	RR shall support the private addressing (RFC 1918)
		RR must support RFC 6589 IP address space
		RR shall support interoperability for various std. protocols with other vendor equipments.
		BGP,IS-IS Optimization should supported for fast convergence
		Authentication support for all routing protocol
4	Scalability	RR must support 2K IBGP Peer( ipv4 and ipv6 , all address family)(RR client and non-client)
		RR must be scalable up to 200M RIB by adding server resources
		RR shall be capable of supporting minimum 20M VPNv4/IPv4/ipv6/vpnv6/LU routes
		RR must support a routing table size of a minimum of 20K routes for IPv4 and IPv6.(IGP Routes)
		Should support at least 8K Peers along with all address families required
		Support for Different Update groups(Collection of peers with identical outbound policy)
5	Operational Requirement	RR should support BGP slow Peers dynamically
		In the event of full RR failure, a trace area must be maintained in non-volatile memory for analysis and problem resolution.
		A power down condition must not cause loss of RR configuration.
		The hardware and software must not pose any problems in the normal functioning of any network elements when interfacing with network for voice, data and transmission systems is required.
6	Security	Remote software and configuration download, backup of configuration without interruption of functioning of the RR via management system must preferably be possible including means of identification of software module versions.
		The RR must support RADIUS and TACACS for AAA requirement
		The RR must support shell functionality for remote login
		The RR must support at least one level of password protection feature.
7	Management Functionalities	The RR must support multiple levels of Management access privileges.
		All management should support on IPV6 only
		The RR must support industry standard Telemetry
		The RR must be able to support in-band and OOB management.
8	Configuration Management	The RR shall have SSH compliancy, the system shall be able to initiate an SSH session and also the clients shall be able to login to the system using SSH protocol.
		The RR must support configuration management through the Command Line Interface CLI/Netconf
		The RR shall support saving configuration to locally

		The RR shall support configuration upload/download through SFTP
		The RR shall support configuration rollback capability (minimum 10 instances of config) to recover from failures
9	Fault management	BGP sessions and Route flap information needs to be passed to central SYSLOG server
		Saving system messages on local media (like flash card, etc.)
		RR must support rich APIs
		The RR shall provide Telemetry based traps and Alarms.
		The RR must be capable of supporting extensive debugging, troubleshooting
		The RR shall support appropriate logging functionality on itself as well as on external source like Syslog servers. The RR must support event and system logging
10	Performance Management	The RR shall provide the performance monitoring attributes of a device (such as CPU utilization, Temp., Voltage, Memory utilization, in and out traffic, interface report, connection statistics).
11	Security Management	Multiple Privilege Levels shall be supported to provide different levels of access.
		RR shall support password encryption
		Per-user authorization and authentication locally as well as with external authentication services like RADIUS, TACACS etc.
12	Customer References (Service Provider)	Customer References for the proposed solution deployments with at least 2 telecom service provider customers

**I. (SOR Item No-7) Servers for Virtual route reflector as per technical specification defined in annexure-I.**

- (a) It should be possible to rack mount the server on a standard 19” rack and 600mm x 1000mm. All mounting hardware for the same shall be supplied by the contractor.
- (b) It should be equipped with a 2x Eight core or higher Intel/AMD processor.
- (c) It should have 64GB of DDR4 RAM working at 2400 MHz or higher.
- (d) It should have a 2x1Gbps Ethernet Port .
- (e) It should have a minimum of 2xUSB 3.0 ports and shall support booting from the USB port.It should be equipped with 2x960GB SSD nvme enterprise disks suitable for working on a 24x7 basis. It should be supporting RAID 0/1 .
- (f) The server should support Ubuntu and Debian OS.
- (g) It should have Dual, Hot -Plug, Fully Redundant Power Supply (1+1).
- (h) OEM should be ISO 9001:2015 and ISO 14001:2015 certified.
- (i) Server should have ILO/IPMI Interface for remote management.

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

**GM/NTP  
RailTel Corporation of India Ltd.**

**Dated: .....**

.....  
.....  
.....

**Applicable for OEM directly participating in the Bid.**

I / We ..... hereby confirm that we have read specifications & conditions of GeM Bid No .....and accept that the requirement of Long Term Maintenance Support as per Clause 17 shall be met by us **directly or through our subsidiary in India** as per rates quoted in the Price Bid. I / We shall provide services as per terms and conditions pertaining to Long Term Maintenance Support of tender document.

Or

**Applicable for Authorized Distributor/Partner of OEM**

I / We ..... hereby confirm that we have read specifications & conditions of GeM Bid No .....and accept that the requirement of Long Term Maintenance Support as per Clause 17 shall be met by Authorized Distributor/Partner of OEM. However, if the Authorized Distributor/Partner fails to fulfill the support obligation due to any un-foreseen circumstances, the same shall be provided by us **directly or through our subsidiary/Partner in India for the mentioned/remaining period at the quoted prices by the bidder. I/We have gone through the requirement mentioned in the Bid Document and shall provide services as per terms and conditions pertaining to Long Term Maintenance Support of Bid document.**

(Signature of Firm's Authorized Officer)

Seal

Signature of witness:

.....  
.....

