Corrigendum - I

Sub: Tender for "Supply, Installation, Integration, & Commissioning of Internet Gateways including IT & Security equipment's for RailTel"

Ref: RailTel/Tender/OT/CO/TP/2025-26/Internet Gateway & Security system/06 dated 12.11.25

In reference to the Tender for the " Supply, Installation, Integration, & Commissioning of Internet Gateways including IT & Security equipment's for RailTel against **E-Tender No RailTel/Tender/OT/CO/TP/2025-26/Internet Gateway & Security system/06 dated 12.11.2025**, following is issued with the approval of competent authority:

1: Corrigendum-I (Point 1- 30)

2: Response to Pre-bid queries (Point 1- 103)

3: Extension of Bid End Date/Time as mentioned below:

Present	Revised Tender closing/opening date and time
Bid End Date/Time 16-12-2025 15:00:00	Bid End Date/Time 19-12-2025 15:00:00
Bid Opening Date/Time 16-12-2025 15:30:00	Bid Opening Date/Time 19-12-2025 15:30:00

All other terms and conditions will remain unchanged.

Deepti 04/12/2025

(Deepti chauhan)
Sr.DGM/Technology Planning
for GM/Technology Planning
(For and behalf of RailTel Corporation of India Ltd.)

Corrigendum-I Tender no. RailTel/Tender/OT/CO/TP/2025-26/ Internet Gateway & Security System/06

Dated: 12.11.2025

S.No.	Tender Clause No.	Sub-clause no./ Point no.	Original Clause	Modified clause
1	3.8 of Chapter- 3A	3.8 – System Engineering Guidelines	3.8 – System Engineering Guidelines 3.8.1With 100% concurrent users loaded on the system the target response times should be as follows: 3.8.1.1.Total time for Ticket creation after submission should be less than 10 seconds. 3.8.1.2.Any ticket object, when opened in modify mode for state change or any other information update, should be saved in less than 10 seconds, after pressing the save button. 3.8.1.3.Any ticket object, when opened in modify mode, for assignment or re- assignment to a user, should be saved in less than 10 seconds, after pressing the save button. 3.8.1.4.Tab navigation (such as moving from dash-boarding to reporting etc.) <2seconds. 3.8.1.5.Screen opening from user login<3 seconds. 3.8.1.6.For a qualified search criteria, search results should be fetched within stipulated time of less than 20 seconds for each 100 results. 3.8.1.7.Simple & Medium Report generation <30 seconds 3.8.1.8.With auto TT in place (post both-way integration with alarm management system), automatic ticket should be opened within 20 seconds from the time of getting trigger from alarm management system. 3.8.1.9.With auto TT in place (post both-way integration with alarm management system The system triggering the ticket update should get the response back with update success status in less than 60 seconds. 3.8.1.10.In parent child ticket scenario, the updation in parent ticket should reflect in child ticket in less than 60 seconds.	Deleted
2	3.A.4 of Chapter-3A	3.A.4 DEPENDENCIES AND RESPONSIBILITY MATRIX	3.A.4 DEPENDENCIES AND RESPONSIBILITY MATRIX DESIGN OF THE SYSTEM The deployment location(s) will be decided by RailTel based on requirement. It will be in the scope of the vendor to technically support RailTel with design parameters, process flow fine tuning, ITIL alignment, optimization, escalation matrix definition, SLA rules definition & implementation etc within the limitations of ordered configurations (SOR, Specifications etc) for successful commissioning of the system. Design of system would include the following: a)Study of existing process flows, SLA Rules etc. b)Process flow fine tuning, ITIL alignment, optimization, escalation matrix definition, SLA rules definition & implementation etc. c)Provision for integration with other modules / systems. System Designs shall be approved by RailTel before implementation. The Tenderer shall submit detailed report on the above parameters and the complete system design including system performance to meet the technical requirements including codes for customization.	Deleted
3	3B- Technical specifications for schedule of supply (B)	3. Next Generation Firewall Sr. No. 3: IPv6 Support-	IPv6 ready & certified from day one	IPv6 ready & NIST USGv6/IPv6 certified from day one
4	3B- Technical specifications for schedule of supply (B)	3. Next Generation Firewall Sr. No. 13: Storage SSD	≥ 128 GB SSD for logging	≥ 120 GB SSD for logging

S.No.	Tender Clause No.	Sub-clause no./ Point no.	Original Clause	Modified clause
5	3B- Technical specifications for schedule of supply (B)	3. Next Generation Firewall Sr. No. 15: Management Ports: Web Management	≥ 1 port (10/100/1000 RJ45 or 1G/10G SFP with optics)	≥ 1 port (10/100/1000 RJ45 or 1G/10G SFP with optics) or through traffic Port.
6	3B Technical specifications for schedule of supply (B)	3. Next Generation Firewall Sr. No. 16 Power Supply: Adapter Inbuilt	DC PSU with two sources or Redundant DC PSU.	AC or DC PSU with two sources or Redundant AC or DC PSU.
7	Clause 3.5 Chapter-3A, A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	SN-1, Tier-1	Minimum Ports (excluding SFP/SFP28/QSFP/QSFP28) from day one. 24x400/100G QSFP-DD	Minimum Ports (excluding SFP/SFP28/QSFP/QSFP28) from day one. 24x100G/200G/400G QSFP-DD or 8x200G/400G QSFP DD and 16X100G QSFP28/QSFP-DD for Tier-1 and It should also support BNG at all ports in future in case required for both Tier-I & II .
8	Clause 3.5 Chapter-3A, A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	SN-5, Tier-1	Minimum MAC Table Size: 1M	Minimum MAC Table Size: 500K
9	Clause 3.5 Chapter-3A, A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	SN-1, Tier-4	Minimum Ports (excluding SFP/SFP28/QSFP/QSFP28) from day one. 2x40G QSFP+ & 12x10/25G SFP28	Minimum Ports (excluding SFP/SFP28/QSFP/QSFP28) from day one. 2x40G QSFP+ & 8x10/25G SFP28
10	Clause 3.5 Chapter-3A, A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Features Required - SN-8	All interfaces shall support services like L2VPN, L3VPN, VPLS and multicast VPN for both IPv4 and IPv6.	All interfaces shall support services like L2VPN, L3VPN, VPLS for both IPv4 and IPv6.
11	Clause 3.5 Chapter-3A, A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Features Required - SN-28	Shall support Multi-chassis LAG or EVPN Multi-Homing	Deleted
12	Clause 3.5 Chapter-3A, A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Features Required - SN-52	EVPN Features (i) Router should have support of Ethernet VPN (EVPN with single homing, multi homing (ii) Router should have support of following features on EVPN: EVPN-IRB, EVPN VPWS, EVPN VPWS Preferred Path over SR-TE Policy	EVPN Features (i) Router should have support of Ethernet VPN (EVPN with single homing. (ii) Router should have support of following features on EVPN: EVPN VPWS Preferred Path over SR-TE Policy
13	Clause 3.5 Chapter-3A, A-3 SDN Controller	2.1.9	The SDN controller must support the graphical display of the entire network topology and support subnet topology division and visualization.	The SDN controller must support the graphical display of the entire network topology.
14	Clause 3.5 Chapter-3A, A-3 SDN Controller	5.1.4	The SDN controller must support reports and visualized display of QoS queue/VPN service performance and quality, including packet loss, delay, and jitter	The SDN controller must support reports and visualized display of VPN service performance and quality, including packet loss, delay, and jitter

