Response of RailTel to Prebid queries

RailTel/Tender/OT/CO/Project/2022-23/Type-IV Switch/006 dated 07.11.2022

1. Commercial Terms and Conditions:

SN	Clause no. & Chapter no.	Page no.	Sub- clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remarks of bidder	Response of RailTel
1	4.A.41, Chapter-4A: Public Procurement	53	4.A.41.1	i. Only Class-I local suppliers (meeting minimum 50% local content) & Class-II local suppliers (meeting minimum 20% local content)are eligible to participate in this tender.	We would like to request you to change the restrictions on Non Make in India suppliers of switches to participate as Make in India local content for the subjected tender requirement of Type IV Switches are unavailable in market. It would be difficult for us to align OEMs and participate in the bid. We would like to relax thic clause and consider our request for more larger healthier participation.		No change in tender condition
2	4.A.4, Chapter-4A: Delivery, Installation, Testing, Commissioning & Integration period	26	4.A.4.	The materials as per SOR-A are required to be delivered, installed, tested, commissioned & Integrated within 180 days from the issue of LOA/Purchase Order.	since you are aware that due to COVID, there is shortage of raw material and huge gap between demand and supply. Therefore request you to consider our request for changing the timelines. We request you to extend the timeline to be delivered, installed, tested, commissioned & Integrated to within 270 days from the issue of LOA/Purchase Order.		No change in tender condition
3	4.A.5, Chapter-4A: Payment Terms for Supply items (Schedule-A)	26, 27	4.A.5.	Payment Terms for Supply items (Schedule-A) 75% payment of the value of Schedule-A 15% payment of the value of Schedule-A shall be made by RailTel on Installation,Testing, Commissioning & Integration at site	Since this project is mainly of CAPEX, We very humbly request for Industry friendly Payment Terms in order to have maximum tender participation. Therefore please consider and change the payment terms as requested Payment Terms for Supply items (Schedule-A) 90% payment of the value of Schedule-A 10% payment of the value of Schedule-A on Installation,Testing, Commissioning & Integration at site(distributed on the whole 10% on conditions as mentioned in RFP)		No change in tender condition
4	4.A.3, Chapter-4A: Long Term Maintenance Support	25	4.A.3.1	Bidder/OEM shall provide maintenance support after successful completion of the warranty obligations for a minimum period of 5 years.	Generally, such products have a life cycle of 7 yrs. (8 yr. max), this is also due to the fact that many ASICs used in devices are produced by other chip manufacturers that provide a shorter life cycle for the ASICs. All OEMs would be using Broadcom ASIC for this router. Considering that, if the product is released a year back, it gives only 7 more years of the lifecycle from now. It will take at least 1 year from now for getting PAC from which the warranty period will start which is asked as 3 years. So, it gives only **3 more years** for long-term maintenance support for the product. So, Please change the maintenance period to **3 years.**		No change in tender condition
5	4.A.4, Chapter-4A: Delivery, Installation, Testing, Commissioning & Integration period	26	4.A.4	The materials as per SOR-A are required to be delivered, installed, tested, commissioned & Integrated within 180 days from the issue of LOA/Purchase Order.	Due to industry wide chipset shortage issues in the networking industry the delivery lead times are high. Hence request you to modify the clause as " The materials as per SOR-A are required to be delivered, installed, tested, commissioned & Integrated within **365 days** from the issue of LOA/Purchase Order "		No change in tender condition

Netesh Kumar Singh

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Date: 2023.01.12 17:45:00 IST

