Corrigendum No. OCAC-SEGP-INFRA-0035-2023-23127/Corr – 01 Dated: 09/01/24

Below table(s)/section(s) illustrates the Amendments (Annexure I) and Clarifications (Annexure II) issued for the RFP published for "Selection of Implementation Agency to Establish an IP-MPLS Network Connectivity in Odisha under Odisha Net Phase 1.0" (Tender Enquiry No. OCAC-SEGP-INFRA-0035-2023-23127: Date: 30-12-2023). All other terms and conditions mentioned in the published RFP document remain unchanged.

Annexure I Amendments:

S.No.	Page Number	Section	Sub-Section	Existing Clause	Amendments
1	23	6.2	A2	Project Experience for Long distance transport network (minimum 1000 Km)	If PSU had established its own Long-Distance Network, self-certified project experience from the Company Secretary/ State Head or above designated official/Statutory Auditor/CA will be considered subject to all details of the established Network made available as evidence along with the citation. Any work executed for Central/State Govt/PSU shall be supported by respective Client certificates.
2	23	6.2	A3	Project Experience for the establishment of IPMPLS Network (100 nodes minimum)	If PSU had established its own IP-MPLS Network, self-certified project experience from the Company Secretary/State Head or above designated official/Statutory Auditor/CA will be considered subject to all details of the established Network made available as evidence along with the citation. Any work executed for Central/State Govt/PSU shall be supported by respective Client certificates.
3	63	20		20.1 Technical Requirement - IP MPLS Router SHQ Point no 68 "The router must have capability to support minimum interfaces : 30 x 40/100GE, 60 x 10/25GE, 60 x 1/10GE"	The proposed product shall support this many number of ports. There shall be a minimum 30 x 100 GE ports (auto-negotiable) populated from day 1

S.No.	Page Number	Section	Sub-Section	Existing Clause	Amendments
4	63	20		20.1 Technical Requirement - IP MPLS Router SHQ Point no 68 "The router must have capability to support minimum interfaces : 30 x 40/100GE, 60 x 10/25GE, 60 x 1/10GE"	The proposed product shall support this number of ports. There shall be a minimum 30 x 100 GE ports (auto-negotiable) populated from day 1
5	67	20		20.2 Technical Requirement - IP MPLS Router DHQ Point no 65 "The router must support minimum interfaces natively without the need of adapter or convertors: 6 x 100GE (Coherent), 24 x 10/25GE, 48 x 1/10GE"	The proposed product shall support this number of ports. There shall be minimum 6 x 100GE (Coherent)(auto negotiable) ports populated from day 1
6	71	20		20.3 Technical Requirement - IP MPLS Router DHQ Non-Aggregation Point no 68 "The router must support minimum interfaces natively without the need of adapter or convertors: 6 x 100GE (Coherent), 24 x 10/25GE, 48 x 1/10GE"	The proposed product shall support this number of ports. There shall be minimum 6 x 100GE (Coherent)(auto negotiable) ports populated from day 1
7	71	20		20.4 DWDM Point no 5 "The system should provide FEC technology, SD-FEC, Ultra SD-FEC and HD-FEC should be supported."	The system should provide support to FEC or latest, SD-FEC or latest, Ultra SD-FEC/SDFEC-ACC or latest, and HD-FEC or equivalent or latest.