S.No.	Tender Clause No.	Sub-clause no./ Point no.	Original Clause	Modified clause
15	Clause 3.5 Chapter-3A, A.2 .Technical Specifications for CGNAT Appliance/Module (Type-1 and Type2	I	Support for DNS, FTP, ICMP, PPTP, Sun RPC and, RTSP, SIP, SQLNET, TFTP, Unix Remote Shell Service, TELNET	Support for DNS, FTP, ICMP, PPTP, Sun RPC and, RTSP, SIP, SQLNET/ TFTP, Unix Remote Shell Service/ TELNET/SSH
16	Clause 3.5 Chapter-3A, A.2 .Technical Specifications for CGNAT Appliance/Module (Type-1 and Type2	7	Proposed platform shall support minimum concurrent established connections from day 1. 60 Million for Type-1	Proposed platform shall support minimum concurrent established connections from day 1. 48 Million for Type-1
17	Clause 3.5 Chapter-3A, A.2 .Technical Specifications for CGNAT Appliance/Module (Type-1 and Type2	16	Platform shall support CGNAT and logging to support minimum IMIX throughput. Proposed devices should be equipped required optics to connect with upstream Routers in case of external box solution. Tyep-1 : 300 Gbps	Platform shall support CGNAT and logging to support minimum IMIX/real world (512Byte UDP) throughput. Proposed devices should be equipped required optics to connect with upstream Routers in case of external box solution. Tyep-1 : 300 Gbps
18	Clause 3.5 Chapter-3A, A.2 .Technical Specifications for CGNAT Appliance/Module (Type-1 and Type2	16	Platform shall support CGNAT and logging to support minimum IMIX throughput. Proposed devices should be equipped required optics to connect with upstream Routers in case of external box solution. Tyep-2 : 150 Gbps	Platform shall support CGNAT and logging to support minimum IMIX/real world (512Byte UDP) throughput. Proposed devices should be equipped required optics to connect with upstream Routers in case of external box solution. Tyep-2 : 150 Gbps
19	Clause 3.5 Chapter-3A, B.Technical specifications for schedule of supply (B)	3. Next Generation Firewall, SN- 12 : Performance-NGFW	≥ 2 Gbps Mbps with full features enabled	≥ 2 Mbps with full features enabled
20	Clause 3.5 Chapter-3A, B.Technical specifications for schedule of supply (B)	3. Next Generation Firewall, SN- 12 : Performance-SSL Inspection	≥ 2Gbps	(50% traffic) ≥ 2 Gbps enabled
21	Clause 3.5 Chapter-3A, B.Technical specifications for schedule of supply (B)	3. Next Generation Firewall, SN- 12 : Performance-Virtualization	Support for ≥ 10 virtual firewalls	Support for ≥ 10 virtual firewall/vrf
22	Clause 3.5 Chapter-3A, B.Technical specifications for schedule of supply (B)	3. Next Generation Firewall, SN- 12 : Performance-Firewall Throughput	25 Gbps	Layer -7 Firewall Throuhgput 10Gbps or Firewall Throuhgput 25 Gbps.
23	Clause 3.5 Chapter-3A , A.4 Rack Servers for DNS/Speed Test Server/Syslog Collector	Point-16: Regulatory Compliance	ROHS, FCC / UL/CE and 80% Plus Platinum Level for power supplies.	ROHS and FCC / UL/CE
24	Clause 3.5 Chapter-3A, A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	SN-31	The proposed router should be NEBS level 3 compliant. 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.	The proposed router should be NEBS Level 3 or GR-1089 compliant. 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.

S.No.	Tender Clause No.	Sub-clause no./ Point no.	Original Clause	Modified clause
25	Clause 3.5 Chapter-3A, B.Technical specifications for schedule of supply (B)	5.POE Switches , SN- 1: Switch Type	Layer 2 Managed PoE++ Switch	Layer 2 Managed PoE+ Switch
26	Clause 3.5 Chapter-3A, B.Technical specifications for schedule of supply (B)	5.POE Switches , SN- 2: Ports	24 × 10/100/1000BASE-T RJ45 PoE++ ports (IEEE 802.3at compliant)	24 × 10/100/1000BASE-T RJ45 PoE+ ports (IEEE 802.3at compliant)
27	Clause 3.5 Chapter-3A, B.Technical specifications for schedule of supply (B)	B 1.Desktops/ Workstation, SN- 3, Processor	Intel Core i5 or higher	AMD Ryzen 5 / Intel Core i5 or higher
28	Clause 3.5 Chapter-3A, B.Technical specifications for schedule of supply (B)	B 1.Desktops/ Workstation, SN- 8, Virtualization Support:	Hardware-assisted virtualization (Intel VT-x/VT-d)	Hardware-assisted virtualization(Intel/AMD virtualization support)
29	Clause 3.5 Chapter-3A, B.Technical specifications for schedule of supply (B)	B 2. Laptops: SN-3: Processor	Intel Core i5 or M1	AMD Ryzen 5 / Intel Core i5 or M1
30	Clause 3.5 Chapter-3A,A.4 Rack Servers for DNS/Speed Test Server/Syslog Collector	13. OS Supported	Red Hat, CentOS, Ubuntu, Oracle Linux and Debian.	Red Hat, CentOS, Ubuntu, Oracle Linux/ Debian.

Response to PRE-BID QUERIES received against Tender no. RailTel/Tender/OT/CO/TP/2025-26/ Internet Gateway & Security System/06
Dated: 12.11.2025

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
1	4.A.3 – Long Term Maintenance Support	49	4.A.3.3	RailTel will release a separate LOA for AMC three months before warranty completion. A fresh PBG (10% of AMC LOA value), valid for four months beyond AMC completion, must be submitted within 30 days of issuing the AMC LOA. Any delay may lead to encashment of the existing PBG. The contractor must notify RailTel six months before warranty expiry; otherwise, the existing PBG must be extended until the AMC PBG is submitted.	We request RailTel to also permit the submission of an Insurance Surety Bond for AMC, similar to what is allowed for the SITC phase.	Helps maintain uniformity and simplifies compliance while keeping RailTel's financial safeguards intact.	It will be as per Tender document.
2	4.A.5.6 – Payment Terms for Schedule of Services (C)	51	4.A.5.6.1	AMC payments will be released quarterly. For availing AMC advance payment, the bidder must submit a PBG equal to the claimed amount plus the claimed period plus four months, along with the OEM warranty certificate.	We request RailTel to allow the use of an Insurance Surety Bond in place of the required PBG for AMC advance payment.	Eases compliance requirements while maintaining financial protection for RailTel.	It will be as per Tender document.
3	3.A.2 A. For Schedule-A:	15	Sr. 7 Point-P	Pre-Production Lab Setup at CNOC: The Bidder/OEM shall also establish a dedicated Lab environment at the Central Network Operations Center (CNOC) for pre-production testing and validation, at no financial cost to RailTel. The Lab shall be provisioned with a minimum of six (6) additional routers, ensuring representation of at least one unit of each distinct equipment type proposed under the production environment. In the case of Carrier Grade NAT (CGNAT), if the Bidder/OEM has proposed two distinct CGNAT solutions, they may opt to deploy either one of the proposed types within the Lab environment, subject to compatibility and functional equivalence with the production design.	Please specify how long the pre-production lab must remain operational—only for FAT, during rollout, or throughout the entire contract.	Duration clarity is required for accurate planning and resource allocation.	Tender condition is very clear. It will be required througout the entire contract period
4	3.A.2 A	16	B	The scope of work would be Supply and Supervision of installation, testing, commissioning of offered IT Hardware and Software at various sites/locations of RailTel NOCs (as mentioned in Annexure-II).The scope is limited to supply of IT Hardware and Software with the existing network. The scope of work shall include following Supply of IT Hardware and Software:	Please confirm whether items under Schedule-B require only supply or whether SITC activities are also included in the bidder's scope.	Needed to accurately define scope and responsibilities.	items under Schedule-B required to supply only.
5	3.5 A. Technical specifications for schedule of supply (A)	32	A.4 Rack Servers for DNS/Speed Test Server/Syslog Collector	Queries regarding Speed Test server application source and Syslog Collector requirements such as log retention, number of users per CGNAT, and average daily storage consumption.	Required to size hardware and storage correctly.	Helps avoid under- or over-sizing.	The servers shall be supplied as per Technical specifications defined in the Tender.
6	3.5	37	Point 6 – Microsoft Office Licenses	Requirement for Microsoft Office edition/version not specified.	Kindly specify the required Office edition/version.	Necessary to quote correctly.	Microsoft Office should be supplied with Latest version and also compitable with proposed laptop & Desktop.
7	3.8.	37	3.8 – System Engineering Guidelines	Several performance benchmarks listed under system engineering such as ticket creation time, modification time, navigation speed, search time, report generation time, and auto-TT integration timings.	Please confirm whether these requirements apply to a ticketing tool, as the clause appears to be related to one.	Clarity needed to ensure compliance with system expectations.	<mark>May please see corrigendum-I</mark>
8	3.A.4	38	3.A.4 – Dependency & Responsibility Matrix	Vendor must support RailTel in system design, fine-tuning processes, ITIL alignment, SLA setup, integration provisions, etc., within ordered configuration limitations.	The clause is unclear and needs further explanation.	Required for proper interpretation of responsibilities.	<mark>May please see corrigendum-I</mark>

