Information to Bidder for the "Procurement of Electronics items-25-26/02 through GeM".

Ref: GeM Bid No. GEM/2025/B/6147989 dated: 17.04.2025

• The item/items in this bid should be quoted as per the technical specifications. The details of the specifications along with consignee/site details are also available on website www.railtelindia.com.

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

- 1. In the specification wherever support for a feature has been asked for, it will mean that the feature should be available without RailTel requiring any other hardware/software/licenses. Thus, all hardware/software/licenses required for enabling the support/feature shall be included in the offer. The technical specifications are mentioned in Annexure-I.
- 2. OEM or Authorized distributor/Partner of OEM should have a registered office in India to provide sales and 24x7 support in India. The certificate to this effect should be submitted. The bidder should be either OEM or his authorized dealer/distributor.
- **3.** In case of the authorized distributor/partner certificate from the OEM to this effect should be submitted. If OEM is quoting then OEM should submit the certificate. In the tender, either the manufacturer or its authorized dealer will be considered as valid bidders. In cases where the manufacturer has submitted the bid, the bids of its authorized dealer will not be considered and EMD will be returned. And in case of violations, both infringing bids will be rejected.
- **4.** The equipment offered shall have complete data sheets and detailed description on OEM web sites.
- **5.** Bidder shall submit the detailed BOM of the equipment offered duly verified and certified by the respective OEM.
- **6.** GST Registration Certificate of vendor should be provided.
- 7. Delivery Period, Consignee Address, Inspection and Installation:
- **7.1 Delivery Period**: The supplier will have to supply the material within 90 days from the date of issue of confirmed LOA/PO. If material is not supplied within the approved delivery period then penalty of 0.5% of undelivered/uninstalled quantity per week to the maximum to the 10% of the contract value will be levied.

7.2 Consignee Address:

Sr. Manager/Stores,

RailTel Office, Thomson Road, New Delhi,

Northern Region.

Note: In addition to the above consignee address i.e. Regional store, bidder may also be required to send items to RailTel Northern Region Territory stores/sites, without any cost to RailTel.

7.3.1 Inspection: Inspection shall be carried out by authorized representative of RailTel's.

- 8. Estimated cost of Tender & Earnest Money Deposit (EMD)/Bid Security:
- 8.1 Estimated cost of Tender: Estimated cost of the Tender is Rs. 2,65,82,186/- (Incl. GST).
- **8.2** Earnest Money Deposit (EMD)/ Bid Security: Earnest Money Deposit (EMD)/ Bid Security: Bid Security: **Rs. 5,31,700**/- in the form of Pay Order/ Demand Draft drawn in favor of RailTel Corporation of India Ltd. payable at New Delhi on or before 15:00 Hrs of Bid Opening Date. The Bid received without EMD will be summarily rejected.
- 8.3 In addition to clause 8.2 above, Tenderer has an option for online submission of EMD through NEFT/RTGS also. The EMD should be remitted in following account of RailTel Corporation of India Limited before the stipulated time and date of bid submission:

Name of bank & address	Union Bank of India, 14/15-F, Connaught Place, New Delhi- 110001.
Name of Account holder	RAILTEL CORPORATION OF INDIA LIMITED N R COLLECTION A/C (RCIL)
Account No.	307801010917906
IFSC Code	UBIN0530786
Branch/MICR Code	Connaught Place/110026006

- **8.4** The EMD/Bid Security shall be taken from all tenderers against advertised tenders subject to the following exemptions:
 - a. Tender cases of value up to Rs. 5 (five) Lakhs.
 - b. Micro and Small Enterprises (MSEs) registered under Udyam Registration.
 - c. Startups as recognized by Department of Promotion of Industry and Internal Trade (DPIIT).

Note: In case the tenderer falls in these categories, the bidder should furnish a certified copy of its valid registration details and Bid Security Declaration. Except for MSEs, this exemption is valid for the trade group and monetary value of registration only. The Bid Security Declaration format is atatched as Annexure-IX.

9. This bid complies with "Public Procurement (preference to make in India) Policy Order, 2017 issued by DIPP and Public Procurement Policy for Micro and Small Enterprises (MSEs) order,2012" issued by MoSME."

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

10. Security Deposit/Performance Guarantee:

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

- i. Security Deposit/Performance Bank Guarantee@5% of total value of Purchase Order is required to be submitted within 30 days of issue of Purchase Order with validity of 3 months beyond warranty period, failing which a penal interest of 15% per annum shall be charged for the delay period i.e. beyond 30 (thirty) days from the date of issue of LOA/PO.
- ii. The security deposit/PBG shall be submitted to RCIL/RO/NR, Shastri Park, Delhi.
- 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. RailTel's Bank Details for BG SFMS Report are as under:

Name of bank & address	ICICI Bank
Name of Account holder	Railtel Corporation of India Limited
BG Advising Message	IFN 760COV/IFN 767COV via SFMS
IFSC Code	ICIC0000007
Unique Reference in field 7037	RAILTEL6103

iv. 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 New Delhi.

Note 1: In case value of BG comes to Rs. 5 Lakhs or less, same should be submitted online through NEFT/RTGS only.

Note 2: In case of change in the value of Security Deposit/Performance Guarantee as per latest guidelines issued by GoI, bidder has to submit the revised BG accordingly.

11. Eligibility Criteria for OEM (Tele-Presence End-Points, Switch and SFP's):

• The equipment offered by the OEM or equipment of the same series/family from the same OEM should have been satisfactorily working in Government /PSUs/Telecom Service Providers network for at least 12 months as on opening of bid, in India or Abroad. The certificates from the actual users will have to be submitted online.

- The OEM should have supplied at least 35% of the tendered quantity (rounded to the nearest whole number) of the equipment offered or equipment of the same series/family during last preceding 3 financial years (i.e. current year and three previous financial years) as on opening of bid to Government/PSUs/Telecom Service Providers. OEM should submit self-certificate with proper contact detail of clients along with quantities supplied (Firm Name, Contact person, Designation, Telephone Number, Fax, Official mail id etc.). The same should be issued by authorized signatory.
- The OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing of Tele-Presence End-Points, Switch and SFP's and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Repair, Service Center Supports for at least past three years in the country from where the proposed equipment are planned to be supplied. In case OEM is located outside India, it should have training repair and service center facilities in India also. The certificates/Undertaking for the same will have to be submitted online.