6	4.A.12.3, Chapter-4A: Eligibility Criteria Requirements for OEM"s	35	S.N. 1 - Eligibility Criteria Requirements	The OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Logistic Supports for at least past three years.	many OEMs only do high-level designing of many of the products and then offload the hardware manufacturing, integration, assembly and hardware testing to the ODMs. So, requesting to modify the clause as suggested below: "The OEM should have proven facilities for Engineering and basic facilities with respect to space, Engineering, Personnel, Test equipment, Training, Logistic Supports for at least past three years."		No change in tender condition
7	4.A.12.3, Chapter-4A: Eligibility Criteria Requirements for OEM"s	36	S.N. 2 -Supporting Document Required	Satisfactory Working Performance of the same series/family from the same OEM by the user is required to be submitted and it should be issued during last one year from the date of opening of Tender.	Please allow public case studies as supporting document as such reports can not be provided because of NDA clauses with many customers. Also please remove 1 yr. restriction. Please change clause as suggested: "Satisfactory Working Performance by the user or public case study by user/OEM of the same series/family from the same OEM is required to be submitted"		No change in tender condition
8	4.A.12.3, Chapter-4A: Eligibility Criteria Requirements for OEM"s	36	S.N. 3 - Eligibility Criteria Requirements	OEM should have supplied the equipment/software offered or equipment/software of the same series/family at least of the value 19.99 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 / Internet Service Provider / Public Listed Company	please modify the clause as suggested for clarity: OEM should have supplied the equipment/software offered or equipment/software of the same series/family at least of the value 19.99 Cr **cumulatively** 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 / Internet Service Provider / Public Listed Company		Value Rs. 19.99 Cr is cumulative.
9	4.A.12.3, Chapter-4A: Eligibility Criteria Requirements for OEM"s	36	S.N. 3 -Supporting Document Required	OEM should submit selfcertificate with proper contact detail of clients along with PO reference and amount supplied (Firm Name, Contact person, Designation, Telephone Number, Fax, Official mail id etc.). The same should be issued by authorized signatory	Due to NDA with customer, customer details can not be provided. So, requesting to omit the requirement of customer details from the clause. Please modify the clause as mentioned below: "OEM should submit self certificate with PO reference and the amount supplied" The same should be issued by authorized signatory		No change in tender condition
10	4.A.41, Chapter-4A: Public Procurement	53	4.A.41.1 Preference to Make in India	Only Class-I local suppliers (meeting minimum 50% local content) & Class-II local suppliers (meeting minimum 20% local content) are eligible to participate in this tender.	Nokia is a global leader in IP MPLS, DWDM, GPON, Radio technologies. In India Nokia had been supplying IP MPLS solution to every large service provider (Bharti Airtel, Reliance Jio, Vodafone, BSNL etc) & many large ISP's. We are very keen to particliate in this opporutnity & would look forward to your kind consideration.		No change in tender condition
11	4.A.5, Chapter-4A: Payment Terms for Supply items (Schedule-A)	26, 27	4.A.5	75% On supply , 15 % of Installation on SAT, 5% onPAC, 5% on FAC	We request to change this payment terms to 95% supply, 5% on PAC.		No change in tender condition

2. Technical Specifications:

SN	Clause no. & Chapter no.	Page no.	Sub- clause no./ Point no.	Content of the clause requires clarification	Points of clarification required	Remark by Bidder	Response of RailTel

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Date: 2023.01.12 17:45:00 IST