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
9	3.A.4	39	4.4 – Installation, Integration, Customization, Testing, Trial Run & Commissioning	The Tenderer shall be fully responsible for Quality Assurance of equipment & other elements of the system including the following:- a) Installation, Integration & Customization of the above-mentioned equipment / items as per System design. b) Testing of the System as specified in the tender document. c) Trial run of the System. d) Commissioning of the System.	Request clarification on the meaning and scope of the trial run.	Needed to understand the activities expected during the trial phase.	Tender condition is very clear. It will be required as per the scope of the work defined in the Tender.
10	3.5	32	A.4 – OEM Compliance for Rack Servers	OEM must be ISO 9001 and 14000 certified & OEM should be listed in telecom trusted portal as trusted source.	As servers are not categorized as telecom devices, we request modification of the clause to require only ISO 9001 & 14000 certifications.	Ensures compliance alignment and avoids unnecessary Trusted Source requirements.	It will be as per Tender document.
11	3.A.2 OVERVIEW OF THE SCOPE OF WORK	13	5 – Deployment Locations	The project will span 22 aggregation gateways (e.g., NDLS, HWH, MUM, CHENNAI, ERNAKULAM, ADI, JAIPUR, DDU, GHY, VZM, NGP, SC, SBC) and 100 service delivery PoPs across all telecom circles, with NE-1 and NE-2 covered via GHY.	Request confirmation of the final deployment sites and whether existing routers/CGNAT units will be reused or replaced. Also clarify configuration responsibility if routers are supplied by RailTel.	Needed to prepare accurate BOQ, logistics, and avoid duplication.	May please refer the Annexure-II given in Tender document.
12	Annexure II	136	Tier-3 & 4 Routers	Installation for Tier-3 & 4 is stated to be done by RailTel, while configuration is to be done by the bidder.	Please clarify whether configuration is expected to be done remotely or onsite.	Required for deployment planning.	configuration shall be done by Bidder remotely or onsite.
13	3B Technical specifications for schedule of supply (B)	34	3. Next Generation Firewall Sr. No. 3	IPv6 Support- IPv6 ready & certified from day one	Request to modify to "NIST USGv6/IPv6 certified," as both certifications validate IPv6 compliance.	Ensures broader participation and acceptance of certified products.	May please see corrigendum-I
14	3B Technical specifications for schedule of supply (B)	35	3. Next Generation Firewall Sr. No. 13	Storage SSD- ≥ 128 GB SSD for logging	Request amendment to ≥120 GB, as SSDs are available in standard increments of 120/240/480 GB.	Aligns with market availability and ensures competitive offers.	May please see corrigendum-I
15	3B Technical specifications for schedule of supply (B)	35	3. Next Generation Firewall Sr. No. 15	Management Ports- ≥ 1 port (10/100/1000 RJ45 or 1G/10G SFP with optics)	Request to allow devices without a dedicated management port if GUI access is possible through existing ports or via Device Manager.	Smaller devices often lack dedicated management ports; request improves participation.	May please see corrigendum-I
16	3B Technical specifications for schedule of supply (B)	35	3. Next Generation Firewall Sr. No. 16	Power Supply- DC PSU with two sources or Redundant DC PSU.	Request to modify to "AC/DC PSU with two sources or redundant AC/DC PSU."	Provides flexibility to support both AC and DC environments.	May please see corrigendum-I
17	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-1	1	Minimum Ports (excluding SFP/SFP28/QSFP/QSFP28) from day one: 24x400/100G QSFP-DD	Kindly clarify number of 100G QSFP28 /QSFP-DD andnumber of 400G QSFP56-DD ports to be proposed	Clarification	May please see corrigendum-I

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
18	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-1	2	Proposed devices should be equipped optics: 8x100G QSFP28 LR4	We understand, as per scope 3.A.2.A)7)b): b.Tier-1 to Tier-1 Interconnect 1x400G for HA also to be added. Kindly clarify.	Clarification	No change. It will be as per Tender requirement.
19	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-1	3	Minimum Total throughput (Full duplex): 2.4 Tbps	Considering the interfaces port requirements, we understand required router throughput (full duplex) should be increased to 5.6 tbps or higher	Clarification	No change. It will be as per Tender requirement.
20	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-1	4	Minimum MAC Table Size: 1M	We would request to reduce the MAC table size to 128K, considering this is Core router	considering this is Core router, request for reduction	<mark>May please see corrigendum-I</mark>
21	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-1	5	Minimum IPv4 RIB/FIB: 10M/5M	We request to reduce the IPv4 FIB to 3M	considering this is Core router, request for reduction	No change. It will be as per Tender requirement.
22	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-1	7	Minimum MPLS Labels: 256K	We would request to reduce the MPLS labels to 40K	considering this is Core router, request for reduction	No change. It will be as per Tender requirement.
23	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-1	9	Minimum Number of L2 / L3 VPN VRF: 10K	We would request to 2K L3 VPN and 2K L2 VPN	considering this is Core router, request for reduction	No change. It will be as per Tender requirement.
24	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-2	1	Minimum Ports (excluding SFP/SFP28/QSFP/QSFP28) from day one: 16x100G QSFP28	Kindly allow 400G Q-DD port with breakout to achieve similar number of port or 16x100G QSFP28	Clarification	No change. It will be as per Tender requirement.
25	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-2	4	Minimum MAC Table Size: 1M	We would request to reduce the MAC table size to 128K, considering this is Core router	considering this is Core router, request for reduction	No change. It will be as per Tender requirement.
26	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-2	5	Minimum IPv4 RIB/FIB: 10M/5M	We request to reduce the IPv4 FIB to 2M	considering this is Core router, request for reduction	No change. It will be as per Tender requirement.
27	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-2	7	Minimum MPLS Labels: 256K	We would request to reduce the MPLS labels to 40K	considering this is Core router, request for reduction	No change. It will be as per Tender requirement.
28	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-2	9	Minimum Number of L2 / L3 VPN VRF: 10K	We would request to 2K L3 VPN and 2K L2 VPN	considering this is Core router, request for reduction	No change. It will be as per Tender requirement.