S.No.	Page Number	Section	Sub-Section	Existing Clause	Amendments
8	63	20	20.1	53. Ability to configure hierarchical queues in hardware for IP QoS at the egress to the edge. Minimum 750K queues per system	53. Ability to configure hierarchical queues in hardware for IP QoS at the egress to the edge. Minimum 750K queues or Virtual Output Queueing per system
9	64	20	20.2	11. Router should support minimum 120Gbps full-duplex per slot capacity from day-1	The router should support a minimum 80Gbps full-duplex per slot capacity from day-1 for 1G/10G slots and 200G for 100G cards slot
10	66	20		50. Ability to configure hierarchical queues in hardware for IP QoS at the egress to the edge. Minimum 20k egress and ingress hardware queues	Ability to configure hierarchical queues in hardware for IP QoS at the egress to the edge. Minimum 20k 'egress and ingress hardware queues' or Virtual output Queues (VoQ) for Low latency queuing
11	67	20	20.2	68. The Router should be supplied with following interfaces on Day-One:- (i) 3 x 100GE coherent interfaces distributed across minimum 2 line cards and equipped with 100G coherent optics on Day-1. (ii) 1 x 100GE QSFP28 interface equipped with 1 LR4 100G Optic. (iii) 18 nos. of 1/10GE distributed across minimum two (2) interface slots with minimum 30% fill-up ratio per card. Equipped with 12 x SFP+ LR, and 6 x SFP LX	The Router should be supplied with the following interfaces on day one:- (i) 3 x 100GE coherent interfaces distributed across a minimum of 2 line cards and equipped with 100G coherent optics on Day 1. (ii) 1 x 100GE QSFP28 interface equipped with 1 LR4 100G Optic. (iii) minimum 16 nos. of 1/10GE distributed across minimum two (2) interface slots. Equipped with 12 x SFP+ LR, and 6 x SFP LX from day 1
12	70	20	20.3	52. Ability to configure hierarchical queues in hardware for IP QoS at the egress to the edge. Minimum 20k egress and ingress hardware queues	52. Ability to configure hierarchical queues in hardware for IP QoS at the egress to the edge. Minimum 20k 'egress and ingress hardware queues' or Virtual output Queues (VoQ) for Low latency queuing

S.No.	Page Number	Section	Sub-Section	Existing Clause	Amendments
13	71	20		The Router should be supplied with following interfaces on Day-One:- (i) 2 x 100GE interfaces distributed across 2 line cards and equipped with 100G coherent optics on Day-1. (ii) 14 nos. of 1/10GE distributed across minimum two (2) interface slots with minimum 30% fill-up ratio per card. Equipped with 8 x SFP+ LR, and 6 x SFP LX	The Router should be supplied with the following interfaces on Day One:- (i) 2 x 100GE interfaces distributed across 2 line cards and equipped with 100G coherent optics on Day 1. (ii) 14 nos. of 1/10GE distributed across a minimum of two (2) interface slots. Equipped with 8 x SFP+ LR, and 6 x SFP LX from day 1
14	90	21.3.6		Performance Management System	Sub-second level real-time visibility is not required. The clause stands deleted.
15	75	20.9	Sr. No.-6 :	Nominal Output Voltage :- 220/230/240 VAC	Nominal Output Voltage: - 380/400/415 V AC
16	75	20.9	Sr No-21 :	BIS certification with ISO 9001, ISO 14001 & ISO 45001. UPS should be complied with ROHS directive and IEC test standards	BIS certificate is not required for 40 kVA UPS
17	75	20.9	OEM Certificate -3 :	The product must be in compliance with UL/EN/BIS certifications. In case the information not available in datasheet/supporting documents provided by the SI/OEM, copy of the UL/EN/BIS certificates to be provided.	BIS certificate is not required for 40 kVA UPS
18	76	20.1.0	OEM Certificate : Sr. No-4 :	Must have received a single order for at least 50 Nos. Online UPS of 10 and/or 20 KVA or more capacity throughout Odisha locations from any Central Govt. / State Govt. / PSU / Bank. : Copy of LoI/MSA/work	Must have received a single order for at least 50 Nos. Online UPS of 10 and/or 20 KVA or more capacity throughout Odisha locations from any MSI/SI (PSUs/Pvt Ltd Companies) against any Central Govt/State Govt/PSU/ PSU Bank PO where the Govt/PSU PO reference should be