1	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	B-5	The LSR to be equipped with 12x10G and 4x40/100G (Uplink) optical SFP Ports .	Against RDSO standard specs of 8 x 10G, RailTel has requested additional 10G interfaces as well as 100G interfaces to cater the traffic requirement. Considering traffic growth also, 12 x 10G SFP+ and 2 x 40/100G QSFP28 Optical ports would suffice the requirement for future. Requesting for 4 x 40/100G will push the OEMs to position higher box which will escalate the overall project cost. Hence, we request to change the clause as follows: The LSR to be equipped with 12x10G and 2x40/100G (Uplink) optical SFP Ports .		Pls see the corrigendum-III
2	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	D 1.6	The router shall be equipped with 12x10G SFP+ and 4x40/100G (Uplink) QSFP28 Optical ports. All the optical interfaces shall be support LR, ER and ZR optics. Router should be equipped with following optics 1. 2x10G BIDI SFP+ LR (10 Km) in Pair. 2. 1x10G SFP+ ZR BIDI (80 Km) in pair or suitable solution to work on on single mode fibres (Single fiber) upto 80 km (Link Budget 22db on 1550nm) 3. 1x40G DAC. Third Pary optics can also acceptable however it should be fully compatible.	Against RDSO standard specs of 8 x 10G, RailTel has requested additional 10G interfaces as well as 100G interfaces to cater the traffic requirement. Considering traffic growth also, 12 x 10G SFP+ and 2 x 40/100G QSFP28 Optical ports would suffice the requirement for future. Requesting for 4 x 40/100G will push the OEMs to position higher box which will escalate the overall project cost. Hence, we request to change the clause as follows: The router shall be equipped with 12x10G SFP+ and 2x40/100G (Uplink) QSFP28 Optical ports. All the optical interfaces shall be support LR, ER and ZR optics. Router should be equipped with following optics 1. 2x10G BIDI SFP+ LR (10 Km) in Pair. 2. 1x10G SFP+ ZR BIDI (80 Km) in pair or suitable solution to work on on single mode fibres (Single fiber) upto 80 km (Link Budget 22db on 1550nm) 3. 1x40G DAC. Third Pary optics can also acceptable however it should be fully compatible.		Pls see the corrigendum-III
3	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	14	6.7	Operating temperature: 0°C to 45°C.	As the devices are going to be deployed in temperature controlled air-conditioned environment and are not industrial grade. For most of the carrier grade devices support temperature range between 5°C to 40°C, we request to modify the clause as: Operating temperature: 5°C to 40°C.		Pls see the corrigendum-III
4	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.8	Router ASIC should be capable of supporting SRv6 natively and inter-working with SR-MPLS in future. SRv6-MPLS inter-working in future with software enhancement.	SRv6 is not deployed in any large service provider networks as it requires IPv6 infrastructure end to end. Requesting this clause, will limit the participation. Hence we request you to delete this clause or alternatively modify the clause as follows: Router ASIC should be capable of supporting MPLS for both IPv4 and IPv6 infrastructure on Day-1.		Pls see the corrigendum-III
5	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	10.9	The system should support REST API for communication with third party tools and applications	We request you to modify the clause as: The system should support REST API/RESTCONF/NETCONF/YANG for communication with third party tools and applications		Pls see the corrigendum-III
6	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	B-9	TDM should be supported inbuilt or through smart SFPs in future if required	-- please delete the clause TDM is very old technology and is limiting participation with latest hardware. Please remove clause for wider participation.		As per RFP

7	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	D - 1.6	The router shall be equipped with 12x10G SFP+ and 4x40/100G (Uplink) QSFP28 Optical ports. All the optical interfaces shall be support LR,ER and ZR optics . Router should be equipped with following optics 1. 2x10G BIDI SFP+ LR (10Km) in Pair. 2. 1x10G SFP+ ZR BIDI (80Km) in pair or suitable solution to work on single mode fibres (Single fiber) upto 80km (Link Budget 22db on 1550nm) 3. 1x40G DAC. Third Party optics can also acceptable however it should be fully compatible .	Please change 4x40/100G to 6x40/100G ports to better long-term scalability. The majority of the OEMs have a product to support this requirement. Please remove 10G ZR BiDi optics requirement from router specs. This transceiver is not common in industry and is available with very few 3rd party optics vendors. Putting this optics requirement in router specification is limiting participation from router OEMs. So, please remove this clause from here for wider participation from router OEMs.		Pls see the corrigendum-III
8	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	13	D - 1.13	Router shall have IP-MPLS interoperability with routers of other multiple OEMs. The product should be tested at EANTC or any other renowned LAB for INTEROPERABIITY in Multi-OEM FOR IP/MPLS. The product series/family should be deployed at least two major Service provider, Govt, Railways. Customer letter (Govt/PSU/ISP) with satisfactory performance of the offered make with IP/MPLS.	Only few products of a family are tested in such LABs as testing every product is not possible. Please allow for case studies also to be acceptable as getting letter from customer may not be possible in all cases. So, Please make the changes as suggested. "Router shall have IP-MPLS interoperability with routers of other multiple OEMs. The product**/product-family** should be tested at EANTC or any other renowned LAB for INTEROPERABIITY in Multi-OEM FOR IP/MPLS. The product series/family should be deployed at least two major Service provider, Govt, Railways. Customer letter**/case study** (Govt/PSU/ISP) with satisfactory performance of the offered make**/product series** with IP/MPLS."		Pls see the corrigendum-III
9	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	13	D - 2.2	Router shall support LDP, MPLS-TE with FRR, R-LFA, TI-LFA for sub 50 msec protection.	MPLS-TE FRR and TI-LFA are more advance than the R-LFA. Please **remove R-LFA** for wider participation.		Pls see the corrigendum-III
10	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	14	D - 6.7	Operating temperature: 0°C to 45°C.	Operating temperature range of 0°C to **40°C** is more commonly supported in the industry. Please relax for wider participation		Pls see the corrigendum-III
11	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	14	D - 9.4	The router should be able to act as Path computation client in the PCE architecture defined in RFC 4655.	BGP SR-TE is another way of getting update from PCE. Please allow the alternate for wider participation. Requesting to change the clause to: "The router should be able to act as Path computation client in the PCE architecture defined in RFC 4655 **or should support BGP SR-TE extension**"		Pls see the corrigendum-III
12	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	D - 9.5	The router should support PCECP as defined in RFC5440.	BGP SR-TE is another way of getting update from PCE. Please allow the alternate for wider participation. Requesting to change the clause to: "The router should support PCECP as defined in RFC5440 **or should support BGP SR-TE extension**"		Pls see the corrigendum-III
13	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	D - 11.2	Traffic Steering of SR policies with Autoroute Include and Segment Routing TI-LFA SRLG Protection	Please modify the clause as mentioned below for wider participation: "Traffic Steering of SR policies and Segment Routing TI-LFA SRLG Protection"		Pls see the corrigendum-III