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29	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-3	1	Minimum Ports (excluding SFP/SFP28/QSFP/QSFP28) from day one: 8x100G QSFP28 & 24x10/25G SFP28	Kindly allow 4x100G QSFP28/DD or 2x100G QSFP28+2x100G/400G QSFP-DD & 24x10/25G SFP28	Clarification	Bidder can give 8x100G support through breakout.
30	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-4	1	Minimum Ports (excluding SFP/SFP28/QSFP/QSFP28) from day one: 2x40G QSFP+ & 12x10/25G SFP28	We would request to reduce to change 2x40G QSFP+/100G QSFP28 & 8x10/25G SFP28+16x1/10G	Clarification and change in interfaces	May please see corrigendum-I
31	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-4	3	Minimum Total throughput (Full duplex): 100 Gbps	Considering the interfaces port requirements, we understand required router throughput (full duplex) should be increased to 300 Gbps or higher	Clarification	No change. It will be as per Tender requirement.
32	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-4	Scope of Work	5. Deployment Locations (as mentioned in Annexure-II). The project will span 22 aggregation gateways (e.g., NDLS, HWH, MUM, CHENNAI, ERNAKULAM, ADI, JAIPUR, DDU, GHY, VZM, NGP, SC, SBC) and 100 service delivery PoPs across all telecom circles, with NE-1 and NE-2 covered via GHY.	Kindly clarify: As per this clause and annexure -II, table 1)A, 4 sites of Tier-1 (in 1+1) and 8 number of Tier-2 sites to be required with T2 router (1+0 , single router persite). T1 Router: 8 Qty for 4 Qty of T1 sites T1 CGNAT:8 Qty for 4 Qty of T1 sites T2 Router: 12 Qty out of 21 Qty of T2 sites (including spare at Shastri park) T2 CGNAT: 7 Qty out of 21 Qty T2 sites (including spare at Shastri park) Also kindly clarify, 46 number of Tier-3 and 46 number of Tier 4 locations require single Tier-3 and Tier-4 routers, as per location location mentioned in Annexure II.	Clarification on Qty of site versus router and CGNAT appliance to be considered	Deployemnt of equipments as per Annexure-II
33	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)	Tier-4	3.A.1)A)6)g)	g. SRv6-Based Path Selection: Segment Routing over IPv6 (SRv6) shall be implemented across the proposed network. Path selection will be governed by SRv6 policies based on performance parameters such as path delay, packet drop rate, jitter, and other relevant metrics, enabling intelligent traffic engineering.	Kindly clarify While considering SRv6 based path selection, it is related to mainly L2/L3 VPN Unicast single homed services ? Kindly also clarify Dual Homed services, MC-LAG, EVPN Multi homing services are not applicable while implementing SRv6 based path selection, as per clause in scope document 3.A.1)A)6)g)	Clarification on overall design scope of the network	It will required for L2 & L3 VPN unicast single homed services.
34	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)		8	All interfaces shall support services like L2VPN, L3VPN, VPLS and multicast VPN for both IPv4 and IPv6.	Kindly clarify SRv6 implementation point of view, multicast is not required.	Clarification on overall design scope of the network	May please see corrigendum-I

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
35	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)		**14**	Shall support following class of service features: d) Single Rate Three Color Policer RFC 2697			No change. It will be as per Tender requirement.
36	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)		**22**	Shall support MPLS based VPN services: d) Next Generation mVPN (P2MP) based on (Draft-ietf-13vpn-2547bis-mcast-01.txt) & mVPN (draft-rosen-vpn-mcast).	Kindly clarify SRv6 implementation point of view, P2MP multicast is not required.	Clarification on overall design scope of the network	No change. It will be as per Tender requirement.
37	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)		**28**	Shall support Multi-chassis LAG or EVPN Multi-Homing	Kindly delete "Multi-chassis LAG or EVPN Multi-Homing"	Clarification on overall design scope of the network	May please see corrigendum-I
38	A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)		**52**	EVPN Features: i) Router should have support of Ethernet VPN (EVPN with single homing, multi homing ii) Router should have support of following features on EVPN: EVPN-IRB, EVPN VPWS, EVPN VPWS Preferred Path over SR-TE Policy	Kindly delete Multi-homing and EVPN-IRB	Clarification on overall design sco	May please see corrigendum-I
39	A3 SDN Controller		2.1.9	The SDN controller must support the graphical display of the entire network topology and support subnet topology division and visualization.	Kindly allow topology view of only for network and modify as below: The SDN controller must support the graphical display of the entire network topology and support subnet topology division and visualization.	Clarification	May please see corrigendum-I
40	A3 SDN Controller		3.1.1	The SDN controller should be able to manage RSVP-TE LSPs, SR-TE LSPs, and SR policies at the same time	Can you please clarify, as per clause 3.A.1)A)6)g), whether RSVP-TE LSPs, SR-TE LSPs, and SR policies at the same time with SRv6 implementation	Clarification	In case of SRv6 , only the SR Policies will be implemented.
41	A3 SDN Controller		5.1.4	The SDN controller must support reports and visualized display of QoS queue/VPN service performance and quality, including packet loss, delay, and jitter	The SDN controller must support reports and visualized display of QoS queue/VPN service performance and quality, including packet loss, delay, and jitter	Clarification	May please see corrigendum-I

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
42	A.2 .Technical Specification s for CGNAT Appliance/M odule (Type-1 and Type2)		D	The CGN must allow the NAT outside pool to be made up of contiguous IPv4 subnets, non-contiguous IPv4 subnets and/or a combination thereof. Please specify the number of subnets that can be used to for one pool.	"The CGN must allow the NAT outside/inside pool to be made up of contiguous IPv4 subnets, non-contiguous IPv4 subnets and/or a combination thereof. Please specify the number of subnets that can be used to for one pool."	Clarification with scope of larger participation	No change. It will be as per Tender requirement.
43	A.2 .Technical Specification s for CGNAT Appliance/M odule (Type-1 and Type2)		F	The CGN must support static-port forwarding to allow a subscriber to define a mapping of (protocol, outside IP, inside address, outside port, inside port) on the CGN	"The CGN must support static-port forwarding to allow a subscriber to define a mapping of (protocol, outside IP/inside address, outside port/ inside port) on the CGN"	Clarification with scope of larger participation	No change. It will be as per Tender requirement.
44	A.2 .Technical Specification s for CGNAT Appliance/M odule (Type-1 and Type2)		L	Support for DNS, FTP, ICMP, PPTP, Sun RPC and, RTSP, SIP, SQLNET, TFTP, Unix Remote Shell Service, TELNET	Support for DNS, FTP, ICMP, PPTP, Sun RPC and, RTSP, SIP, SQLNET/ TFTP, Unix Remote Shell Service/ TELNET/SSH	Clarification with scope of larger p	May please see corrigendum-I
45	A.2 .Technical Specification s for CGNAT Appliance/M odule (Type-1 and Type2)		7	Proposed platform shall support minimum concurrent established connections from day 1. 60 Million	Kindly allow: 48 Million for Type-1 CGNAt appliance	Clarification with scope of larger p	May please see corrigendum-I
46	A.2 .Technical Specification s for CGNAT Appliance/M odule (Type-1 and Type2)		16	Platform shall support CGNAT and logging to support minimum IMIX throughput. Proposed devices should be equipped required optics to connect with upstream Routers in case of external box solution. Tyep-1 : 300 Gbps	Kindly allow real world (1518Byte UDP) /IMIX packet size for throughput	Clarification with scope of larger p	May please see corrigendum-I
47	A.2 .Technical Specification s for CGNAT Appliance/M odule (Type-1 and Type2)		16	Platform shall support CGNAT and logging to support minimum IMIX throughput. Proposed devices should be equipped required optics to connect with upstream Routers in case of external box solution. Tyep-2 : 150 Gbps	Kindly allow real world (1518Byte UDP) /IMIX packet size for throughput	Clarification with scope of larger p	May please see corrigendum-I