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

12. Eligibility Criteria:

12.1 Technical Eligibility for Bidder:

The tenderer must have successfully completed any of the following during last 03 (three) years, ending last day of month previous to the one in which tender is invited:

- Three similar works# each costing not less than the amount equal to 15% of advertised value of the tender, or
- Two similar works# each costing not less than the amount equal to 20% of advertised value of the tender, or
- One similar work # costing not less than the amount equal to 35% of advertised value of the tender.

Satisfactory Performance certificate issued by respective Buyer Organization for the above Orders should be uploaded with bid.

#Similar Work# Supply/Supply and Installation of Tele-Presence End-Points/Switch/SFP's for any Government department or Public Sector Units or public listed companies (as per note below).

Note: Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organization, PSU or any reputed TELCO, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of opening of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates. In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate

12.2 Financial Criteria for Bidder:

The tenderer must have received total contractual payments/operating turnover in the previous three financial years and the current financial year up to the date of inviting of tender, at least 150% of the advertised value of the tender. The tenderers shall submit Certificates to this effect which may be an attested Certificate from the concerned department / client or Audited Balance Sheet /Certificate from Chartered Accountant duly supported by Audited Balance Sheet. (Note: Client certificate from other than Govt. Organization should be duly supported by Form 16A/26AS generated through TRACES of Income Tax Department of India).

12.2.1 Financial Eligibility Criteria of Startup:

The tenderer must have received total contractual payments/operating turnover in the previous three financial years and the current financial year up to the date of inviting of tender, at least 50% of the advertised value of the tender. The tenderers shall submit Certificates to this effect which may be an attested Certificate from the concerned department / client or Audited Balance Sheet /Certificate from Chartered Accountant duly supported by Audited Balance Sheet. (Note: Client certificate from other than Govt. Organization should be duly supported by Form 16A/26AS generated through TRACES of Income Tax Department of India).

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

12.3 The Bidder should be OEM or System Integrator authorized by OEM for Supply, Warranty/AMC Support for the Tele-Presence End-Points, Switch and SFP's.

In case of System Integrator, Bidder should have authorization specific to this tender from Tele-Presence End-Points, Switch and SFP's OEM as per Annex-IV.

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

14. Warranty:

14.1 The materials are to be warranted for 3 years from the date of delivery to the consignee. The supplier shall warrant that stores to be supplied shall be new and free from all defects and faults

in material, workmanship and manufacture 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 Cards/Modules requirements, inadequate contact protection, deficiencies in design and/ or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty.

14.2 SLA:

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

15. Purchaser's Right to Vary Quantities:

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

- (A) Upto maximum extent of +/- 50% subject to following condition
 - i. Upto +25% with no rebate.
 - ii. From +25% to +40% with 2% rebate
 - iii. From +40% to +50% with 4% rebate
 - (B) For variation beyond +50% of the quantity mentioned in the SOR may be done after proper negotiation with the selected bidder.
 - (C) AMC rates for items under Variation Order will be at same percentage as finalized in the main contract.
- 16. Hardware and Software offered by OEM (Tele-Presence End-Points, Switch and SFP's) should have End of Life (EOL) not less than 08 years from the date of Supply. The bidder is required to submit compliance to this clause as per Annexure-VI.
- 17. Payment Terms:-
- 17.1 For Supply Items:

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

The following documents are to be submitted for payment:

- Original Tax Invoice. (With separate Tax amount, containing POS, RailTel GSTN and Supplier GSTN).
- Delivery Challan.
- E-Way Bill.
- Original Consignee receipt.
- Original Inspection Certificate.
- Transit Insurance Certificate.
- Warranty Certificate of OEM.
- Proof of SD/PG submitted.
- Certificate of receipt of Goods in Good Condition.
- Declaration of non-applicability of e-invoicing, if applicable.
- Declaration regarding 206AB/206CCA of IT act.
- 17.2 Bill Passing Authority will be GM/P&I/NR and Bill Paying Authority will be Sr. DGM/Finance/NR.

Note: All the documents related to payment has to be submitted in RailTel Vendor Bill Tracking System (BTS).

18. The tenderers shall submit a notarized affidavit on a non-judicial stamp paper stating that they are not liable to be disqualified and all their statement/documents submitted along with bid are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as Annexure-V. Non submission of an affidavit by the bidder shall result in summarily rejection of his/their bid. And it shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self attested by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. It will not be obligatory on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned.

The RailTel (RCIL) reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the RailTel (RCIL), make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification by the RailTel (RCIL) shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the railway thereunder.

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

19. Power of Attorney:

Power of attorney in favor of the signatory duly authorizing the signatory shall be submitted online before the due date and time of submission of the e-Tender and Original copy is needed to be submitted by the successful bidder before issuance of PO.

20. On line Submissions:

The bidder is	s required to	upload and	d submit	the following	documents	on line	e before	due date	e &
time of bid.	The due date	& time for	closing	of the bid is _	Hrs of _		and	the bid	wil
be opened at	Hrs of	··	_•						

- (i) Offer letter as per Annexure-II.
- (ii) EMD Submission details.
- (iii) BOQ of offered equipment.
- (iv) Clause wise compliance along with all mentioned documents/annexures for all clauses of GeM Bid and ATC documents.
- (v) Data Sheet of offered equipment.
- (vi) Financial (Certified copies of audited balance sheets/annual reports of last three preceding financial years) and Technical Eligibility Criteria documents.
- (vii) Technical Compliance of all Specification of items as per GeM Bid and ATC documents.
- (viii) Certificate from the End user against the Eligibility criteria for OEM para 11.
- (ix) Proof of document required against Eligibility criteria of OEM and Bidder vide para 11 & 12 respectively.
- (x) OEM Declaration for (Tele-Presence End-Points, Switch and SFP's) should have End of Life (EOL) as per Annexure-VI.
- (xi) MAF/OEM Authorization as per para 12.3 and Annexure-IV.
- (xii) Notarized affidavit on a non-judicial stamp paper as per Annexure-V.
- (xiii) Compliance to clause 16 as per Annexure-VI.
- (xiv) Certificate as per Annexure-VII.
- (xv) Nil Deviation as per Proforma attached in Annexure-VIII.
- (xvi) Bid Security Declaration as per Annexure-IX.
- (xvii) Power of Attorney as per clause 19.

Note: 1) The bidder is required to give acceptance of all the clauses mentioned in the "Information to the Bidders" document is mandatory. Any deviation / non-acceptance may lead to rejection of the bid.

- 2) Information to Bidder viz. corrigendum /addendum/ amendments etc. for this bid shall be posted on www.railtelindia.com only.
- 3) This bid is governed by the Specific Additional Terms & Conditions and General Terms & Conditions laid down by the GeM against GeM Bid No: _____.

