

FINAL CONSOLIDATED CLARIFICATIONS IN
TENDER NO. NITRR/CENTRAL STORE/CCC/OT/2017/487 DATED 29/05/2017

LAST DATE AND TIME FOR SUBMISSION OF BIDS HAS BEEN EXTENDED UPTO 5TH JULY 2017 UPTO 3:00 P.M.

DATE & TIME FOR OPENING OF TECHNO-COMMERCIAL BID PART – A SHALL BE 5TH JULY 2017 AT 3:30 P.M.

TWO FORMATS OF PRICE BID (CHAPTER 5) HAVE BEEN GIVEN IN THESE CLARIFICATIONS – ONLY ONE OF THEM IS TO BE UTILIZED BY THE BIDDERS FOR ENTERING THEIR PRICES DEPENDING ON WHETHER GST BECOMES APPLICABLE BY THE LAST DATE FOR SUBMISSION OF BIDS

REVISED PAYMENT TERMS

On account payment for supply of equipment / materials and / or services, indicated in the work order, subject to recoveries, if any, shall be made once every two months as given below

Eighty (80%) percent of the value of equipment / materials supplied in each consignment and / or services, shall be paid on completion of the following

- On receipt of equipment / materials and / or completion of associated services at the site.
- Original Inspection certificate issued by CCC, NIT Raipur.

Note for issue of Inspection Certificate of Active Devices: A random sample of the active devices shall be Power-On Self-Tested i.e., POST tested for payment recommendation during supply. However, if any active device is found not working at any stage till issue of final acceptance certificate, it shall be replaced by the successful bidder free of cost.

- Delivery Challan / Invoice in running bill format (to be submitted in triplicate) clearly mentioning the quantities indicated in the work order, (properly incorporating any subsequent change in quantities due to the variation in quantities clause which must have the due approval of the CCC, NIT Raipur), the quantities delivered, the quantities remaining to be delivered, etc. duly accepted and forwarded with payment recommendation by CCC, NIT Raipur to Accounts Section, NIT Raipur

Note for Service Payment Recommendation:

For service payments against line items whose quantities have been mentioned as LOT in the price schedule / work order, the bidders are advised in their own interest to provide a supplementary sheet along with the price bid, indicating the break-up of that line item, unit cost of installation etc. to enable intermediate payments. If a bidder does not provide this information, and becomes successful, the payment against such service line items can only be made after the entire LOT is installed.

- A certificate from the System Integrator that the materials supplied are as per the contract and the amount claimed in the invoice is correct as per terms of the contract.
- The on account payments made will subsequently be adjusted against payments due on Final Acceptance.

Balance Twenty Percent (20%) of the value of equipment / material supplied and/or services, if any, of all consignments shall be paid after the successful completion of the project including installation & commissioning of all equipment / materials at various locations, completion of all measurements and testing, and issue of "Final Acceptance Certificate" on satisfaction of CCC, NIT Raipur. By the time of issue of the Final Acceptance Certificate all project requirements must have been met including but not limited to successful demonstration of running of the Extended and Upgraded Network for at least one week. The balance payment recommendation shall be forwarded by CCC, NIT Raipur to Accounts Section, NIT Raipur.

Payment against manpower services shall be made on a six-monthly basis after manpower deployment on recommendation of the CCC, NIT Raipur to Accounts Section, NIT Raipur. The performance bank guarantee shall be released only on successful completion of warranty requirements under the project. The successful bidder shall be required to submit the differential amount of PBG arising from any changes in initial work order value on account of the variation in quantities clause prior to the release of final payment. The duration between payment recommendation and payment realization is ordinarily not expected to exceed 15 days; the bills should therefore be put up for payment recommendation to CCC at least 15 days before this to give sufficient time for verification, testing, if any, etc.

OTHER CHANGES

Active components e.g., network switches shall be supplied with necessary cables for stacking, software licenses etc. so as to meet the project requirements in totality.

S.No.	Chapter, Section & Page	Item Descriptor	Original Statement	Revised Statement
1	Section I, Pg. 46	S. No. 1.15 in the Technical Specifications Table of Item No. 9 i.e., Centre-of-Row Switch	Switch should have min. 16 Nos. 10G SFP+ ports from Day 1	Switch should have min. 16 Nos. 10G SFP+ ports, 6 Nos QSFP ports and 36 Nos 1G SFP ports from Day 1
2	Section II, Pg. 56	S. No. 12 Battery Backup in the Technical Specifications Table of 6 KVA Online UPS	For 60mins backup req. minimum VAH should be 1512 VAH.	For 60mins backup req. minimum VAH should be 8064 VAH.
3	Section II, Pg. 58	S. No. 14 Battery Block in the Technical Specifications Table of 1 KVA Online UPS	3 nos SMF battery	2 nos SMF battery

PERFORMANCE BANK GUARANTEE

In Point No. 50 (vi) h of Chapter I: Instructions to Bidders Performance Guarantee Bond has been erroneously mentioned in the list of documents to be submitted along with Techno-commercial Bid: Part-A. It may be noted that the Performance Guarantee Bond has to be submitted by the successful bidder after issue of the work order.