14	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	D - 11.3	LSP ping, trace-route, Pseudo wire Ping over Segment Routing, trace route for binding-SID	Please modify the clause as mentioned below for wider participation "LSP ping, trace-route"		Pls see the corrigendum-III
15	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	D - 11.4	MPLS-LDP interworking with SR-ISIS and SR-OSPF	SR-ISIS is more commonly used. Please remove SR-OSPF or make it optional for wider participation		Pls see the corrigendum-III
16	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	D - 11.8	Router ASIC should be capable of supporting SRv6 natively and inter-working with SR-MPLS in future. SRv6-MPLS inter-working in future with software enhancement.	MPLS SR is more commonly used which is already asked in the RFP. Please delete this clause for wider participation		Pls see the corrigendum-III
17	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	B-5	The LSR to be equipped with 12x10G and 4x40/100G (Uplink) optical SFP Ports .	Against RDSO standard specs of 8 x 10G, RailTel has requested additional 10G interfaces as well as 100G interfaces to cater the traffic requirement. Considering traffic growth also, 12 x 10G SFP+ and 2 x 40/100G QSFP28 Optical ports would suffice the requirement for future. Requesting for 4 x 40/100G will push the OEMs to position higher box which will escalate the overall project cost. Hence, we request to change the clause as follows: The LSR to be equipped with 12x10G and 2x40/100G (Uplink) optical SFP Ports .		Pls see the corrigendum-III
18	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	D 1.6	The router shall be equipped with 12x10G SFP+ and 4x40/100G (Uplink) QSFP28 Optical ports. All the optical interfaces shall be support LR, ER and ZR optics. Router should be equipped with following optics 1. 2x10G BIDI SFP+ LR (10 Km) in Pair. 2. 1x10G SFP+ ZR BIDI (80 Km) in pair or suitable solution to work on on single mode fibres (Single fiber) upto 80 km (Link Budget 22db on 1550nm) 3. 1x40G DAC. Third Pary optics can also acceptable however it should be fully compatible.	Against RDSO standard specs of 8 x 10G, RailTel has requested additional 10G interfaces as well as 100G interfaces to cater the traffic requirement. Considering traffic growth also, 12 x 10G SFP+ and 2 x 40/100G QSFP28 Optical ports would suffice the requirement for future. Requesting for 4 x 40/100G will push the OEMs to position higher box which will escalate the overall project cost. Hence, we request to change the clause as follows: The router shall be equipped with 12x10G SFP+ and 2x40/100G (Uplink) QSFP28 Optical ports. All the optical interfaces shall be support LR, ER and ZR optics. Router should be equipped with following optics 1. 2x10G BIDI SFP+ LR (10 Km) in Pair. 2. 1x10G SFP+ ZR BIDI (80 Km) in pair or suitable solution to work on on single mode fibres (Single fiber) upto 80 km (Link Budget 22db on 1550nm) 3. 1x40G DAC. Third Pary optics can also acceptable however it should be fully compatible.		Pls see the corrigendum-III
19	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	14	6.7	Operating temperature: 0°C to 45°C.	As the devices are going to be deployed in temperature controlled air-conditioned environment and are not industrial grade. For most of the carrier grade devices support temperature range between 5°C to 40°C, we request to modify the clause as: Operating temperature: 5°C to 40°C.		Pls see the corrigendum-III