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

Technical Specifications

1. All Equipment should be:

- i. With 3 Years Warranty.
- ii. Equipped with necessary hardware/software to comply all above required/support features.
- iii. Back-to-Back warranty with respective OEMs for both Hardware and Software. The certificates/Undertaking for the same will have to be submitted along with bid from respective OEM. Hardware and Operating System for Network Devices should be from the same OEM. Disaggregated solution shall not be acceptable.
- iv. OEMs should have their spare depots in India and location & address for same need to be submitted.
- v. OEMs should have 24*7 TAC support in India. Relevant document in support of the same shall be submitted.
- vi. Bidder/OEM can offer third party grey optics, but it should be fully compatible with the offer equipment.
- vii. UL, CE and FCC Certification is not required for PMA. However, they have to produce certificate from standard lab approved/ authorized by Govt. of India that their product are equivalent to UL, CE and FCC and meets all standard and specification of UL, CE and FCC.

2. SOR wise details are as:

SOR	Item Description	Units	Qty.
SOR-1	Supply of Tele-Presence End-Points as per technical specifications of SOR-1 of Information to Bidder.	No.	24
SOR-2	Supply of EDFA-Amplifier-Booster as per technical specifications of SOR-2 of Information to Bidder.	No.	6
SOR-3	Supply of Switch as per technical specifications of SOR-3 of Information to Bidder.	No.	21
SOR-4	Supply of SFP Type-I as per technical specifications of SOR-4 of Information to Bidder.	No.	28
SOR-5	Supply of SFP Type-II as per technical specifications of SOR-5 of Information to Bidder.	No.	6
SOR-6	Supply of SFP Type-III as per technical specifications of SOR-6 of Information to Bidder.	No.	43
SOR-7	Supply of SFP Type-IV as per technical specifications of SOR-7 of Information to Bidder.	No.	28
SOR-8	Supply of SFP Type-V as per technical specifications of SOR-8 of Information to Bidder.	No.	24

SOR-9	Supply of SFP Type-VI as per technical specifications of SOR-9 of Information to Bidder.	No.	74
SOR-10	Supply of SFP Type-VII as per technical specifications of SOR-10 of Information to Bidder.	No.	20
SOR-11	Supply of SFP Type-VIII as per technical specifications of SOR-11 of Information to Bidder.	No.	4
SOR-12	Supply of SFP Type-IX as per technical specifications of SOR-12 of Information to Bidder.	No.	36
SOR-13	Supply of SFP Type-X as per technical specifications of SOR-13 of Information to Bidder.	No.	6
SOR-14	Supply of SFP Type-XI as per technical specifications of SOR-14 of Information to Bidder.	No.	8
SOR-15	Supply of SFP Type-XII as per technical specifications of SOR-15 of Information to Bidder.	No.	2
SOR-16	Supply of SFP Type-XIII as per technical specifications of SOR-16 of Information to Bidder.	No.	33
SOR-17	Supply of SFP Type-XIV as per technical specifications of SOR-17 of Information to Bidder.	No.	10
SOR-18	Supply of SFP Type-XV as per technical specifications of SOR-18 of Information to Bidder.	No.	28
SOR-19	Supply of Charger as per technical specifications of SOR-19 of Information to Bidder.	No.	14
SOR-20	Supply of Battery as per technical specifications of SOR-20 of Information to Bidder.	Set	4
SOR-21	Supply of Rack as per technical specifications of SOR-21 of Information to Bidder.	No.	6
SOR-22	Supply of Patch Cord Type-I as per technical specifications of SOR-22 of Information to Bidder.	No.	332
SOR-23	Supply of Patch Cord Type-II as per technical specifications of SOR-23 of Information to Bidder.	No.	54

Technical Specification of SOR Items

SOR-1: Tele-Presence End-Points

SN	Category	Specification	RailTel Requirement
1		Type of Endpoint	Point to Point /upgradable to 1+3
2	General	Does it require mandatory registration with MCU/Gatekeeper	Supported
3		Codec supports minimum 1080p 60fps. Video Conferencing system resolution	up to 1080p (Full HD)
4		Minimum Bandwidth required for Specified video quality at End point/farsite-end	1 Mbps
5		Type of Camera	PTZ
6		Camera Positioning System	Supported
7	Camera	Type of sensor	CMOS
8		Camera, Camera Control (focus, brightness, white balance) should be	Automatic or Automatic and Manual
9		Multiple Camera System	Single
10		Optical Zoom	12x or more
11		Digital Zoom	NA
12]	Field of View at Zoom	70
13		Pan range Minimum to Maximum (+/- Degree)	(+/-)130
14		Tilt Range (Degree)	90, -20
15		Power Cord and Connector to be supplied for codec and camera	Yes
16		System delivers Full HD video and voice and Full HD Content for an over Full HD/ 1080P experience at specified bandwidth	Yes
17	Audio/Video	Audio/Video Specs, I. Call must to established using H.265 /H.264 video codecs. Same to be shown in call statistics	H.265/H.264
18	Specs	System has G 722, G 711, G729 or equivalent wideband audio coding support	Yes

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19		It is possible to see both the near and far site on one screen thus making most efficient use of single display area	Yes
20		System is equipped with one or more omni directional microphones as required to cover large conference room Mic should have a pickup of at least 10ft	Yes
21	-	Min. Number of Microphone Supplied (Port)	2 (3 ports)
22		Min. Number of camera support from the same OEM	1
23	Network Parameters	Min. Number of Ethernet connection points for System supports for RJ-45, 10/100/1000 Mbps Base-T Ethernet connection	Yes
24		Wi-Fi Connectivity	Yes
25		If Yes, Type of Wi-Fi connectivity	Wi-Fi 802.11a/b/g/n/ac
26	Encryption	System supports AES Encryption video calls, system has encryption on and off facility	Yes
27	31	Video Codec shall support 16:9 format	Yes
28	-	Power Supply 230 + or - 10% volts, 50 Hz	Yes
29		Shall come with easy to use infra-red hand held remote control/Touch panel with operating distance	Yes
30	_ Peripherals	All equipment are in compliance with the requirements of ITU-T (SIP Protocol and H.323) standard related to video conferencing, BFCP and H.239 for content sharing	Yes
31	-	System to IPv6 ready from Day One	Yes
		System uses standard based protocols and the offered system is inter operable with existing H.323 AVC/SVC based equipment in a P2P call on VC endpoint. All H/w and s/w required to make it interoperable is included in scope of supply	