S.No.	Page Number	Section	Sub-Section	Existing Clause	Amendments
				order along with work completion/PAT/FAT certificate	mentioned along with work completion/PAT/FAT certificate
19	77	20.11	OEM Certificate : Sr. No-4 :	Must have received a single order for at least 50 Nos. Online UPS of 2 KVA or more capacity throughout Odisha locations from any Central Govt. / State Govt. / PSU / Bank. : Copy of LoI/work order/MSA along with work completion/PAT/FAT certificate	Must have received a single order for at least 50 Nos. Online UPS of 2 KVA and/or more capacity throughout Odisha locations from any MSI/SI (PSUs/Pvt Ltd Companies) against any Central Govt/State Govt/PSU/ PSU Bank PO where the Govt/PSU PO reference should be mentioned along with work completion/PAT/FAT certificate
20	59	19.4	Bill of Materials		The bill of materials is indicative. Bill of Material to be finalized after site survey by the selected bidder. The final decision regarding the final BoQ will be taken by OCAC.
21	11	4	Definitions		Planned downtime: The selected bidder shall plan the downtime for any rectification, proactive maintenance etc. and shall inform the OCAC for approval in advance. Otherwise, any unapproved downtime will be taken into consideration for calculating the SLA.
22	9	3.1.3	End link Identification	It is proposed to lay Arial OFC for the end link to complete the project. However, the underground cable is to be laid for the end link to provide redundancy and increase reliability. The following table summarizes the requirement of end links. A total of around 144 KM is to be laid.	It is proposed to lay underground OFC through HDD for the end link to complete the project. However, a survey for additional underground cable to be laid for the end link to provide redundancy and increase reliability is to be carried out by the approved vendor for which the proposal is to be submitted. The following table summarizes the requirements of end links. A total of around 153.79 KM is to be laid. However, in the BoQ, 150 KM will be taken for financial evaluation purposes only.

S.No.	Page Number	Section	Sub-Section	Existing Clause	Amendments
23	Generic				Bidder needs to submit unpriced BoQ with Make and Model with their Quantity proposed for technical evaluation

Annexure II Clarifications:

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
1	12	5.3	5.3.2	Bidders shall submit, along with their General Bid, EMD of Rs.50,00000 /- (Rupees Fifty Lakhs Only) only in the shape of bank guarantee issued by any scheduled commercial bank only and shall be valid for minimum 180 days from the bid submission date	1.RailTel Corporation of India Limited, being a CPSU, should be exempted from EMD Fees. 2.BSNL, being a 100% owned Central Govt. Enterprise, submission of EMD BG may exempted for BSNL.	As per RFP
2	26	7	7. Scope of Work	e. When the network is extended up to the block level in the future, the existing/future Telecom Infrastructure of the BharatNet shall be used to the extent permissible by the defined parameters of network reliability and capacity. In the next level of expansion of BharatNet to the Villages, provision is being made to provide IP MPLS network from villages (with a population of more than 1000), and GPs up to the Blocks.	is there expectation of having single umbrella monitoring NOC for both IMPLS and Bharatnet?	Yes
3	26	7	7. Scope of Work	f. Integrate all the active & passive components of the Network with the central network operations centre for real-time monitoring. A	For central network monitoring is there expectation of extension of existing NOC by adding new capabilities for coverage of IPMPLS network?	Yes

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
				provisioning module for the OdishaNet will be commissioned.		
4	27	7.1	7.1. Technological Requirements	7.1 To meet the network service delivery requirements, it is proposed that an end-to-end Internet Protocol – Multi-Protocol Label Switching (IP-MPLS) based service delivery network shall be deployed. This will provide end-to-end network management and service delivery. To meet the transport network requirement in a high-capacity environment DWDM is proposed to be used.	Will IPMPLS and DWWM network come from same OEM and if the same EMS will take care of DWDM event and performance data along with offering provisioning capabilities as well?	Preferably from the same OEM. If it is from the same OEM, then EMS for Router (or any other active components from the same OEM) for IP-MPLS network shall also take care of DWDM events.
5	30	7.3	7.3. Network Topologies	The network will be IPMPLS based using router/DWDM nodes as per the need. The districts will be connected to the state headquarters node located in Bhubaneswar at the SNOC location. The districts can have a maximum of 100G Bandwidth and bandwidth will be expanded as per the need of the districts. The network should be capable of expansion from 100G to 400 G in the initial phase. The SHQ router will be connected to the existing internet gateway using the firewall already available. The	Request clarity on IPMPLS & DWDM device types along with DWDM device count	As per BoQ given in the RFP