20	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.8	Router ASIC should be capable of supporting SRv6 natively and inter-working with SR-MPLS in future. SRv6-MPLS inter-working in future with software enhancement.	SRv6 is not deployed in any large service provider networks as it requires IPv6 infrastructure end to end. Requesting this clause, will limit the participation. Hence we request you to delete this clause or alternatively modify the clause as follows: Router ASIC should be capable of supporting MPLS for both IPv4 and IPv6 infrastructure on Day-1.		Pls see the corrigendum-III
21	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	10.9	The system should support REST API for communication with third party tools and applications	We request you to modify the clause as: The system should support REST API/RESTCONF/NETCONF/YANG for communication with third party tools and applications		Pls see the corrigendum-III
22	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	14	TAN Clause 5.2	Router shall support 64k IPv4 routes /32k IPv6 routes and Multicast routes 1K.	Router shall support 128k IPv4 routes / 32k IPv6 routes and Multicast routes 1K.	More sclability in the network	Pls see the corrigendum-III
23	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	14	TAN Clause 5.5	Minimum 250 MPLS VPLS.	Minimum 250 MPLS VPLS, minimum 500 L3 VPN	L3 VPN is mising, Most of the services would be L3 and minimum scale would be 500	Pls see the corrigendum-III
24	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	14	9. New Clause	The offered devices must support following functionalities to support 3rd party SDN (in future)	The offered devices must support following functionalities to support 3rd party SDN should be supported in Day-1	All these feature are available with all leading OEM and these should be available from Day-1, so that RCIL does not have any dependencies on OEM on License, feature etc	Pls see the corrigendum-III
25	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A			Additional Clause on Segment routing	Router should support Tree-SID and RFC7473 for multicast services in Segment routing	To run multicast in SR environment	Pls see the corrigendum-III
26	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A			Additional Clause on Segment routing	Segment routing must support feature to monitor the labelled path to avoid any black holing due to missing or incorrect label. This should be available for an end to end SR path.	This will avoid traffic forwarding where ismatch between label data plane and IP plane , which avoid drop of traffic in that path	Pls see the corrigendum-III
27	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A			Additional Clause on Segment routing	Router should support Segment Routing and Segment Routing Traffic Engineering (SR-TE), SR PCEP, Segment Routing for IPv6,On demand next hop, Any cast SID, binding -segments and BGP-LS with support of minimum 10 label depth.	Anycast SID will require for providing resiliency in the network. Binding Sid provides isolation or decoupling between different source-routed domains and improve overall network scalability.	Pls see the corrigendum-III
28	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A				All 10G and 100G ports should support SR, LR and ZR (80km) optics from day 1		Pls see the corrigendum-III
29	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	B-9	TDM should be supported inbuilt or through smart SFPs in future if required	Pls confirm for TDM interfaces Quantity and their Type. Should we make this as part of BoM. Generally these SFPs works in Pair so need more clarity on the end to end flow	Product is Completely IP based and hence TDMoIP SFP required for TDM Interfaces. Pls also specify no of SFP/s to be supplied	As per RFP
30	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	13	1.8	The router should have external/Internal Alarm Option for Chassis temperature and Chassis Power supply.		Pls change the compliance for wider participation to "Router Should be capable to send device health and Alrms to NMS/Controller"	Pls see the corrigendum-III
31	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.1	The router should support telemetry based on push model for monitoring network devices		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
32	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.3	The router should support sending telemetry data to multiple consumers simultaneously		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
33	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	104	The router shall support GPB/GRPC/KAFKA encoding for telemetry data		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III