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Min. Number of Input DVI Ports	
	0
Min. Number of Input HDMI /HDCI ports	2
Min. Number of Output HDMI ports	2
Min. Number of Input USB ports	1
System supplied complete with the following components a) Codec b) Camera	
c) 2 Microphones with suitable connectivity of length 15 mtr d) Touch panel e) Necessary cables (including 15 Mtrs HDMI cable content sharing -1 nos)	Yes
Microphone type	Omnidirectional
BIS Registry under CRS of MeitY	Yes
UL/CE Certification	Yes
Min Operating temperature (Deg C)	0
Max Operating temperature (Deg C)	35 or more
Peripherals, Min Operating/ non operating humidity (%RH),	15 or better.
Peripherals, Max Operating /non operating humidity (%RH)	80
Free installation and commissioning	NA
On Site OEM warranty (Years)	3
Audio 3.5 mm stereo line in/out jacks for integration with External Audio System	Yes
USB Support for integration with PC for sharing codec mics and camera	NA
System has Automatic Noise Suppression, Echo cancellation	Yes
Management access to Codec via Web, SSH/Telnet for min 2 users	Yes

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51		System supports external cameras via USB / HDMI and Consumer Electronics Control (CEC).	Yes
52	-	System supports FECC	Yes
53		Should Support standard Packet loss recovery/packet loss based down speeding	Yes
54		The proposed solution should be interoperable with the existing video conferencing solution present in Railtel network:	Yes
55	Integration of the device with the existing TPaaS infrastructure at Railtel	The Proposed VC endpoints should seamlessly integrated with existing Central VC system (MCU- Cisco Meeting server -2000, Gatekeeper and Scheduler) and shall be able to access the devices 24/7 for operations, software updating, change request and reporting through monitoring Server, In case existing infra not supporting the remote configuration and Provisioning, Bidders should supply and install central infra (Scheduler/Manager with adequate licenses), without any additional cost in both DC and DR	Yes
56		The existing central management system	Yes
		should be able to remote configure and take backup of the configuration of the proposed VC endpoints	
57		Provision is kept in tender document for supply and installation of central infra to do provisioning and configuration of the proposed endpoints.	Yes
58	Web Interface Support	The options mentioned here should be present in the web interface.	Yes
59		i) It should support registration over SIP and H.323 on Cisco Video Communication Server version 8.1 or higher.	Yes

60		ii) It must be inter-operable with Cisco meeting server version 3.1 and Content sharing over both SIP and H.323.	Yes
61		iii) Audio: It should be possible t unmute control. The echo contro automatic or be available for adj	Yes
62		iv) Camera: Backlight, Zoom and adjustment, automatic snapshots to be shown on webpage	Yes
63		v) Conference: Auto answer, Call Protocols: H.323 and SIP settings, Default protocol, Call Rate, Do Not Disturb control, video channel rate, phonebook etc.	Yes
64		vi) Network: DHCP, IPv4, IPv6, MTU, QoS, DNS, HTTP/HTTPS, SNMP, NTP, Telnet/SSH	Yes
65		vii) Security: User control, Loggi settings, logs (audio, video, call	Yes
66		viii) System Settings: Name, Lan	Yes
67		ix) Video IN/OUT: Quality, Resolution, Multiple display mode, Remote operation, Self view settings	Yes
68		x) Active Call Monitoring: Call Inf used, transmit/receive rate, A/V Frame rate, encryption mode.	Yes
69	Local Setting	Manual IP configuration on codec using remote control/touch panel	yes
70	Software upgrade	Bidder/OEM should provide software Upgrade/update during warranty period without any additional cost	Yes

SOR-2: EDFA-Amplifier-Booster

SN	Specification
1	Single channel amplifier with high output power and low noise figure
2	Optical, Booster Amplifier, 17dBm output power, C band, -48V DC, SC connector, 1RU
3	Operating wavelength range (nm) (Min/Typ/Max): 1530/1550/1565
4	Input Optical power (Min/Max): -6/3 dBm
5	Output Optical power (Min/Max): 17/17.5
6	Noise Figure (dB): 5
7	Operating temperature : -5 to 55 deg C
8	Storage temperature : -25 to 70 deg C
9	RoHS compliant

SOR-3: Switch

SN	Specification
1	Should have minimum 24 x GE SFP based ports.
2	Should have minimum 4 nos. SFP+ based 10 GE ports.
3	Should have at least 64 Gbps full duplex line rate traffic.
4	Should have support for 802.3x flow control.
5	Should support 802.1D spanning tree control/RSTP support and MSTP support.
6	Should support management features viz. Web-based GUI/SSH, SNMP, TFTP Client System Log.
7	Should support Auto MDI-II/MDI-X uplink for all the twisted pair ports.
8	Should support 802.1Q VLAN, 802.1p Priority queues.
9	Should support port mirroring, jumbo frame & should have at least 16K MAC address
10	Should support console port and telnet-based management.
11	Should have power supply arrangement as given below in chassis without any external adaptors with redundant power supply (RPS): (i) AC power supply 100 to 240 V AC with 50 to 60 Hz (ii) -48 V DC Supply
	DC power supply should work as a redundant power supply to power on the switch in case failure of AC power supply.
12	Should support Port-based VLAN, 802.1Q Tagged VLAN along with Management VLAN
13	Should support ITU-T G.8032 Ethernet Ring protection for Loop Protection and fast convergence time (Sub 50 ms) in ring topologies/ IEEE 802.1W RSTP for Sub Second failover. Industry Standard IEEE 802.1W RSTP is standard for Ring /STP topology.
14	Switch should support Surge Protection on power input and on Ethernet ports as per EN61000-4-

	5 standard and as per requirement at Indian Railway Station.	
15	Should support Quality of Service (QoS) features viz. Priority Queue, Class of Service (CoS), Rate Limiting (Bandwidth Control), Strict Priority Queue (SPQ), Weighted Round Robin (WRR) or better, DOS attack prevention.	
16	IPv6 feature should be ready from day 1.	
17	Minimum Operating Temperature 0 to 50 degree.	
18	It should have safety certificates as per UL/IEC/EN 60950. The switch should have EMC certification as per EN/CE/FCC standards.	
19	Switch shall be with Rack Mountable clamps for standard 19-inch rack mountable.	
20	The Switch shall be designed for continuous operations.	
21	Should support port Trunking of at least 2 Nos. GE/10GE ports.	
22	Switch should support LLDP or similar functionality.	
23	Should support following security features viz.:	
	 i) SSL (HTTPS)/SSH, ii) Broadcast/Multicast/Unicast Storm Control, iii) DoS Attack Prevention/ DAI 	
24	Switch should support following SNMP traps or syslog	
	 i) Interface UP & Down ii) Optical Power SFP threshold alarms iii) STP Topology Changes and New root bridge iv) LLDP table changes 	
	Note:- In the specification wherever support for a feature has been asked for, it will mean that the feature should be available without RailTel requiring any other hardware/software/licenses. Thus, all hardware/software/licenses required for enabling the support/feature shall be included in the offer.	