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48	NGFW		12	NGFW ≥ 2 Gbps Mbps with full features enabled	NGFW ≥ 10 Gbps Mbps with full features enabled	Since the TLS throughput VPN throughput area asked as 2Gbps, NGFW performance will have to be higher than both, thus requesting change for right sizing of the solution	May please see corrigendum-I
49	NGFW			SSL Inspection ≥ 2 Gbps enabled	SSL Inspection (50% traffic) ≥ 2 Gbps enabled	It is important to define the % of traffic to be decrypted as not mentioning it leaves ambiguity and can be read as 10% or 50%, thus requesting change for betterment of solution	May please see corrigendum-I
50	NGFW			Connection ≥ 30,000 new connection/sec	Connection ≥ 90,000 new connection/sec	For 2Gbps firewall	No change. It will be as per Tender requirement.
51	NGFW			Virtualization Support for ≥ 10 virtual firewall	Virtualization Support for ≥ 10 virtual firewall/vrf	Requested change doesn't impact any functional aspect, thus requesting change for wider participation.	May please see corrigendum-I
52	NGFW			Firewall Throuhgput 25Gbps	Remove	Since the NGFW throughput is already mentioned, thus additional performance is favouring a particular OEM and restricting participation thus requesting change	May please see corrigendum-I
53	NGFW		13	SSD ≥ 128GB SSD for logging	SSD ≥ 800GB NVMe SSD for logging	Since firewall is a security device all the logs, storage should be encrypted to maintain data sensitivity. Thus requesting change	No change. It will be as per Tender requirement.
54	NGFW		14	10 GE SFP+ ≥ 2 slots	10 GE SFP+ ≥ 8 ports	For the requested throughput and connection with future scalability it is important to have higher number of 10G ports thus requesting change for betterment of solution	May please read slot as a port

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
55	NGFW		16	Power Supply Adaptor/inbuild: DC PSU with two sources or Redundant DC PSU	Power Supply Adaptor/inbuild: DC PSU hot swappable Redundant DC PSU and Fan module/tray	Since this component is impacted with external environmental conditions like load, health, operating temperature etc. it is important to have hot swap functionality to ensure device are operational and in case of RMA the whole device doesn't need to be replaced ensuring higher ROI of the solution	May please see corrigendum-I
56	3.A.2	13	5. Deployment Locations (as mentioned in Annexure-II).	Deployment Locations (as mentioned in Annexure-II). The project will span 22 aggregation gateways (e.g., NDLS, HWH, MUM, CHENNAI, ERNAKULAM, ADI, JAIPUR, DDU, GHY, VZM, NGP, SC, SBC) and 100 service delivery PoPs across all telecom circles, with NE-1 and NE-2 covered via GHY.	1. The tender mentions 22 aggregation gateways and 100 Service Delivery PoPs; however, Annexure-II lists a total of 116 Tier-1-4 locations for Internet Delivery Routers. Kindly confirm the deployment locations (Tier-1, Tier-2, Tier-3, Tier-4) to be considered for BOQ preparation. 2. Certain locations are indicated as routers being shifted from one site to another alongwith CGNAT Appliance/Card i. Kindly clarify whether existing routers are having CGNAT Appliance/card ii. Kindly clarify whether RailTel intends to reuse existing routers at these locations or whether the bidder must consider new routers for such PoPs as part of the proposal. if railtel provide the router with appliance, the configuration part will be bidder scope or railtel scope	Required to ensure accurate site-wise BOQ preparation, hardware forecasting, logistics planning, and avoidance of duplication with RailTel's existing installed equipment.	Repeated query
57	3.A.2	15	P- Pre-Production Lab Setup at CNOC	Pre-Production Lab Setup at CNOC: The Bidder/OEM shall also establish a dedicated Lab environment at the Central Network Operations Center (CNOC) for pre-production testing and validation, at no financial cost to RailTel. The Lab shall be provisioned with a minimum of six (6) additional routers, ensuring representation of at least one unit of each distinct equipment type proposed under the production environment. In the case of Carrier Grade NAT (CGNAT), if the Bidder/OEM has proposed two distinct CGNAT solutions, they may opt to deploy either one of the proposed types within the Lab environment, subject to compatibility and functional equivalence with the production design.	Kindly confirm the required duration for maintaining the pre-production lab environment at CNOC (e.g., during FAT only, during rollout, or throughout the contract period)		Repeated query
58	3.A.2	16	B	The scope of work would be Supply and Supervision of installation, testing, commissioning of offered IT Hardware and Software at various sites/locations of RailTel NOCs (as mentioned in Annexure-II).The scope is limited to supply of IT Hardware and Software with the existing network. The scope of work shall include following Supply of IT Hardware and Software:	Please confirm whether Schedule-B items are required only to be supplied or whether SITC (Supply, Installation, Testing & Commissioning) is also in bidder scope		Repeated query
59	3.5	32	A.4	Rack Servers for DNS/Speed Test Server/Syslog Collector OEM Compliance OEM must be ISO 9001 and 14000 certified & OEM should be listed in telecom trusted portal as trusted source.	As server is not categorized as telecom device and therefore does not fall under the Telecom Trusted Products requirement. Hence we request you to kindly amend the clause as "Rack Servers for DNS/Speed Test Server/Syslog Collector OEM Compliance OEM must be ISO 9001 and 14000 certified "	Required to ensure compliance with Trusted Source guidelines and to avoid rejection due to category mismatch.	Repeated query

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
60	3.5	32	A4	Rack Servers for DNS/Speed Test Server/Syslog Collector	i. Speed test server application will be provided by Railtel or Bidder? ii. For the Syslog Collector, kindly confirm the following parameters: a. Required log retention period (in days/months). b. Existing number of users per CGNAT for sizing. c. Existing Average daily storage consumption per CGNAT instance."	Required for accurate hardware & storage sizing.	Repeated query
61	3B	34	3.Next-Gen firewall specification	IPv6 ready & certified from day one	Request you to amend the caluse as: NIST USGv6/IPv6 & certified from day one	Please include the NIST USGv6/IPv6 certified products as well. Both IPv6 Ready and NIST IPv6 serves the same acknowledgement that the proposed devices are IPv6 supported.	Repeated query
62	3B	35	3.Next-Gen firewall specification	≥ 128 GB SSD for logging	SSD storage comes in general multiple of 120 GB. Hence request you to amend the clause as "≥ 120 GB SSD for logging"	SSD storage comes in general multiples of 120G, 240G, 480G and so on. Hence request to modify the parameter for competitive positioning.	Repeated query
63	3B	35	3.Next-Gen firewall specification	15.Management Ports Web Management ≥ 1 port (10/100/1000 RJ45 or 1G/10G SFP with optics)	Request to amend the clause as: "≥ 1 port (10/100/1000 RJ45 or 1G/10G SFP with optics) or full GUI management possible with above requested ports in clause 14"	Smaller performance devices are generally not equipped with the dedicated Management Port due to the form factor and fitment of more data ports in the device for better utilization of hardware & resources. Also the tender has requested for a separate dedicated Device Manager as well hence the management will be taken care on the Device Manager rather on the local device itself. Request to accommodate the required changes for competitive participation.	Repeated query
64	3B	35	3.Next-Gen firewall specification	16.Power Supply DC PSU with two sources or Redundant DC PSU.	Request to amend the clause to: "AC/DC PSU with two sources or Redundant AC/DC PSU."	Please include the option & flexibility of both AC as well DC power supply.	Repeated query
65	3.5	37	B6	Microsoft Office Licenses	Kindly specify the required Microsoft Office edition/version	Essential to quote correct product/SKU.	Repeated query