34	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.6	The solution shall use either UDP or GRPC for transport of telemetry data		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
35	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.7	The system should support streaming granularity of atleast 10 sec		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
36	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.9	The system should support REST API for communication with third party tools and applications		Pls change the compliance for wider participation to "The system should support REST API/Net Conf for communication with third party tools and applications"	Pls see the corrigendum-III
37	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.1	Enabling telemetry should not have any adverse impact on the performance of the device/router		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
38	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.5	Router should have capability to calculate Bandwidth based path using centralized controller.		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
39	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	1.6	The router shall be equipped with 12x10G SFP+ and 4x40/100G (Uplink) QSFP28 Optical ports. All the optical interfaces shall be support LR, ER and ZR optics. Router should be equipped with following optics 1. 2x10G BIDI SFP+ LR (10 Km) in Pair. 2. 1x10G SFP+ ZR BIDI (80 Km) in pair or suitable solution to work on single mode fibres (Single fiber) upto 80 km (Link Budget 22db on 1550nm) 3. 1x40G DAC. Third Pary optics can also acceptable however it should be fully compatible.		Pls change the clause to 2/3x40/100G (uplink) for fair competition	Pls see the corrigendum-III
40	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	B-9	TDM should be supported inbuilt or through smart SFPs in future if required	Pls confirm for TDM interfaces Quantity and their Type. Should we make this as part of BoM. Generally these SFPs works in Pair so need more clarity on the end to end flow	Product is Completely IP based and hence TDMoIP SFP required for TDM Interfaces. Pls also specify no of SFP/s to be supplied	As per RFP
41	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	13	1.8	The router should have external/Internal Alarm Option for Chassis temperature and Chassis Power supply.		Pls change the compliance for wider participation to "Router Should be capable to send device health and Alrms to NMS/Controller"	Pls see the corrigendum-III
42	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.1	The router should support telemetry based on push model for monitoring network devices		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
43	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.3	The router should support sending telemetry data to multiple consumers simultaneously		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
44	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.4	The router shall support GPB/GRPC/KAFKA encoding for telemetry data		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
45	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.6	The solution shall use either UDP or GRPC for transport of telemetry data		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
46	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.7	The system should support streaming granularity of atleast 10 sec		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
47	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.9	The system should support REST API for communication with third party tools and applications		Pls change the compliance for wider participation to "The system should support REST API/Net Conf for communication with third party tools and applications"	Pls see the corrigendum-III

48	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.1	Enabling telemetry should not have any adverse impact on the performance of the device/router		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
49	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.5	Router should have capability to calculate Bandwidth based path using centralized controller.		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
50	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	13	1.13	Router shall have IP-MPLS interoperability with routers of other multiple OEMs. The product should be tested at EANTC or any other renowned LAB for INTEROPERABIITY in Multi-OEM FOR IP/MPLS. The product series/family should be deployed at least two major Service provider, Govt, Railways. Customer letter (Govt/PSU/ISP) with satisfactory performance of the offered make with IP/MPLS.	Usually for interop test, every Router variant is not tested. Hence, request Railtel to modify the clause as Router/Router series to betested for Interoperatability Test.		Pls see the corrigendum-III
51	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	14	9.4	The router should be able to act as Path computation client in the PCE architecture defined in RFC 4655.			Pls see the corrigendum-III
52	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.4	The router shall support GPB/GRPC/KAFKA encoding for telemetry data			Pls see the corrigendum-III
53	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.4	MPLS-LDP interworking with SR-ISIS and SR-OSPF	This functional requirement can be met by enabling SR & LDP on the same Router. Hence request to allow Roadmap for this Feature		Pls see the corrigendum-III
54	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.6	Shall support SR and MPLS (LDP) Interworking Mapping Server	This functional requirement can be met by enabling SR & LDP on the same Router. Hence request to allow Roadmap for this Feature		Pls see the corrigendum-III
55	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.8	Router ASIC should be capable of supporting SRv6 natively and inter-working with SR-MPLS in future .SRv6-MPLS inter-working in future with software enhancement.	This functional requirement can be met by enabling SRv6 & LDP on the same Router. Hence request to make inter-working part of clause Optional & modify the statement as "Router ASIC should be capable of supporting SRv6 natively"		Pls see the corrigendum-III
56	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	RDSO Cluase	5.4	Minimum 500 MPLS layer-3 VPN's.	As per Functional requirement of VSS, need to check if Layer-3 VPN's requirement can be deacreased to 32.		As per RFP
57	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	B-9	TDM should be supported inbuilt or through smart SFPs in future if required	Pls confirm for TDM interfaces Quantity and their Type. Should we make this as part of BoM. Generally these SFPs works in Pair so need more clarity on the end to end flow	Product is Completely IP based and hence TDMoIP SFP required for TDM Interfaces. Pls also specify no of SFP/s to be supplied	As per RFP
58	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	13	1.8	The router should have external/Internal Alarm Option for Chassis temperature and Chassis Power supply.		Pls change the compliance for wider participation to "Router Should be capable to send device health and Alrms to NMS/Controller"	Pls see the corrigendum-III
59	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.1	The router should support telemetry based on push model for monitoring network devices		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
60	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.3	The router should support sending telemetry data to multiple consumers simultaneously		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
61	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.4	The router shall support GPB/GRPC/KAFKA encoding for telemetry data		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
62	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.6	The solution shall use either UDP or GRPC for transport of telemetry data		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III