SOR-4: SFP Type-I (1G-BIDI-40KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.
2	Should support 20-40 km optical distance on single fiber
3	Should have LC type connector.
4	Should have 1 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 regulatory compliances.
8	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

SOR-5: SFP Type-II (1G-Dual Fiber-10KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.
2	Should support 10 km optical distance (1550/1310 nm) on dual fiber.
3	Should have LC type connector.
4	Should have 1 Gigabit Ethernet capacity on single mode fibre.
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 regulatory compliances.
8	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

SOR 6: SFP TYPE-III (SFP-1G-Dual Fiber-40 KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.
2	Should support 20-40 km optical distance (1550 nm) on dual fiber.
3	Should have LC type connector.
4	Should have 1 Gigabit Ethernet capacity on single mode fibre.
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 regulatory compliances.
8	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

SOR-7: SFP Type-IV (1G-Dual Fiber-80KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.
2	Should support 80 km optical distance (1550/1310 nm) on dual fiber.
3	Should have LC type connector.
4	Should have 1 Gigabit Ethernet capacity on single mode fibre.
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 regulatory compliances.
8	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

SOR-8: SFP TYPE-V (SFP-10G-BIDI-10 KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.
2	Should support 10 km optical distance on single fiber.
3	Should have LC type connector
4	Should have 10 Gigabit Ethernet capacities on single mode fiber.
5	Should support DDMI feature. Option should be available for both SFP+ and XFP
6	Should should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.
7	Should have CE and FCC regulatory compliances.
8	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

SOR-9: SFP Type-VI (SFP+ 10G BIDI - 40 KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.
2	Should support 20-40 kms optical distance on single fiber
3	Should have LC type connector
4	Should have 10 Gigabit Ethernet capacities on single mode fiber.
5	Should support DDMI feature. Option should be available for both SFP+ and XFP
6	Should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.
7	Should have CE and FCC regulatory compliances.
8	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

SOR-10: SFP Type-VII (SFP+ 10G-BIDI-60 KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.

2	Should support minimum 60 km optical distance on Single Fiber (ITU-G 652D) (Bi Directional on Single Mode Fiber).
3	Should have LC type connector.
4	Should provide quantity in such a way that matching pair (BX U & D) can be achieved.
5	Should have 10 Gigabit Ethernet throughput on single mode fiber.
6	Important Parameters: A. Link Budget (Max Tx Power- Receiver Sensitivity) 25 dB or better. B. Transceiver supply voltage: 3.3 V (Nominal) C. The case operating temperature -0 Degree Centigrade to +70 Degree Centigrade. D. The storage Temp: -40 Degree Centigrade to +85 Degree Centigrade E. Wavelength- 1270/1330 or 1310/1550 or 1490/1550 (Nominal)
7	Should support Digital Diagnostic Monitoring (MSA-SFF 8472 Compliant) feature with following operating parameters: A. Transceiver temperature B. Laser bias current C. Launch Optical Power D. Received optical power E. Transceiver supply voltage: F. It will provide alarm and warning flags to alert the user when particular operating parameters are outside of a factory set normal range.
8	Complies with SFF-8431/8432 SFP+ MSA (Multi-Source Agreements Standards)
9	Applications- 10 Gbps Ethernet
10	Performance Certificate: The bidder will submit a satisfactory performance certificate from Telecom Service Provider/ISP/Govt/PSU for the offered make of the SFP.
11	A. EMI/EMC compatible with FCC/EN/IEC B. Laser Safety compatible with FDA/EN/IEC C. RoHS compliant

SOR-11: SFP Type-VIII (10G-BIDI-80 KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.
2	Should support minimum 80 km optical distance on Single Fiber (ITU-G 652D) (Bi Directional on Single Mode Fiber).
3	Should have LC type connector.
4	Should provide quantity in such a way that matching pair (BX U & D) can be achieved.
5	Should have 10 Gigabit Ethernet throughput on single mode fiber.
6	Important Parameters: A. Link Budget (Max Tx Power- Receiver Sensitivity) 27 dB or better.

	B. Transceiver supply voltage: 3.3 V (Nominal)		
	C. The case operating temperature 0 Degree Centigrade to +65 Degree Centigrade.		
	D. The storage Temp: -40 Degree Centigrade to +85 Degree Centigrade		
	E. Wavelength- 1270/1330 or 1550/1310 or 1490/1550		
	Should support Digital Diagnostic Monitoring (MSA-SFF 8472 Compliant) feature with		
	following operating parameters:		
7	A. Transceiver temperature		
	B. Laser bias current		
	C. Launch Optical Power		
	D. Received optical power		
	E. Transceiver supply voltage:		
	F. It will provide alarm and warning flags to alert the user when particular operating		
	parameters are outside of a factory set normal range.		
8	Complies with SFF-8431/8432 SFP+ MSA (Multi-Source Agreements Standards)		
	A 11 - 1 - 10 01 - F11		
9	Applications- 10 Gbps Ethernet		
	Regulatory Compliance		
10	Regulatory Compilance		
	A. EMI/EMC compatible with FCC/EN/IEC		
	B. B Laser Safety compatible with FDA/EN/IEC		
	C. RoHS compliant		
	C. Itorio compitant		

SOR-12: SFP Type-IX (10G-Dual Fiber-10KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.
2	Should support 10 kms optical distance on dual fiber
3	Should have LC type connector
4	Should have 10 Gigabit Ethernet capacities on single mode dual fiber.
5	Should support DDMI feature. Option should be available for both SFP+ and XFP
6	Average Launch Power -7 dBm or better
7	Receiver Sensitivity -11 dBm or better
8	Should should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.
9	Should have CE and FCC regulatory compliances.
10	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

SOR-13: SFP Type-X (10G-Dual Fiber-20KM)

SN	Description
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.