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
				existing infrastructure of the SNOC will be utilized.		
6	41	11	11. Compliance with the generic requirements of BharatNet	iii. The network would be created, owned, and managed through an independent state-owned entity. This would ensure Non-Discriminatory Access to the infrastructure for all service providers	Is integration with BBNL NOC required for newly added infrastructure?	It is not under BharatNet. Independent network will be created which needs to be integrated with the existing S-NOC. Integration with BBNL NOC shall not be required.
7	55	19		19.1 General Requirement IP-MPLS Network IP MPLS Network components: "SHQ to DHQ Aggregation IP-MPLS WAN connectivity over overriding underlay DWDM using 100G links on Day-1 which shall be upgradable to 200G in future."	Please confirm DWDM network bandwidth in between SOC (Bhubaneswar) to DHQ will be 100G on day 1 and in future NW bandwidth shall be expended by adding the traffic cards.	The supplied product shall have the capacity so that upgradation of bandwidth using DWDM shall be 200 G without additional cost to the customer in terms of additional cards or capability of cards from day 1 (based on bidders solution)
8	56	19		19.2 Functional Requirement IP-MPLS SWAN Sub point: "DWDM, Routers, and EMS Platform shall be preferably from same OEM, if not, then it shall be the responsibility of the bidder to integrate all products without any additional cost to the client. Also, the bidder shall provide the solution so that the EMS shall be	As per Industry practice EMS OEM provides Open interfaces on Northbound to OSS OEM along with complete documentation. However, responsibility of integration with various EMS systems is always with OSS OEM/Solution Provider. Please confirm the same.	The bidder needs to integrate the EMS with the OSS as per the scope of work defined in the RFP.

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
				ingrate to the existing HP NMS in the S-NOC."		
9	60	19		19.4 Bill of Material DHQ & OTHER LOCATION -S.N. 8 &9 ILA-Non-Aggregation to Aggregation-25 Nos, Amplifiers (AMP) at terminal locations (Non-aggregation to aggregation)-35 Nos	Hope Inline Amplifier and terminal location Amplifier numbers are indicative for commercial exercise. Actual no's will be worked out during network design phase and will be procured based on final network design. Please clarify.	Understanding is correct
10	71	20		20.4 DWDM Point no 3 "Multiple protocol clients interface should be supported, OTN, SDH, Ethernet, FICON with different client services: 100G , OTU4, 40GE, 10GE, OTU2/E."	As we understood, current requirement is to drop 100G only to connect Router port, detail given here is w.r.t. proposed equipment or offered DWDM technology should support Multiple protocol clients interface should be supported, OTN, SDH, Ethernet, FICON with different client services: 100G , OTU4, 40GE, 10GE, OTU2/E,	Understanding is correct
11	72	20		20.4 DWDM Point no 7 "System should support compact 8 channel filters for Low cost DWDM configurations (support for 44 channel filter must also be there)"	Please confirm day 1 requirement is 8 Channel filter that can be expandable to 44 channel filter card.	Understanding is correct

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
12	73	20		20.6 Layer-3 Network Switch Point no 11 "The Switch should support Virtualized switching or physical stacking to provide simplified management as the switches appear as a single chassis when stacked."	Request to remove this clause. Virtual Chassis and stack solution has it own limitations and provide only 40G back to back stacking BW. For 24x10G and 2x100G switch capacity, we suggest to go for Active standby or Active-Active solution.	As per RFP
13	73	20		20.6 Layer-3 Network Switch Point no 12 "The switch should support Nonstop switching and routing"	Request to remove this clause. Nonstop Routing and switching is chassis based dual Control processor box solution. RFP ask is fixed configuration switch in 1+1 mode. Dual box solution provide complete box redundancy.	As per RFP
14	74	20		20.7 DMZ Network Switch Point no 11 "The Switch should support Virtualized switching or physical stacking to provide simplified management as the switches appear as a single chassis when stacked."	Request to remove this clause. Virtual Chassis and stack solution has it own limitations and provide only 40G back to back stacking BW. For 24x10G and 2x100G switch capacity, we suggest to go for Active standby or Active-Active solution.	As per RFP
15	74	20		20.7 DMZ Network Switch Point no 12 "The switch should support Nonstop switching and routing"	Request to remove this clause. Nonstop Routing and switching is chassis based dual Control processor box solution. RFP ask is fixed configuration switch in 1+1 mode. Dual box solution	As per RFP

