

RCL_ER_2020-21_1202

Dt. 04.08.2020

Reply to Pre-Bid Queries

Reply to Pre-Bid Queries for Tender No. : RCL_ER_2020-21_1202 Dt. 06.07.2020
Name of the work : Provision of IP MPLS network in Sonpur & Dhanbad Divisions of East Central Railway

Reply to Pre-Bid Queries raised by the following firms are given under (not in sequence)

- 1 M/s. Nokia Solutions and Networks India Pvt. Ltd.
- 2 M/s. Juniper Networks
- 3 M/s. Takyon Networks Pvt. Ltd.
- 4 M/s. Benchmark Infotech Pvt. Ltd.

S.No.	Chapter- No.	Page No.	Clause No.	Content of Tender document requiring Clarification	Consolidated Queries (Query/ Requested changes/ New clause)	Response to Queries
1	Chapter – 2, Schedule A -- Main Items	7	2	Supply of Interface card to upgrade the above SN No- 01 router with one STM-Port.	Kindly confirm if SFP for STM1 port is required in the offer. As SDH MUX and Router will be place at same location, IR-1/1-1 SFP(SM, 15-21km, 1310 nm, LC with DDM) for STM1 should suffice the requirement. Kindly confirm	STM-1 ports should be equipped with SFP (Single Mode, 10km, 1310 nm, LC with DDM)
2	Chapter – 3, A	16	3,d,9	Integration with instant messaging system for alarm.	Generally EMS/NMS, supports integration with an e-mail system as legacy instant messaging (SMS) in unreliable, kindly modify the clause as "Integration with e-mail/instant messaging system for alarm."	Tender Conditions are very clear, No change is proposed
3	Chapter – 7, A	98	1, a, 1	2x10G Optical WAN based interface along with 10G SFP suitable for working up to a distance of 40km on single mode fiber	General Distance between 2 station are mostly less than 10km, thus LR SFP+ (10 Km) suffice the requirement. Further ER SFP+(40km) and ZR SFP+(80km) will be require for Ring connectivity. Thus, to optimise the overall project cost, kindly change the 10G SFP+ requirements to LR (10km), ER(40km) and ZR(80 km) in the ratio of 70% (Qty 306) , -25%(Qty 110) and 5%(Qty 20) respectively for the Router Type 1	Tender Conditions are very clear, No change is proposed
4	Chapter – 7, A	98	1, b	1. 2xSTM-1 optical interface OR 2. 16xE1 G.703 interface.	Since STM1 and E1 both could be required at a location simultaneously in future, Thus kindly modify the clause as 1. 2xSTM-1 optical interface AND 2. 16xE1 G.703 interface.	Tender Conditions are very clear, No change is proposed
5	Chapter – 7, A	98	1, c	The router shall have 40 Gbps throughput.	As an industry standard practice, kindly confirm 40 Gbps throughput mention is half duplex throughput.	Tender Conditions are very clear, No change is proposed

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6	Chapter – 7, A	99	1, x	Routers shall conform to EN55022 Class A/B or CISPR22 Class A/B or CE Class A/B for EMC (Electro Magnetic Compatibility).	Since these are older standard, kindly allow the Router conformation to newer standard EN55032, CISPR32 or equivalent standard. Thus modify the clause to "Routers shall conform to EN55022 Class A/B or CISPR22 Class A/B or CE Class A/B or EN 55032 or CISPR32 or equivalent standard for EMC (Electro Magnetic Compatibility)." "	Routers shall conform to EN55022 Class A/B or CISPR22 Class A/B or CE Class A/B or EN 55032 or CISPR32 or equivalent standard for EMC (Electro Magnetic Compatibility).
7	Chapter – 7, A	99	2, c	Router shall support be capable of 160 Gbps throughput	As an industry standard practice, kindly confirm 160 Gbps throughput mention is half duplex throughput.	Tender Conditions are very clear, No change is proposed
8	Chapter – 7, A	100	2, p	Resources in the routing table of the routers shall be such that it shall support at least 32000 IPv4 routes and 10000 IPv6 routes.	For the network with 236(218+18) routers, their should not me more than 6000 to 8000 routes, thus to optimised overall project cost, kindly modify the clause as "Resources in the routing table of the routers shall be such that it shall support at least 24000 IPv4 routes and 6000 IPv6 routes."	Tender Conditions are very clear, No change is proposed
9	Chapter – 7, A	100	2, x	Routers shall conform to EN55022 Class A/B or CISPR22 Class A/B or CE Class A/B for EMC (Electro Magnetic Compatibility).	Since these are older standard, kindly allow the Router conformation to newer standard EN55032, CISPR32 or equivalent standard. Thus modify the clause to "Routers shall conform to EN55022 Class A/B or CISPR22 Class A/B or CE Class A/B or EN 55032 or CISPR32 or equivalent standard for EMC (Electro Magnetic Compatibility)." "	Routers shall conform to EN55022 Class A/B or CISPR22 Class A/B or CE Class A/B or EN 55032 or CISPR32 or equivalent standard for EMC (Electro Magnetic Compatibility).
10	Chapter – 7, A	102	3, a	Open source OpenNMS software shall be provided for monitoring various IP infrastructure in Railways. The NMS shall be configured in a distributed architecture	Kindly confirm if OpenNMS is already existing the in the network and OEM need not to provide the NMS/EMS Kindly confirm if EMS is required in High availability at central location. Further at Division location only clients(of NMS) is required as probe server, kindly confirm Due to security situation "open Source" could be a cause concern. Moreover OEM has either own EMS which could be used for 3rd party IP/MPLS routers integration	Tender Conditions are very clear, No change is proposed