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63	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.7	The system should support streaming granularity of atleast 10 sec		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
64	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.9	The system should support REST API for communication with third party tools and applications		Pls change the compliance for wider participation to "The system should support REST API/Net Conf for communication with third party tools and applications"	Pls see the corrigendum-III
65	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	15	10.1	Enabling telemetry should not have any adverse impact on the performance of the device/router		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
66	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.5	Router should have capability to calculate Bandwidth based path using centralized controller.		Roadmap. Pls allow roadmap items of CY 2023 to be considered	Pls see the corrigendum-III
67	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	1.6	The router shall be equipped with 12x10G SFP+ and 4x40/100G (Uplink) QSFP28 Optical ports. All the optical interfaces shall be support LR, ER and ZR optics. Router should be equipped with following optics 1. 2x10G BIDI SFP+ LR (10 Km) in Pair. 2. 1x10G SFP+ ZR BIDI (80 Km) in pair or suitable solution to work on single mode fibres (Single fiber) upto 80 km (Link Budget 22db on 1550nm) 3. 1x40G DAC. Third Pary optics can also acceptable however it should be fully compatible.		Pls change the clause to 2/3x40/100G (uplink) for fair competition	Pls see the corrigendum-III
68	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	7	A	Supply of Type-IV Swiches with 3 years warranty as per technical specification in Chapter- 3A of tender document.		Railtel is trequested to change the name of the tender from "Supply, Installation and Supervision of Testing, Commissioning of Type-IV Switches including Integration with the existing MPLS/SDH/DWDM network of RailTel" to "Supply, Installation and Supervision of Testing, Commissioning of Type-IV ROUTERS including Integration with the existing MPLS/SDH/DWDM network of RailTel" as the technical specifications in the tender pertains to Lable switch Router as mentioned on Page 12 Clause B-5. Further, As switches and routers falls under Different SNC Code, while Importing the Raw material and falls under different Custom Duty segements, It would be very difficult to execute this project as Switches and while tender specifications calls for requirement of ROUTER.	Pls see the corrigendum-III
69	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.6	Shall support SR and MPLS (LDP) Interworking Mapping Server		We need your help to waive off compliances which currently are not supported on the Hardware by ADVA NOS.	Pls see the corrigendum-III
70	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	16	11.8	Router ASIC should be capable of supporting SRv6 natively and inter working with SR-MPLS in future. SRv6-MPLS inter-working in future with software enhancement.		We need your help to waive off compliances which currently are not supported on the Hardware by ADVA NOS.	Pls see the corrigendum-III
71	B. TECHNICAL SPECIFICATIONS, CHAPTER-3A	12	B-5	The LSR to be equipped with 12x10G and 4x40/100G (Uplink) optical SFP Ports		Instead of 4*100G UL ports , 3*100G ports	Pls see the corrigendum-III

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