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
					provide complete box redundancy.	
16	21	6	6.1. Pre-Qualification or eligibility Criteria	(5. Bidder's average annual turnover must be INR 1000 Crores or above in Telecom business for last three financial years.)	CVC Guidelines call for % of tender value as the bidder's Turnover.	As per RFP
17	9	3	3.1.2. Overview of OPGW cables laid by OPTCL	The POP will be established in the collector's office. PR department has been requested to allocate 800 sq. ft of space in the collector's office.	Will the bidder be provided "Raised Floor of 800 Sq. Ft."? Will this PoP site be provided with Redundant power or the bidder needs to make provisions for the same the way a very-high-availability Stock Echange POP infrastructure was designed in an earlier project?	Initially the project will be implemented using SWAN PoP and later the space will be provided based on the decision by OCAC. Bidders are requested to provision only for the asked BoQ and associated components based on the solution proposed by them.
18	26	7	7. Scope of Work	d. Provide horizontal connectivity to government institutes at the district level approximately 10 per District. The cost of horizontal connectivity has not been accounted for in this project. The fiber laid through BSNL could be utilized for the end link. No provision for horizontal connectivity has been provided in the project.	We understand that BSNL Infrastructure is to be used for providing Horizontal Connectivity (up to 10 sites per district) and that OCAC would directly pay to BSNL for any such horizontal connectivity provided to those sites. Please confirm our understanding.	Horizontal connectivity is not under the scope of the bidder. Bidder needs to coordinate and support to provide horizontal connectivity as required

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
19	27	7	7.1. Technological Requirements	OFC end links The end links to the district collector's office (SWAN POPs) will be extended by laying underground OFC through HDPE pipes.	This RFP has given good details about desired Two-Layer network architecture along with DWDM Network. Please share existing Odisha State Wide Area Network's OEM/make of routers currently deployed to give us fair idea about the network interconnects and traffic hand-off planning that would become part of our Proposed Network Architecture that we shall submit as Bid-Response to this RFP.	There is no interconnects with SWAN network. Only physical SWAN locations will be used for execution of the project
20	37	8	8.2. Planning & Designing	• Conduct an on-field survey and optimize the network design and a corresponding detailed implementation plan. Executive Agency (EA) shall submit a cable laying drawing and GIS map along with ABD diagram for OFC to be laid under the project.	Please clarify if the bidder needs to undertake GIS Mapping using technologies/services such as LiDAR Mapping for this. In case OCAC wish the bidders to make use of specific GIS Mapping technology/solution; we will abide with the requirement.	As per bidder's solution
21	38	8	8.3. Implementation Phase	Implementation Phase	What are the communication channels and protocols that OCAC wish to give preference / priority for in this project?	Communication matrix to be proposed by the bidder once selected or as part of their proposal which will be reviewed and approved by the OCAC

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
22	38	8	8.3. Implementation Phase	Implementation Phase	What are the quality standards that OCAC wish to give preference / priority for in this project?	Bidders needs to abide by the guidelines from Central Govt./ State Govt. / industry standards
23	38	8	8.3. Implementation Phase	Implementation Phase	What are the testing and validation procedures that OCAC wish to give preference / priority for in this project?	Test plans and procedures to be shared by the selected bidder which will be reviewed by OCAC and approved
24	39	9	Operations & Management	• Operations and Maintenance of the entire infrastructure for 5 years which includes 1 year of warranty, extendable to 5 years of warranty/AMC or further as mutually agreed between OCAC and the selected agency and delivering on the required SLAs.	Please clarify if the bidder need to undertake / provide AMC support (renew existing contracts) with existing Equipment OEMs or the currently deployed agency/implementation partner would continue to give that support?	Existing implementation partner would continue to give the support for their components. Bidder needs to support for the equipment/software/solution provided under their scope of work
25	39	9	Operations & Management	• Forming of Fault Repair Teams (FRTs) in each District for easy support and resolution of problems in the network.	Please clarify if the new Execution Partner (Bidder) needs to take over existing FRT teams/vehicles or propose completely new set of teams/vehicles/equipment for this project.	New set of FRT to be formed and deployed under the project
26	39	9	Operations & Management	• Stores and Warehouse management for spares.	Please clarify if the bidder needs to coordinate with existing vendor of OCAC who is currently manage Warehouse and materials.	Bidder to arrange their own store/warehouse to keep the spares as per the requirement of the RFP