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
66	3	37	3.8	SYSTEM ENGINEERING GUIDELINES: 3.8.1 With 100% concurrent users loaded on the system the target response times should be as follows: 3.8.1.1. Total time for Ticket creation after submission should be less than 10 seconds. 3.8.1.2. Any ticket object, when opened in modify mode for state change or any other information update, should be saved in less than 10 seconds, after pressing the save button. 3.8.1.3. Any ticket object, when opened in modify mode, for assignment or re- assignment to a user, should be saved in less than 10 seconds, after pressing the save button. 3.8.1.4. Tab navigation (such as moving from dash-boarding to reporting etc.) <2seconds. 3.8.1.5. Screen opening from user login<3 seconds. 3.8.1.6. For a qualified search criteria, search results should be fetched within stipulated time of less than 20 seconds for each 100 results. 3.8.1.7. Simple & Medium Report generation <30 seconds 3.8.1.8. With auto TT in place (post both-way integration with alarm management system), automatic ticket should be opened within 20 seconds from the time of getting trigger from alarm management system. 3.8.1.9. With auto TT in place (post both-way integration with alarm management system The system triggering the ticket update should get the response back with update success status in less than 60 seconds. 3.8.1.10. In parent child ticket scenario, the updation in parent ticket should reflect in child ticket in less than 60 seconds.	Clearification required on system engineering, as it seems is related to ticketing tool	Requirement appears related to a ticketing tool; clarification is required for compliance.	Repeated query
67	3	38	3.A.4	DEPENDENCIES AND RESPONSIBILITY MATRIX 1. DESIGN OF THE SYSTEM The deployment location(s) will be decided by RailTel based on requirement. It will be in the scope of the vendor to technically support RailTel with design parameters, process flow fine tuning, ITIL alignment, optimization, escalation matrix definition, SLA rules definition & implementation etc within the limitations of ordered configurations (SOR, Specifications etc) for successful commissioning of the system. Design of system would include the following: a) Study of existing process flows, SLA Rules etc. b) Process flow fine tuning, ITIL alignment, optimization, escalation matrix definition, SLA rules definition & implementation etc. c) Provision for integration with other modules / systems. System Designs shall be approved by RailTel before implementation.	This Clause is not clear.		Repeated query

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
68	3.A.4	39	4.4	INSTALLATION, INTEGRATION, CUSTOMIZATION, TESTING, TRIAL RUN AND COMMISSIONING OF SYSTEM The Tenderer shall be fully responsible for Quality Assurance of equipment & other elements of the system including the following:- a) Installation, Integration & Customization of the above-mentioned equipment/items as per System design. b) Testing of the System as specified in the tender document. c) Trial run of the System. d) Commissioning of the System.	Required clearification on trial run, what is your understanding this.		Repeated query
69	4.A.3. Long Term Maintenance Support	49	4.A.3.3	Separate LOA for AMC shall be issued by RailTel 3 months prior to the completion of warranty period and separate Agreement shall be signed with the Bidder/OEM. A fresh Bank Guarantee valid for a period of 4 months beyond the completion of AMC from the date of LOA shall be required to be submitted by OEM/ Tenderer for due fulfillment of Long term maintenance support obligation. Value of PBG will be 10% of the total value of LOA issued for AMC for five years. 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 (main contract). The contractor will inform to RailTel in writing and ask for the AMC LOA six months prior to expiry of warranty period. In case issue of LOA for AMC is delayed due to non-intimation by the contractor, he will extend the original PBG till issue of LOA for AMC and submission of PBG else original PBG will be encashed.	As per the tender terms, a Performance Bank Guarantee (PBG) equivalent to 10% of the AMC order value is required to be submitted against the AMC LOA. We request RailTel to kindly allow submission of an Insurance Surety Bond in place of the PBG for the AMC order as well, similar to the provision already permitted for the SITC order.	This will ensure uniformity across both stages (SITC and AMC) and ease of compliance for the bidder without affecting RailTel's financial safeguards.	Repeated query
70	4.A.5.6 Payment term for Schedule of Services	51	4.A.5.6.1	Payment of schedule of service (C) towards "AMC/ Long Term Maintenance Support" would be paid quarterly by the concerned Office as per clause 7.6.4 of Chapter 7. Note: If the bidder intends to claim advance payment against the Annual Maintenance Cost, Bidder shall provide a Performance Bank Guarantee (PBG) equivalent to the amount claimed and claimed period plus four months along with a valid warranty certificate from the OEM.	As per the tender conditions, an equivalent amount of PBG is required to be submitted for release of the AMC advance payment. We request RailTel to kindly allow submission of an Insurance Surety Bond in place of the PBG for the AMC advance payment as well.	Allowing an Insurance Surety Bond as an acceptable instrument will facilitate smoother compliance while maintaining the required financial security for RailTel.	Repeated query
71	4.A.6. Performance Bank Guarantee (Security Deposit) or Insurance Surety Bond	51	4.A.6.1	The successful bidder has to furnish security deposit in the form of Performance Bank guarantee @ 10% or Insurance Surety Bond (Form no. 9 of Chapter-6) of issued PO/ LOA value, the same should be submitted within 30 days of issue of LOA/PO, failing which a penal interest of 15% per annum shall be charged for the delay period i.e. beyond 30 (thirty) days from the date of issue of LOA/PO. This PBG should be from a Scheduled Bank and should cover warranty period plus four months for lodging the claim. The performance Bank Guarantee will be discharged by the Purchaser after completion of the supplier's performance obligations including any warranty obligations under the contract.	We are assuming that submission of an Insurance Surety Bond in place of the required PBG is acceptable under the tender terms.		Repeated query