In Form 2: Form for Submission of Bids the Performance Guarantee Bond has been mentioned as 10% of the work order value whereas in Form 7: Form of Bank Guarantee for 5% Contract Value for Contract Performance Guarantee Bond the value has been mentioned as 5%.

It is clarified that the value of the performance guarantee is 5% of the initial work order value and further the successful bidder shall be required to submit the differential amount of PBG arising from any changes in initial work order value on account of the variation in quantities clause prior to release of final payment.

SCHEDULED BANKS ACCEPTABLE

Bidders may note that they can submit the EMDs, Bid Security, Performance bank Guarantees etc. of any scheduled bank and nationalized bank is not mandatory.

INSTITUTE BANK DETAILS

Bank details of NIT Raipur are given for preparing BGs, if required

Bank Details of NIT Raipur is as under:	
Bank Name:	State Bank of India
Bank Branch:	G.C.E.T. Branch
Bank Address:	G.E. Road, Raipur. (C.G.) Pin - 492010.
City:	Raipur (C.G.)
Country:	India
Account No:	30054181310
Account Name:	Director NIT Raipur
Bank Branch Code:	02852
IFSC Code:	SBIN002852
Swift Code:	SBININBB646
Phone No. of Branch:	0771- 4040791/795

SERVICE ADDITIONS

Bidders may note the following

- 1kVA online UPS systems need to be placed in old wall mount racks along with batteries. The racks shall require MS brackets for support. These MS brackets need to be supplied and installed by the bidder.
- Likewise, the outdoor Wifi APs need to be installed on 5 meter long GI poles to be supplied and installed by the bidder.

Cost for the above may be considered with the cost of installation of these devices. It is reiterated that the bidders provide a supplementary sheet along with the price bid, indicating the break-up of line items mentioned as LOT, unit cost of installation etc. to enable intermediate payments.

REVISED QUANTITIES IN CHAPTER III: SCHEDULE OF REQUIREMENTS & CHAPTER 5: PRICE SCHEDULE:

S. No.	Item No.	Items	Previous Quantity	Revised Quantity	Units	Remarks
1.	New Item No. 1(a)	16-port SFP+ stackable switch with 2 port QSFP slots as per the technical specifications table mentioned in these clarifications	0	2	Nos	New Item
2.	2	24-port Gigabit distribution PoE+ switch, with redundant power supply with all accessories as per mentioned technical specifications	25	0	Nos	Item Deleted. 25 non-PoE switches with similar capabilities shall be provided for installation as distribution switches. Bidders shall consider the cost of installation, configuration of these switches while quoting.
3.	6	24-port 10/100/1000 Base T stackable switch with 2 combo ports (10/100/1000T or 100/1000X SFP) and 2 SFP+ stacking / user ports as per mentioned technical specifications	70	100	Nos	Quantity increased
4.	7	24-port 10/100/1000 Base T PoE+ stackable switch with 2 combo ports (10/100/1000T or 100/1000X SFP) and 2 SFP+ stacking / user	35	0	Nos	Item Deleted

		ports as per mentioned technical specifications				
5.	New Item No. 7(a)	8-port Fast Ethernet PoE+ switch with 1 combo port as per the technical specifications table mentioned in these clarifications	0	40	Nos	New Item
6.	8	Multiservice access Switch with 6 Giga LAN ports, 1 FO Ports, 2 FXS Ports , with all accessories as per mentioned technical specifications	25	20	Nos	Quantity decreased
7.	10 (a)	Enterprise-class Wireless Access Point (Indoor) with IEEE 802.11ac dual-band radios as per mentioned technical specifications	175	160	Nos	Quantity decreased
8.	10 (b)	IEEE 802.11ac Enterprise-class Wireless Access Point (Outdoor) as per mentioned technical specifications	25	15	Nos	Quantity decreased
9.	New item No. 15(a)	40G QSFP LR4 10km supported Single Mode Module	0	12	Nos	New Item
10.	16	2 x 10GbE SFP+ slots (unpopulated) expansion module as per mentioned technical specifications	4	2	Nos	Quantity decreased