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
27	42	12	Status of SWAN Infrastructure	Details of DHQ sites, Additional Space, AC & DG, 6KVA UPS & Earthing	Of the total 30 number of DHQ, listed in this list, 12 DHQ sites have no additional space available for installing new equipment for IP-MPLS PoP. Please help us understand if space would be made available within same floor of the building or on different floor / wing of the building or in some different building withing DHQ premise. This will help us plan for cost-estimation and cabling efforts/time-estimation.	Bidder needs to do the site survey and come up with the requirement of space (if any) and to be placed before OCAC for the necessary arrangements
28	56	19	19.2	DWDM, Routers, and EMS Platform shall be preferably from same OEM, if not, then it shall be the responsibility of the bidder to integrate all products without any additional cost to the client. Also, the bidder shall provide the solution so that the EMS shall be ingrate to the existing HP NMS in the S-NOC.	We understand that if IP/MPLS and DWDM is from separate OEM, "then it shall be the responsibility of the bidder to integrate all products without any additional cost to the client". We understand here integration is related to the existing HP NMS for both DWDM EMS and IP/MPLS EMS. To get better clarity	Understanding is correct
29	61	20	20.1 Table	11. All line-card slots should be universal. All the line-cards should be capable to be configured on all given line-card slots without any restriction	Kindly note that 100G and 10G cards are having different bandwidth require	Query is not clear.

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
30	61	20	20.1	15. The router should have capability of minimum 2 Million IPv4, 1 Million IPv6 routes	The router should have capability of minimum 3 Million IPv4, 1 Million IPv6 routes. To have the more scalability for state Wide network	As per RFP
31	61	20	20.1. Performance	16.The router should support minimum 1 Million MAC address. 17.Router should support 64k multicast routes. 18. Router should support 120K MPLS PWE3. 19.Router should support 20K VPLS. 20. Router should support 10K MPLS L3 VPN 21.The router should support 100K labels and 10 label stack	16.The router should support minimum 0.5 Million MAC address. 17.Router should support 40k multicast routes. 18. Router should support 8K MPLS PWE3. 19.Router should support 8K VPLS and 500 GRE tunnels 20. Router should support 2K MPLS L3 VPN 21.The router should support 100K labels and 10 label stack for larger OEM participation. Now Single OEM qualifies for this specs. MPLS over GRE is an encapsulation technique for MPLS network	As per RFP

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
32	62	20	20.1	28. Shall support MPLS Provider/Provider Edge functionality. MPLS VPN, MPLS mVPN (Multicast VPN), AS VPN, DiffServ Tunnel Modes, MPLS TE (Fast re-route), DiffServ- Aware TE, Inter-AS VPN, Resource Reservation Protocol (RSVP), VPLS, VPWS, Ethernet over MPLS, EVPN, Segment routing and Segment routing Traffic engineering,	SR standards on IPv6, The router should support SR-MPLS dataplane and protocols OSPF,IS-IS and BGP Segment routing extensions. LDP and SR should coexist and there should support option to prefer LDP over segment routing. Router should support to calculate Bandwidth based path using centralized SDN controller. 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. The network complexity demand for Automation in the network, which should be achievable via SDN controller in future. So, Router should support Segment routing with additional feature required for successful implementation of Segment routing technology in the network.	As per RFP

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
33	64	20	20.1	75. The Router should be NEBS Level 3 compliant	The Router should be NEBS Level 3 compliant. a) Router / Router OS of same series / family should be tested in Multi-OEM environment for IP-MPLS and Segment routing in any of the following : i) EANTC ii) Miercomm	As per RFP
34	64	20	20.2	10. All line-card slots should be universal. All the line-cards should be capable to be configured on all given line-card slots without any restriction	All 10G/1G line-card slots should be universal. All the 10G/1G line-cards should be capable to be configured on all given line-card slots without any restriction. 100G line cards are more higher capacity and require specific slots for a router with 800G capacity. So, kindly change to 1G/10G cards are universal	This clause is about card slots supporting different bandwidth

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
35	65	20	20.2.	16.The router should have capability of minimum 100K IPv4, 60K IPv6 routes (FIB) 17. The router should support minimum 60K MAC address. 18. Router should support 2K MPLS PWE3. 19. Router should support 2K VPLS. 20. Router should support 2K MPLS L3 VPN 21.The router should support 10K labels and 6 label stack depth.	16.The router should have capability of minimum 1M IPv4, 500K IPv6 routes (FIB) 17. The router should support minimum 128K MAC address. 18. Router should support 2K MPLS PWE3. 19. Router should support 2K VPLS. 20. Router should support 1K MPLS L3 VPN 21.The router should support 50K labels and 10 label stack depth. SHQ, DHQ and DHQ non Agg POP would be implemented in a single MPLS network, so lowering the scale in DHQ , compared to SHQ is restricting the design and may have issue in the network in future for scale value. Kinldy update and revise the scale as suggested.	As per RFP
36	67	20	20.2	65. The router must support minimum interfaces natively without the need of adapter or convertors: 6 x 100GE (Coherent), 24 x 10/25GE, 48 x 1/10GE	The router must support minimum interfaces natively without the need of adapter or convertors: 4 x 100GE (Coherent), 24 x 10/25GE, 8 x 1/10GE To keep the Throughput asked	As per RFP