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
72	4.A.6. Performance Bank Guarantee (Security Deposit) or Insurance Surety Bond	51	4.A.6.1	The successful bidder has to furnish security deposit in the form of Performance Bank guarantee @ 10% or Insurance Surety Bond (Form no. 9 of Chapter-6) of issued PO/ LOA value, the same should be submitted within 30 days of issue of LOA/PO, failing which a penal interest of 15% per annum shall be charged for the delay period i.e. beyond 30 (thirty) days from the date of issue of LOA/PO. This PBG should be from a Scheduled Bank and should cover warranty period plus four months for lodging the claim. The performance Bank Guarantee will be discharged by the Purchaser after completion of the supplier's performance obligations including any warranty obligations under the contract.	As per Ministry of Finance notification no. No.F.1/2/2023-PPD dt. (Amendment in General Financial Rules, 2017 - Rule 171(i) Performance Security Regarding.) dt. 01-01-2024 As per the Ministry of Finance guidelines, we request RailTel to kindly revise the Performance Bank Guarantee (PBG) requirement from the existing 10% of the contract value to 3–5% of the contract value.		No change. It will be as per Tender requirement.
73	Annexure II	136	B. Internet Delivery Routers (Tier-3 & 4):	Installation of Tier-3 & 4 will be done by RailTel. However, configuration shall be done by Bidder..	Need Clarification that Configuration will remotely or onsite		Repeated query
74		Page 32	Regulatory Compliance	ROHS, FCC / UL/CE and 80% Plus Platinum Level for power supplies.	It is requested to remove "80% plus Platinum Level for power supplies" as our proposed solution meets the required performance and energy-saving standards with a different power supply rating. **Hence, we request for the removal of "80% Plus Platinum Level" to allow its wider participation.**		May please see corrigendum-I
75		Page 32	A4- Rack Servers for DNS/Speed Test Server/Syslog Collector	The Equipment offered by the tenderer or equipment of the same series/family (minimum Qty 40 Nos) from the same OEM should have been satisfactorily working in Government/ PSUs/Telecom Service Providers (NLD/Class-A ISP) network for at least 12 months, in India. As documentary evidence, the tenderer shall submit the relevant End User Purchase Order (PO) along with an End User Certificate confirming the satisfactory performance of the equipment, both of which must accompany the offer.	We request relaxation of the requirement of 40 Nos installations. We has already supplied & installed 20 Nos of the offered items, working satisfactorily for over 12 months in RAIL TEL networks. **Hence, we request to please consider 20 Nos as a past experience to allow its wider participation.**		Multiple POS/Orders are also acceptable against this clause
76		Page 59	OEM PQ	OEM should have supplied the equipment/software offered or equipment/software of the same series/family at least of the value Rs. 8.10 Cr 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. Note: (i) For Startups* (recognized by Department of Industrial policy and promotion, Ministry of Commerce and Industry) only 1/3 of value as mentioned above is required. (ii) Public listed company having average annual turnover of Rs 500 Cr 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 be considered.	We respectfully request a relaxation of the eligibility requirement of ₹8.10 Cr turnover during the last three preceding financial years, as well as the requirement to submit a certificate from a publicly listed company with a turnover of ₹500 Cr. We would like to highlight that we have already supplied and installed items worth ₹3 Cr and above, which are functioning satisfactorily. In view of this, **we kindly request that the turnover requirement be revised to ₹3 Cr during the last three preceding financial years, and that the condition requiring a certificate from a public listed company with a ₹500 Cr turnover be removed.** This relaxation will help ensure wider participation and promote healthy competition.		No change. It will be as per Tender requirement.
77	Chapter 2	10	A	Schedule of Supplies (A) - Internet Gateways	Unlike IT and Security equipments, the count of Tier 1, Tier 2, Tier 3, Tier 4 SDN routers and Tier 1, Tier 2 CGNAT appliances are not clear. Information in Anneuxure II is not clear. Hence request Railtel to clarify on the count of Tier 1, Tier 2, Tier 3, Tier 4 routers and CGNAT appliances Tier 1 and Tier 2 required as part of this tender.	Just like the quantity for IT & Security Equipments are clearly given. Request Railtel to clarify the quantity required for Schedule A items.	No change. It will be as per Tender requirement.

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78	3.A.2 & Chapter no. 3A	14	A.7.e	The scope includes the supply, design, installation, testing, and commissioning of an SDN Controller at the Central Network Operations Center (CNOC) of same make with DC & DR or DC with application Backup at DR. This controller will centrally manage all deployed SDN routers and CGNAT devices, enabling unified orchestration and policy enforcement. In case CGNAT devices cannot be managed by SDN controller then a dedicated EMS of same make for managing CGNAT devices should be proposed as part of the solution with DC & DR or DC with application Backup at DR.	Rather than deploying a new SDN controller. Request Railtel to leverage the existing SDN controller and let the new routers supplied in this tender to be integrated with Railtel's existing SDN controller using standard protocols such as PCEP, BGP-LS, Netconf, telemetry, etc. Hence request Railtel to make the SDN controller requirement as optional.	Since Railtel is already using a SDN controller it would be easier for operations to manage single controller for entire network.	No change. It will be as per Tender requirement.
79	3.A.2 & Chapter no. 3A	15	A.7.p	Pre-Production Lab Setup at CNOC: The Bidder/OEM shall also establish a dedicated Lab environment at the Central Network Operations Center (CNOC) for pre-production testing and validation, at no financial cost to RailTel. The Lab shall be provisioned with a minimum of six (6) additional routers, ensuring representation of at least one unit of each distinct equipment type proposed under the production environment. In the case of Carrier Grade NAT (CGNAT), if the Bidder/OEM has proposed two distinct CGNAT solutions, they may opt to deploy either one of the proposed types within the Lab environment, subject to compatibility and functional equivalence with the production design.	Is this lab temporary to test and validate the solution and would be dismantled once the testing is completed or is it a permanent deployment?	If it is temporary deployment then what would be the completion criteria.	It is required for permanent deployment.
80	3.A.3 & Chapter no. 3A	17	3.4.4.a	The relevant or applicable TEC GR specs for the equipment sought under this tender as below: 1. MPLS SDN Router1. Router Category V for Tier-4 2. Router Category VI for Tier-3 3. Router Category X for for Tier 1 &Tier 2 TEC/GR/IT/TCP-006/01 AUG 2016 or Latest	Request railtel to make TEC-GR compliance as optional.	Most of the international OEM routers do not comply to TEC-GR. However they do comply to other TEC standards such as MTCTE. These devices are MTCTE certified as per the Indian regulation. Hence request to make TEC-GR compliance as an optional requirement.	No change. It will be as per Tender requirement.
81	3.A.3 & Chapter no. 3A	18	3.4.4.k	Proposed equipment shall have at least 70% compliance of TEC GR by considering each sub-clause as one clause.	Request Railtel to confirm whether for each categroy, out of all the applicable sub-clauses only 70% needs to be complied.	All the clauses in the TEC-GR are not relavant.	It will be applicable to respective Category of Router.
82	3.A.3 & Chapter no. 3A	19	3.5.1.A.A.1.1	Minimum Ports from day one. Tier-1: 24x400/100G QSFP-DD	Since the Total throughput for Tier 1 router is 2.4Tbps and only 100G LR4 optics are requested on the router. Request railtel to modify the clause as "2x400G (QDD) and 16x100G (QSFP28)".	400G interfaces should support QDD standard and 100G interfaces should support QSFP28 standard.	May please see corrigendum-I
83	3.A.3 & Chapter no. 3A	19	3.5.1.A.A.1.1	Minimum Ports from day one. Tier-4: 2x100G QSFP28 & 12x10/25G SFP28	Tier 4 routers connect to Tier 2 routers and as Tier 2 routers have 100G interfaces hence request Railtel to modify the port requirements for Tier 4 router as "2x100G + 12*10G/1G".	This will allow Tier 4 routers to dual home to Tier 2 routers on 100G interfaces	No change. It will be as per Tender requirement.
84	3.A.3 & Chapter no. 3A	19	3.5.1.A.A.1.2	Proposed devices should be equipped optics: Tier 1: 8x100G QSFP28 LR4	As per clause 3.A.2.7.b, Tier-1 to Tier-1 interconnect within the same POP shall be provisioned with 1x400G with optics supporting 2km, SM. Hence request Railtel to modify the clause as "1x400G QDD FR4 & 8x100G QSFP28 LR4"		Bidder to supply 8x100G QSFP28 LR4 and 400G connectvity SFPs as per scope of work.