Note: Please Strike out whichever is not applicable.

**GM/NTP  
RailTel Corporation of India Ltd.**

**Dated: .....**

.....  
.....  
.....

**Subject: Manufacturer Authorisation form (MAF) to M/s ..... for .....**  
**Ref: GeM Bid No.....dated.....**

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 bid and subsequently upon award of the bid  
to execute the supply and Installation & Commissioning of 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 FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONGWITH 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 (-----Railway), 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 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 along with 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 besides banning of business for five year on entire IR. 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, alongwith forfeiture of EMD/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 insuitably by tenderer. Attestation before Magistrate/Notary Public.

**PROFORMA FOR PERFORMANCE BANK GUARANTEE BOND**

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

1. In consideration of the RailTel Corporation of India Limited, having its registered office at Plate A, 6<sup>th</sup> Floor, Office Block Tower -2, East Kidwai Nagar, New Delhi-110023 (Herein after called RailTel) having agreed to exempt .....(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 , ..... Bank do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on demand from the RailTel stating that the amount is claimed is due by way of loss or damage caused to or would be caused to or suffered by the RailTel by reason of breach bythe 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 madeon the Bank shall be conclusive as regards the amount due and payable by the Bank underthis 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 effect of so relieving us. This Guarantee will not be discharged due to the change in the Constitution of the Bank or the Contractor(s) / Bidder(s).

We, the ..... (bank ) further agree that this guarantee shall be invocable at our place of business of ...../New Delhi (indicate detailed address of local of New Delhi Branch with code no.). The branch at New Delhi is being advised accordingly.

(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.

Dated the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_

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

**Witness**

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**PROFORMA FOR “SYSTEM PERFORMANCE GUARANTEE”**

(On Stamp Paper of Rs. One Hundred)

**(To be signed by the Bidder as well as the OEM’s)**

To

**RailTel Corporation of India Limited,**

**CO Office, East Kidwai Nagar,**

**New Delhi-110023.**

**Ref: GeM Bid No.....dated.....**

**Applicable for Bidder/OEM(s) directly participating in the tender**

Dear Sir,

I / We ..... hereby guarantee that the design on the basis of which we have submitted our tender no. .... has been carefully made to conform to the end objectives in the tender documents and to technical specification therein. We further guarantee that in the event of the performance of the system, when installed, not complying with the end objectives or with the specifications contained in the tender documents, we shall provide further inputs to enable the RailTel to realize the end objectives contained in these documents without any additional payment for any additional equipment which may be required in this regard. We further guarantee that all the expenses for providing the additional inputs under the System Guarantee will be borne by us. We further guarantee that these additional inputs will be provided by us to make the system workable within 1 month from the date on which this guarantee is invoked by the Purchaser. The guarantee is valid for a period of one year from the date of commissioning of the system.

(Signature of Firm’s Authorized Officer)  
Seal

Signature of witness:

1. ....

2. ....

**Or**

**Applicable for OEM(s)**

I / We ..... hereby guarantee that the design on the basis of which we have submitted our tender no. .... has been carefully made to conform to the end objectives in the tender documents and to technical specification therein related to OEM’s scope. We further guarantee that in the event of the performance of the system, when installed, not complying with

the end objectives or with the specifications contained in the tender documents as per OEM's scope, we shall provide further inputs to enable the RailTel to realize the end objectives contained in these documents without any additional payment for any additional equipment which may be required in this regard. We further guarantee that all the expenses for providing the additional inputs under the System Guarantee will be borne by us. We further guarantee that these additional inputs will be provided by us to make the system workable within 1 month from the date on which this guarantee is invoked by the Purchaser. The guarantee is valid for a period of one year from the date of commissioning of the system.

(Signature of OEM's Authorized Officer)

Seal

Signature of witness:

3. ....

4.

**FORMAT FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONGWITH 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, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/We the tenderer (s), am/are signing this document after carefully reading the contents.
2. I/we the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. 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 RailTel Administration shall be final and binding upon me/us.
4. I/We declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted alongwith the offer and same shall be binding upon me/us.
6. 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.
7. I/We undersigned that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besides banning of business for five years in RailTel. Further, I/we (insert name of the tenderer)\*\* \_\_\_\_\_ and all my/our constituents understand that my/our offer shall be summarily rejected.
8. I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, alongwith forfeiture of EMD/SD and Performance Guarantee besides any other action provided in the contract including banning of business for five years in RailTel.

**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