2	Should support 10-20 kms optical distance on dual fiber
3	Should have LC type connector
4	Should have 10 Gigabit Ethernet capacities on single mode dual fiber.
5	Should support DDMI feature. Option should be available for both SFP+ and XFP
6	Average Launch Power -5 dBm or better
7	Receiver Sensitivity -14 dBm or better
8	Should should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.
9	Should have CE and FCC regulatory compliances.
10	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

SOR-14: SFP Type-XI (10G-Dual Fiber-40KM)

SN	Description	
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.	
2	Should support 20-40 kms optical distance on dual fiber	
3	Should have LC type connector	
4	Should have 10 Gigabit Ethernet capacities on single mode dual fiber.	
5	Should support DDMI feature. Option should be available for both SFP+ and XFP	
6	Should should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.	
7	Average Launch Power -1 dBm or better	
8	Receiver Sensitivity -17 dBm or better	
9	Should have CE and FCC regulatory compliances.	
10	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)	

SOR-15: SFP Type-XII (10G-Dual Fiber-80KM)

SN	Description	
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.	
2	Should support 80 kms optical distance on dual fiber	
3	Should have LC type connector	
4	Should have 10 Gigabit Ethernet capacities on single mode Dual fiber.	

5	Should support DDMI feature. Option should be available for both SFP+ and XFP	
6	Average Launch Power +1 dBm or better	
7	Receiver Sensitivity -23 dBm or better	
8	Should should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.	
9	Should have CE and FCC regulatory compliances.	
10	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)	

SOR-16: SFP Type-XIII (SFP-1xGigE Electrical (1000 Base TX))

SN	Description	
1	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.	
2	Should support 90 meter distance on copper cable.	
3	Should have RJ45 Connector	
4	Should have 1 Gigabit Ethernet capacities	
5	Should should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.	
6	Should have CE and FCC regulatory compliances.	
7	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)	

SOR-17: SFP Type-XIV (QSFP+ 40G LR4 – 10KM)

Parameter	Value
Module Form Factor	QSFP+
Aggregate Data Rate	40 Gb/s
Link Length Supported	10 KM
Protocols Supported	Typical applications include, 40G Ethernet Infiniband, Fibre Channel, SATA/SAS3
Fiber Type	Dual Fibre, Duplex LC Connector
Operating Temperature Range	0°C to 65°C
Storage Temperature Range	-40°C to 85°C
Power dissipation	<3.5 W

Average Launch Power	-2.7 dBm or better	
Receiver Sensitivity	-11 dBm or better	
Should have RoHS-6 Compliant		
Built in Digital Diagnostic Function		
OEM must have ISO 9001 & 14001 Certificates		
Product must be IEC 60825(Laser Safety) and IEC 60950(Electrical Safety) certified by CSA or		
equivalent		
Manufacturer should be able to provide Factory test report for supplied transceiver parts.		

SOR-18: SFP Type-XV (QSFP+ 40G ER4 - 40KM)

Parameter	Value	
Module Form Factor	QSFP+	
Aggregate Data Rate	40 Gb/s	
Link Length Supported	40 KM	
Protocols Supported	Typical applications include OTN OTU3, 40G Ethernet Infiniband, Fibre Channel, SATA/SAS3	
Fiber Type	Dual Fibre, Duplex LC Connector	
Operating Temperature Range	0°C to 65°C	
Storage Temperature Range	-40°C to 85°C	
Power dissipation	<3.5 W	
Average Launch Power	-2.7 dBm or better	
Receiver Sensitivity	-19 dBm or better	
Should have RoHS-6 Compliant		
Should have XLPPI Electrical Interface		
Built in Digital Diagnostic Function		
OEM must have ISO 9001 & 14001 Certificates		
Product must be IEC 60825(Laser Safety) and equivalent	d IEC 60950(Electrical Safety) certified by CSA or	
Manufacturer should be able to provide Factor	bry test report for supplied transceiver parts.	

SOR-19: 230V AC to 48V DC Rack Mounted Charger with 6.25A SMR's (2+1)

SN	Specification Description	
1	The charger should be mountable on standard telecom rack i.e. 600x400 mm (width x depth)	
2	It should be capable of working in ambient temperature of -5 to +52 degree C.	
3	It should be capable of working within the input AC voltage range 165 to 260 V and frequency range of 47 to 53Hz.	
4	Indication for availability of AC mains to the unit should be provided as LCD display or in the form of LED.	
5	The nominal output DC Voltage should be 48 to 52V with a range of 48 to 56V.	
6	The output current should be 12.5A with 6.25A (min.) SMRs in 2+1 Configuration. In case the higher capacity SMRs are being provided, these should be in N+1 configuration where N indicates the numbers of SMRs being provided to cater the rated load (12.5A or higher) of the unit. The SMRS shall work on current sharing basis for a maximum combined output of 18.75A of main + stand-by SMR's.	
7	The output load & line regulation should be +/-1%.	
8	The output ripples should not be more than +/-3%.	
9	All the circuit breakers and fuses provided on the unit should be of proper rating and well leveled.	
10	The unit should be provided with following potential Free contacts (Normally open) for extending the alarms to the NMS: i) AC mains fail ii) Group alarm iii) Low DC alarm	
11	The Group alarm as indicated in item No. 6 above shall also be available in case any of the SMR gets faulty in addition to other problems related with input/output supply or unit.	
12	The Low DC alarm shall either be fixed at 46 V or should be adjustable between 42 to 47V.	
13	There should be an arrangement of earthing at the unit on its body.	
14	The following protections should be provided with the unit: i) Transient and surge protection ii) Lightening protection iii) Over voltage protection at input and Output iv) Overload protection at output v) Reverse battery protection. vi) Battery LVD (preferably adjustable and in case fix then 41.5 V DC).	
15	The charger should have an arrangement for the charging of the batteries (48 V up to 42 AH) with LVDS.	
16	There should be built in protection against high surge and transient, there should be delay in input switching upon mains recovery to protect the charger from high surges and transient, upon switching on.	
17	There should be protection against lightening and it should be possible to replace the protection tube without opening the unit (external arrangement).	

18	There should be digital display/analogue meter to display the values of, input & output
	voltage, battery voltage, load Current and charging current.

SOR-20: 12V/42 AH VRLA Batteries

SN	Specification Description
1	The battery set should consist of VRLA (maintenance free)/SMF batteries.
2	The one set of battery should consist of 4 Nos. of 12V, 42AH capacity batteries
3	It should be capable to work on High Temperature Ranging from 27 deg. C to 52 deg. C.