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85	3.A.3 & Chapter no. 3A	19	3.5.1.A.A.1.2	Proposed devices should be equipped optics: Tier 4: 2x40G QSFP+ LR & 6x10 SFP+	Tier 4 routers connect to Tier 2 routers and as Tier 2 routers have 100G interfaces hence request Railtel to modify the port requirements for Tier 4 router as "2x100G QSFP28 LR4 & 6*10G SFP+ LR".	10G optics type was not defined.	Bidder to supply LR optics only for both 10G and 40G.
86	3.A.3 & Chapter no. 3A	19	3.5.1.A.A.1.5	Minimum IPv4 RIB/FIB: Tier 1: 10M/5M	Current full internet route table size for IPv4 is ~1M, hence a 4x FIB table size is more than sufficient to meet future requirements. Hence request Railtel to modify the clause as "10M/4M"		No change. It will be as per Tender requirement.
87	3.A.3 & Chapter no. 3A	19	3.5.1.A.A.1.5	Minimum IPv4 RIB/FIB: Tier 2: 10M/5M	Current full internet route table size for IPv4 is ~1M, hence a 4x FIB table size is more than sufficient to meet future requirements. Hence request Railtel to modify the clause as "10M/4M"		No change. It will be as per Tender requirement.
88	3.A.3 & Chapter no. 3A	19	3.5.1.A.A.1.8	Minimum Label Stack	Request Railtel to modify the number of minimum label stack to 8 for Tier 3 and Tier 4 devices as well because services would originate at Tier 3 and Tier 4.	5 Label stack is too less for SR-MPLS or SRv6 deployment and services would originate at Tier 3 and Tier 4. It is better to have 8 label stack across the network.	No change. It will be as per Tender requirement.
89	3.A.3 & Chapter no. 3A	19	3.5.1.A.A.1.11	Minimum Number of VLAN support	Request Railtel to modify the number of VLAN requirements for Tier 1 and Tier 2 routers as 4K.	4096 is the maximum VLAN ranges allowed on routers	No change. It will be as per Tender requirement.
90	3.A.3 & Chapter no. 3A	23	3.5.1.A.A.1.31	The proposed router should be NEBS level 3 compliant. 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.	Request Railtel to consider NEBS Level 3 or GR-1089 compliant routers for smaller locations like Tier 3 and Tier 4	This will allow more vendor participation as smaller location routers may not be NEBS Level 3 compliant as these are smaller devices however they would be NEBS GR1089 compliant.	<mark>May please see corrigendum-I</mark>
91	3.A.3 & Chapter no. 3A	23	3.5.1.A.A.1.33	The offered devices must support following functionalities to support 3rd party SDN (in future)	Request Railtel to make this clause a Day 0 requirement.	Since railtel is already using a SDN controller, this should be a day 0 requirement. In this tender, new vendor can qualify and enter the network.	No change. It will be as per Tender requirement.
92	3.A.3 & Chapter no. 3A	25	3.5.1.A.A.1.41	Router should comply to following Temperature performance parameters: i. Operating Temperature: 5 to 40 degree C or better	Request Railtel to modify the operating temperature range for smaller locations such as Tier 3 and Tier 4 routers to have operating temperature range from -40C to +65C.	Tier-3 and Tier-4 location can have temperature hardened devices as these would be smaller locations with lesser throughput. This would reduce the site cooling requirement, thereby reducing the OPEX for Railtel.	No change. It will be as per Tender requirement.

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
93	3.A.3 & Chapter no. 3A	26	3.5.1.A.A.1.51.i	Router should be able to support SRv6 standards whenever it is firmed upt without any cost to RCIL.	Request Railtel to modify the clause as "The Router should support SRv6 from day 0 and SRv6 standards should be supported whenever it is firmed up without any cost to RCIL".	The routers which Railtel is procuring in this tender should be SRv6 ready so that Railtel does not have to do any forklift upgrade when they want to deploy SRv6 on this network which is also mentioned as an objective of Railtel for this network in clause 3.A.2.7.g	No change. It will be as per Tender requirement.
94	3.A.3 & Chapter no. 3A	27	3.5.1.A.A.1.53	Should have power supply arrangement without any external adaptors with redundant/dual feeds power supply:Type-I & II & III -48 V DC supply (with the operating range of -48 to -60 VDC).	Request Railtel to modify the clause as "Should have power supply arrangement without any external adaptors with redundant power supplies for Type-I, II, III & IV routers -48 V DC supply (with the operating range of -48 to -60 VDC)."	This is a service provider grade network and all the elements delivering end user service should at least have power supply redundancy to main carrier grade service availability.	No change. It will be as per Tender requirement.
95	3.A.3 & Chapter no. 3A	27	3.5.1.A.A.1.58	Note : Bidder can propose dual box for CGNAT Router. In case of dual box solution , CGNAT box should have Min 2x100G interface with required optics to connect the CGNAT Router & redundant DC (-48 V) power supply and should meet CGNAT Specification as per CGNAT Appliance.	In case of dual box solution, request Railtel to modify the min. interface requirement to 4x100G interface with required optics to connect CGNAT appliance with Tier 1 router.	For Tier 1 locations the requested CGNAT throughput is 300Gbps. In this case 2x100G is not enough to connect CGNAT device to the tier 1 router.	No change. It will be as per Tender requirement.
96	3.A.3 & Chapter no. 3A	30	3.5.1.A.A.2.16	Platform shall support CGNAT and logging to support minimum IMIX throughput. Type 1 - 300Gbps, Type 2 - 150Gbps	Request Railtel to confirm the IMIX average packet size.	The IMIX average packet size can vary from OEM to OEM. Hence request Railtel to confirm based on their network.	May please see corrigendum-I
97	3.A.3 & Chapter no. 3A	30	3.5.1.A.A.2.16	Platform shall support CGNAT and logging to support minimum IMIX throughput. Type 1 - 300Gbps, Type 2 - 150Gbps	Request Railtel to modify the CGNAT throughput to Type 1: 1Tbps, Type 2: 700Gbps	The Tier 1 and Tier 2 routers at these locations are terabit scale routers and based on experience from other service providers in India, the NAT throughput required is around 40% of the router throughput. 40% of 2.4Tbps = 960Gbps and 40% of 1.6Tbps = ~640Gbps	May please see corrigendum-I
98	3.A.3 & Chapter no. 3A	36	3.5.1.B.5.1	Switch Type: Layer 2 Managed PoE++ Switch	Request Railtel to modify the clause as "Switch Type: Layer 2 Managed PoE+ Switch"	IEEE 802.3at is the standard for POE+ and not POE++	May please see corrigendum-I
99	3.A.3 & Chapter no. 3A	36	3.5.1.B.5.2	Ports: 24 × 10/100/1000BASE-T RJ45 PoE++ ports (IEEE 802.3at compliant)	Request Railtel to modify the clause as "Ports: 24 × 10/100/1000BASE-T RJ45 PoE+ ports (IEEE 802.3at compliant)"	IEEE 802.3at is the standard for POE+ and not POE++	May please see corrigendum-I

SN	Clause no. & Chapter no.	Page no.	Sub-clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks	RailTel's Response
100	Clause No. 3.A.3 & 3A	33	B 1.Desktops/ Workstation	Processor: Intel Core i5 or higher	AMD Ryzen 5 / Intel Core i5 orhigher		May please see corrigendum-I
101	Clause No. 3.A.3 & 3A	33	B 1.Desktops/ Workstation	Virtualization Support: Hardware-assisted virtualization(Intel VT-x/VT-d)	Hardware-assisted virtualization(Intel/AMD virtualization support)		May please see corrigendum-I
102	Clause No. 3.A.3 & 3A	33	B 2. Laptops	Processor:Intel Core i5 or M1	AMD Ryzen 5 / Intel Core i5 or M1		May please see corrigendum-I
103	A.4 Rack Servers for DNS/Speed Test Server/Syslog Collector		13	OS supported: Red Hat, CentOS, Ubuntu, Oracle Linux and Debian.	Linux and Debian. OS Supported Red Hat, CentOS, Ubuntu, Oracle Linux /Debian	Debian is an old OS	May please see corrigendum-I