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
					in the router is only 800G. So, to achieve the non-blocking architecture	
37	68	20	20.3	16.The router should have capability of minimum 100K IPv4, 60K IPv6 routes (FIB) 17. The router should support minimum 60K MAC address. 18. Router should support 2K MPLS PWE3. 19. Router should support 2K VPLS. 20. Router should support 2K MPLS L3 VPN 21.The router should support 10K labels and 6 label stack depth.	16.The router should have capability of minimum 1M IPv4, 500K IPv6 routes (FIB) 17. The router should support minimum 128K MAC address. 18. Router should support 2K MPLS PWE3. 19. Router should support 2K VPLS. 20. Router should support 1K MPLS L3 VPN 21.The router should support 50K labels and 10 label stack depth. SHQ, DHQ and DHQ non Agg POP would be implemented in a single MPLS network, so lowering the scale in DHQ , compared to SHQ is restricting the design and may have issue in the network in future for scale value. Kindly update and revise the scale as suggested.	As per RFP

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
38	71	20	20.3	71. The router must support minimum interfaces natively without the need of adapter or convertors: 6 x 100GE (Coherent), 24 x 10/25GE, 48 x 1/10GE	The router must support minimum interfaces natively without the need of adapter or convertors: 4 x 100GE (Coherent), 24 x 10/25GE, 8 x 1/10GE. To keep the Throughput asked in the router is only 800G. So, to achieve the non-blocking architecture	As per RFP
39	52	18		Table 6	SLA Monitoring requires a Real time Monitoring " Network Visibility & Performance Management tool " which gives near real time (Sub Second Visibility of IP-MPLS Links ", This would require a TWAMP based Network Visibility tool which can monitor the Network Infrastructure at Central-NOC and SHQ and DHQ Levels. is this Considered as part of this Section over and above NMS (as NMS will not give the near real time visibility of the Network)	As per RFP
40	59	19.4		Bill of Materials	Is Network Visibility & Monitoring Management Tool (which provides near real time Visibility of IP-MPLS Network Included as part of the BOM)?	No separate Network visibility & monitoring tool for near real time visibility of network is provisioned. OSS and NMS requirement to be fulfilled as mentioned in the RFP.

#	Page No.	Section	Sub-Section	Existing Clause	Clarification/Changes Requested	Clarifications
41	75	20.9	Sr No- 14 :	Backup time-30 minutes through suitable SMF Battery Bank at full load	Request to Specify the VAH for 30mins of Backup to have similar technical Offer from all OEMs & Bidders. For 30 mins of Backup @ 40KVA Load we need to have 32000VAH minimum	Bidder to provide number of batteries as per their solution to meet the requirement at full load and considering unity power factor
42	75	20.1.0		Voltage : 170-270 V AC	10KVA UPS has been Asked as 3 Phase Input , whereas in Voltage 170-270 V range has been asked for. Request yout to confirm if 3/1 UPS has to be considered or 3/3 UPS has to be considered	3/1 UPS has to be considered
43	75	20.1.0	Sr No-14 :	Backup time-30 minutes through suitable SMF Battery Bank at full load	Request to Specify the VAH for 30mins of Backup to have similar technical Offer from all OEMs & Bidders. For 30 mins of Backup @ 10KVA Load we need to have 8000VAH minimum	Bidder to provide number of batteries as per their solution to meet the requirement at full load and considering unity power factor
44	77	20.11	Sr No-14 :	Backup time-30 minutes through suitable SMF Battery Bank at full load	Request to Specify the VAH for 30mins of Backup to have similar technical Offer from all OEMs & Bidders. For 30 mins of Backup @ 2KVA Load we need to have 1600VAH minimum	Bidder to provide number of batteries as per their solution to meet the requirement at full load and considering unity power factor