SOR-21: Rack - 19" 42U

No.	Item	Description	
1	Dimension	42U (Height) x 600 mm (Width) x 600 mm (Depth)	
2	Side panels	To be provided across whole height of the rack should be openable with latching arrangement at top and bottom.	
3	Front door	Rack should have front door tough and transparent glass fitted on MS/CRCA sheet on sides with Lock and key.	
4	Rear side	Shall be perforated for appropriate level as per industry standard.	
5	Top & Bottom	Rack top and bottom should be MS/CRCA steel made with cable entry provision with glands at both side.	
6	Fan module	Compact fan module of 90 CFM working on 48V DC 4 nos. with each rack properly fitted at top of rack.	
7	Earthing Provision	Rack Should have earthing provisions.	
8	Cable manager	2 nos. horizontal and 2 nos. vertical cable manager with cable loops to be provided with each rack.	
9	Power Distribution Unit (PDU)	PDU should be an arrangement for providing 6 MCBs (5 No. 16 Amp single pole MCB and 1 No. 32 Amp double pole MCB) should be provided. MCB should be of branded make complying IS/IEC 60898-1 standard.	
10	Material used	CRCA/MS with Thickness varying from 1.6 Mm to 2.0 mm	
11	The rack should be fi	rack should be fitted with one modem tray 19".	
12	The earthing kit consisting of copper bus bar with dimensions 20 inch length, 1.0 inch breadth & 5mm thickness (min.) having 12 holes and 3 brass nut bolts and washers for fixing of earthing cables shall be fixed near the bottom of the rack.		
13	The good quality powder coating light grey in colour shall be used for painting of the rack		
14		tted with dual source power supply distribution board.	
15		with Year" in bold and easily recognizable fonts should be written rack preferably in black or blue color.	

16	OEM should have a valid ISO 9001 certification on the date of opening of bid.
17	Rack should also comply with EIA 310/DIN 41494 standards.

SOR-22: Patch Cord Type-I - SC/APC-LC/PC- 5 Mtr

SOR-23: Patch Cord Type-I – LC/PC-LC/PC- 5 Mtr

The Patch cords for SOR-22 to SOR-23 should be confirming to TEC NO.: TEC/GR/TX OFJ-01/05/NOV-09 with latest amendment No. TEC/T/OFC-OFJ/155/2013. However, the Patch cords should have the following:

- i) Operating Temperature: -40°C to +85°C.
- ii) Insertion Loss:
 - a) Insertion Loss of complete patch cord including adapter when tested from each direction in all conditions of operations: $\leq 0.3 \text{ dB}$
 - b) Insertion Loss of Adaptors: $\leq 0.1 \text{ dB}$
- iii) Return Loss for each connector of patch cord:
 - a) Type-I SC-APC: \geq 65 dB
 - b) Type-II LC: \geq 50 dB
- iv) The length and type of connector of each Patch Cord: As per SOR.
- v) The patchcord with connectors and adaptors shall conform to the TEC Specification No. TEC/GR/TX/OFJ-01/05 NOV-09 with amendment No. TEC/T/OFC-OFJ/155/2013 (latest).
- v) Connector Body:
 - a) FC-PC: Ni plated brass body (Ni plating shall be as per BIS Standards)
 - b) SC-PC & SC-APC: Engineering thermoplastic (Glass filled PBT: Polybutylene Terephthalate)
 - c) LC: PEI (Polyetherimide)/ PPS (Polyphenylene Sulphide)
- vii) Color of connector body:
 - a) FC-PC connector: Ni plated Brass
 - b) SC-PC connector: Blue
 - c) SC-APC connector: Green
 - d) LC connector: Blue

viii) Radius of curvature:

a) FC-PC: 10 to 25 mm

b) SC-PC: 10 to 25 mm

c) SC-APC: 5 to 12 mm

d) LC: 10 to 25 mm

ix) Minimum bending radius of the cable:

a) Loaded: 50 mm

b) Unloaded: 30 mm

General Manager/P&I, Northern Region, RailTel 6th Floor, 3rd Block, Delhi Technology Park, Shastri Park, New Delhi, Delhi-110053

Ref:- Tender No. GEM/2025/B/xx Dated: dd.04.2025

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

2) We hereby offer to supply the goods and ser as you specify in the purchase order at the price quacceptance for a period of 90 days from the date of o	quoted and agree to hold this offer open for
3) Online payment vide transaction No	s EMD has been paid through the details as e full value of Earnest Money shall stand medies if, I/We withdraw or modify the offer
	SIGNATURE OF SUPPLIER (S) Date:

CONTTRACTOR (S) ADDRESS

SIGNATURE OF WITNESS:

1.

2

Annexure-III

PROFORMA FOR PERFORMANCE BANK GUARANTEE PERFORMANCE BANL GAURANTEE 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., 6th Floor, 3 rd Block, Delhi-IT-Park, Shastri Park, New Delhi-110053 (Herein after called RailTel) having agreed to exempt(Hereinafter called "the said
	Contractor(s)") from the demand, under the terms and conditions of an Agreement Nodatedmade
	between
	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,
3.	We,
4.	We,

	writing on or before the We shall be discharged from all liability under this Guarantee thereafter.
5.	We,
	This Guarantee will not be discharged due to the change in the Constitution of the Bank or the Contractor(s) / Tenderer(s).
	We, the
	(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 MM, 2025
	for (indicate the name of the Bank)
Witne	ss:
1.	Signature

- Signature Name
- 2. Signature Nam

Manufacturer Authorization form (MAF)

General Manager/P&I, RailTel Corporation of India Ltd. 6th Floor, 3rd Block, Delhi Technology Park, Shastri Park, Delhi – 110053.	Date:
Subject: Manufacturer Authorization for Ref: Tender No. GEM/2025/B/xx dated	rm (MAF) to M/s for
(Product details),	ed and reputed manufacturer and service provider of having our registered office at
	(bidder name), Office to participate in bid and subsequently upon award of <u>of Electronics Items-25-26/02 through GeM</u> of our range of
products against your above said bid.	11 Lieutonies Items 25 20/02 tillough Geivi of our funge of
We further extend our warranty for thre against the above-said bid.	e years for our range of products offered by M/s
Thanking you, Best regards,	
Authorised Signatory	

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

,	ecuted in presence of Public notary on non-judicial stamp paper of the value of Rs.100/ The er has to be in the name of the tenderer)**
signatory of	(Name and designation)** appointed as the attorney/authorized of the tenderer (including its constituents),
M/s	(hereinafter called the tenderer) for the purpose of the cuments for the work of of (Railway), do hereby solemnly affirm and state on the
Tender do	cuments for the work of
as per the behalf of the	tender No of (Railway), do hereby solemnly affirm and state on the he tenderer including its constituents as under:
(i)	I/We the tenderer (s), am/are signing this document after carefully reading the contents.
(ii)	I/we the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
(iii)	I/We hereby declare that I/We have downloaded the tender documents from electronic-tender portal. I/We have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenderers, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
(iv)	I/We declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
(v)	I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted alongwith the offer and same shall be binding upon me/us.
(vi)	I/We declare that the information and documents submitted alongwith the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents submitted by us.
(vii)	I/We undersigned that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besides banning of business for five year on entire IR. Further, I/we (<i>insert name of the tenderer</i>)** and all my/our constituents understand that my/our offer shall be summarily rejected.
(viii)	I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, alongwith forfeiture of EMD/SD and Performance Guarantee besides any other

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

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.