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11	Chapter – 7, A	102	3, b	The central server shall be located at one place and every division shall be provided with a probe server. The probe server shall monitor the divisional resources and report to the central server. The central server shall keep this data and present it to the user.	Kindly confirm if OpenNMS is already existing in the network and OEM need not to provide the NMS/EMS Kindly confirm if EMS is required in High availability at central location. Further at Division location only clients (of NMS) is required as probe server, kindly confirm	Tender Conditions are very clear , No change is proposed
12	Chapter – 2, Schedule A -- Main Items	7	1	Supply of standard 19" Rack Mountable -48V DC, Modular IP-MPLS Router with redundant power supply having at least 2x10G Optical Interface, 16 channelized E1, 4x1 GbE Copper interface and 4x1 GbE optical interface. It must be possible to add at least two STM-1 ports and 16 more channelized E1s to the router using additional interface cards.	Request to change the clause to "Supply of standard 19" Rack Mountable -48V DC, Modular IP-MPLS Router with redundant power supply having at least 2x10G Optical Interface, 16 channelized E1, 4x1 GbE Copper interface and 4x1 GbE optical interface. The router should have minimum 1 free slot in addition to the existing interfaces asked from day 1 and this free slot should have the flexibility to accommodate 2 x STM-1 in addition to the existing interfaces or 16 x CH-E1 interfaces addition to existing interfaces as per the requirement of the location. The 16 x CH-E1 should not be a breakout from STM-1.	Tender Conditions are very clear, No change is proposed
13	Chapter 7, Technical Specification, Router Type – I	98	1.i.5	Circuit Emulation support in accordance with SAToP and CESoP standards	As per the BoQ (Chapter – 2, Schedule A, Router Type 1) and also as per clause i.5 Circuit Emulation support in accordance with SAToP and CESoP standards. We understand that the router should have Channelised E1 (CH-E1) ports from Day 1. Please confirm if the understanding is correct.	Tender Conditions are very clear, No change is proposed
14	Chapter 7, Technical Specification, Router Type – I	100	2p)	Resources in the routing table of the routers shall be such that it shall support atleast 32000 IPv4 routes and 10000 IPv6 routes.	a) Request to change the clause to "Resources in the routing table of the routers shall be such that it shall support atleast 20000 IPv4 routes and 10000 IPv6 routes." The scale asked for IPv6 is very less. IPv6 migration is evitable and lower IPv6 scale may lead sub-optimal routing and forklift upgrade, hence we request to increase the IPv6 Route scale.	Tender Conditions are very clear, No change is proposed

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				b) Request to change the clause to "Resources in the routing table of the routers shall be such that it shall support atleast 32000 IPv4 routes and 16000 IPv6 routes."	
15	Chapter 7, Technical Specification, Router Type – I	99	--	New clause Request to add "The Router should support PCE/ PCEP" PCEP provides a mechanism for a PCE to perform path computation for an external LSPs. It will help in providing the network wide visibility and faster troubleshooting.	Tender Conditions are very clear. No change is proposed
16	Chapter 7, Technical Specification, Router Type – I	99	--	New clause Request to add "The Router should support automation capabilities like Netconf, Yang, Python scripting." These will help in seamless integration with network management systems (NMS) and operations/business support systems (OSS/BSS) and will result in lower OpEx and TCO and improved operational efficiency	Tender Conditions are very clear. No change is proposed
17	Chapter 7, Technical Specification, Router Type – II	100	--	New clause Request to add "The Router should support PCE/ PCEP" PCEP provides a mechanism for a PCE to perform path computation for an external LSPs. It will help in providing the network wide visibility and faster troubleshooting.	Tender Conditions are very clear. No change is proposed
18	Chapter 7, Technical Specification, Router Type – II	100	--	New clause Request to add "The Router should support automation capabilities like Netconf, Yang, Python scripting." These will help in seamless integration with network management systems (NMS) and operations/business support systems (OSS/BSS) and will result in lower OpEx and TCO and improved operational efficiency	Tender Conditions are very clear. No change is proposed

Team