OEM'S UNDERTAKING ON LETTER HEAD FOR PROVEN FACILITY, BLACKLISTING, MALICIOUS CODE, IPR & RESTRICTION ON COMPANIES FROM LAND BORDER SHARING COUNTRIES WITHINDIA

(To be signed by the OEM)

	GM/P&I, RailTel Corporation of India Limited, Shastri Park, 6 th floor, IIIrd Block, Delhi Technological Park, Shastri Park, New Delhi-110053
E-Ten	der No. GEM/2025/B/xx dated: dd.04.2025
Sub:	OEM undertaking
Dear S	Sir,
	Over and above all our earlier conformations and submissions as per your requirements of the RFP, we confirm that,
A.	I/We undertake/Certify that
	"I/We have proven facilities at
	"In case OEM is located outside India, we have training, repair and service center facilities in India at(Complete Address along with Pin Code) also."
В.	I/We have not been black-listed or debarred currently by Central Govt./CPSUin India or anywhere globally by Government for security reasons either in Individual capacity or as a member of partnership firm/LLP/JV/Society/Trust. I/We Certify that,
(i)	All proposed hardware and software components in scope of supplies when shipped by, does not contain embedded malicious code that would activate proceduresto: -
	 a. Inhibit the desired and designed function of the equipment. b. Cause physical damage to the user or equipment during the exploitation. c. Tap information resident or transient in the equipment/networks.
(ii)	I/We, will be considered to be in breach in case physical damage or malfunctioning is caused due to activation of any such malicious code in embedded software and thus be liable to repair, replace or refund the price of the infected softwareif reported (or, upon request, return) to the party supplying the software to Customer, if different than

- (iii) Security breach or damages to system, if any, so caused by any embedded malicious code or otherwise, due to the act of either OEM or bidder or both, the OEM as well asthe bidder would be considered liable jointly or severally and shall be banned for conducting any business with RailTel. Also the present contract, may liable to be terminated by the purchaser.
 - D. I/We have read the clause regarding restrictions on procurement from a OEMs of a countrywhich shares a land border with India; I certify that I/We is/are not from such a country or,if from such a country, has been registered with the Competent Authority, I/We hereby certify that I/We fulfils all requirements in this regard and is eligible to be considered.
- E. Offered Hardware and Software (Tele-Presence End-Points, Switch and SFP's) are having End of Life (EOL) not less than 08 years from the date of Supply.

Date: Seal and signature of the authorized representative of OEM Name and Designation of the authorized representative of OEM

GUIDLINES REGARDING PROVISION FOR PROCUREMENT FROM A BIDDER WHICH SHARES A LAND BORDER WITH INDIA

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority [The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)].
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
 - a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

IV. The beneficial owner for the purpose of (III) above will be as under:

- 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means. Explanation
 - a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
 - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to

more than fifteen percent of capital or profits of the partnership;

- 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

Certificate to be given by the Tenderer:

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

Certificate to be given by Tenderer for Works involving possibility of sub-contracting:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that I am not from such a country or, if from such a country, I have been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that I fulfill all requirements in this regard and I am eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

PROFORMA FOR "NIL DEVIATION COMPLIANCE UNDERTAKING (To be signed by the Bidder)

To,

General Manager/P&I, RailTel Corporation of India Limited 6th Floor, IIIrd Block, Delhi Technology Park, Shastri Park, New Delhi-110053

Tender Reference No.:

Sub: NIL Deviation Compliance

Over and above all our earlier conformations and submissions as per your requirements of the tender, we confirm that,

- 1. All SOR item proposed in scope supplies are compliant to the technical specifications of the equipment as mentioned in the Annexure-I of ITB Document.
- 2. We will also ensure our unconditional compliance of all the terms and conditions as mentioned in the Tender document including all corrigenda.
- 3. List of deviations (Partial Compliance and Non-compliance) from terms and conditions as mentioned in the Tender document including all corrigenda, if any, is enclosed as Annexure with this form. We understand that any partial compliance or non-compliance, may result in REJECTION of our bid.

Seal and signature of the bidder

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Date:

(This letter should be on the letterhead of the bidder duly signed by an authorized signatory)

Format for Bid Security Declaration

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

CHECK LIST (To be Filled up & uploaded)

<u>List of Documents to be Submitted (Online):</u>

SN	Have you submitted the following documents?	Submitted	Page No./ref
511	Trave you submitted the following documents.	/Complied or Not	No. of Offer
1.	Offer letter as per Annexure-II & as per clause no. 20(i) of ITB.		
2.	EMD Submission details as per clause no. 8 of ITB.		
3.	BOQ of offered equipment as per clause no. 20(iii) of ITB.		
4.	Clause wise compliance along with all mentioned documents/annexures for all clauses of GeM Bid and ATC documents as per clause no. 20(iv) of ITB.		
5.	Data Sheet of offered equipment as per clause no. 20(v) of ITB.		
6.	Financial (Certified copies of audited balance sheets/annual reports of last three preceding financial years) and Technical Eligibility Criteria documents as per clause no. 12 of ITB.		
7.	Technical Compliance of all Specification of items as per GeM Bid and ATC documents as per clause no. 20(vii) of ITB.		
8.	Certificate from the End user against the Eligibility criteria for OEM as per para 11 of ITB.		
9.	Proof of document required against Eligibility criteria of OEM and Bidder vide para 11 & 12 respectively.		
10.	OEM declaration (Tele-Presence End-Points, Switch and SFP's) should have End of Life (EOL) as per Annexure-VI & as per clause no. 16 of ITB.		
11.	MAF/OEM Authorization as per para 12.3 and Annexure-IV of ITB.		
12.	Notarized affidavit on a non-judicial stamp paper as per Annexure-V & as per clause no. 18 of ITB.		
13.	Certificate as per Annexure-VII & as per clause no. 20(xiii) of ITB.		
14.	Nil Deviation as per Proforma attached in Annexure-VIII & as per clause no. 20(xiv) of ITB.		
15.	Bid Security Declaration as per Annexure-IX of ITB.		
16.	Power of Attorney as per clause no. 19 of ITB.		