TECHNICAL SPECIFICATIONS OF NEW ITEM NO. 1 (A):**16-PORT SFP+ STACKABLE SWITCH**

S. No.	Technical Specifications	Compliance (Yes/No)	Remarks
1.	Port Density: The switch should have minimum 16 nos 1G/10G SFP+ ports with additional 2 x QSFP (40G) uplink ports. Servers should be able to connect with 10G Ports of these switches by min 3 metres direct attach or equivalent cable.		
2.	The switch can support Active – Active Cluster switching technology using VSS or equivalent technology. The proposed VSS or equivalent technology should support high availability for both Layer 2 and Layer 3 (RIP, RIPng, OSPF, OSPF v3) including for IP Multicasting (PIM v4,PIM v6) .		
3.	The Virtual Switching System (VSS) / equivalent technology shall support virtualization of switch locally or over geographically diversified locations		
4.	The Switches also need to connect with Data centre Core Switch by 40G link and required Cable with other accessories need to be supplied from Day 1		
5.	The switches also seamlessly integrate with automated LAN Infrastructure to achieve centralized management / provisioning using SDN or equivalent technology.		
6.	The switch should seamlessly integrate with existing core switch		
7.	Performance: Should have Minimum 480 Gbps switching bandwidth and Min. 357 Mpps Switch-forwarding rate. Switch Should support min 16K Mac and 4K configuration VLANs.		
8.	Layer 2 Features: Should support STP, RSTP, MSTP, IGMP v1/v2/v3 snooping, STP root guard, Voice VLAN, LLDP-MED ,MLD snooping (MLDv1 and v2), IEEE 802.3ac, IEEE 802.1v, PVST+ compatibility mode, VLAN Mirroring , Should support GARP VLAN Registration Protocol / GVRP, Q-in-Q, VLAN classification by protocol and port, IEEE 802.3ac VLAN tagging.		
9.	Resiliency: Should support IEEE 802.17/equivalent for sub 50ms ring protection in following scenario: single, dual fibre cuts in ring, Control Plane Prioritization (CPP), Loop Detection and Loop protection.		

10.	Routing : Switch can Support static Routing, RIP, OSPFV3, PIMv4-SM, DM and SSM, RIPvng, ECMP, Policy-based routing etc		
11.	Security: Should support ACL, DHCP snooping, IP Source guard, Dynamic ARP Inspection (DAI), DoS attack blocking, Private VLAN, AAA, Authentication (MAC, Web and IEEE 802.1x), BPDU Protection, MAC address filtering and MAC address lockdown , Network Access and Control , Port-based learn limits (intrusion detection) or equivalent, SSLv2 and SSLv3, SSH, TACACS+, RADIUS Accounting and Authentication etc.		
12.	QoS: Policy-based QoS based classifying traffic based on MAC, Port , VLAN , Protocol, Tail drop for queue congestion control, IP precedence and DiffServ marking , Strict priority/ weighted round robin, Wire speed traffic classification with low latency specially for Video and VOIP application		
13.	Management :CLI, GUI, USB interface for taking backup of software release files configurations, sflow or equivalent, DDM – Optical digital diagnostic monitoring as per SFF – 8472 or equivalent, UDLD or equivalent , Device management over IPv6 networks with SNMPv6, Telnetv6, SSHv6 etc, RMON 4 groups, SNMPv3, Should Support DHCPv6, DNSv6, Ipv4 and Ipv6 dual stack, NTPv6 Server etc.		
14.	The switch shall have pro-active intelligence to create an ICMP polling for service reachability based on IP address and configure pro-active action upon loss or re-establishment of the service reachability		
15.	The switch should support in built Layer 1 monitoring capability for end to end security monitoring to avoid any eve drops or security breach on the Fiber uplink links.		
16.	Event-based triggers allow user-defined scripts to be executed upon selected system events based on Time , Date , day and Event based		
17.	Compliances: RoHS and IEEE 802.3z Energy Efficient Ethernet(EEE) Compliance and UL, CE and TUV or equivalent certifications.		

TECHNICAL SPECIFICATIONS OF NEW ITEM NO. 7(A):**8-PORT FAST ETHERNET POE+ SWITCH:**

S.No	Technical Specifications	Compliance Yes/No	Remarks
1.	The switch should have 8 x 10/100 Base-T PoE port with min. 1x 10/100/1000 Base-T or 1 * SFP Combo uplink port , switch Should support PoE as per 802.3af and 802.3at with PoE budget of min 150W or more .		
2.	Operating temperature range (continuous): 0°C to 50°C		
3.	Performance Specifications : Should have min 3.6 Gbps Switching Fabric and min. 2.6Mpps forwarding rate. Should support wire speed non blocking performance with minimum 16K MAC or more.		
4.	Resiliency Features: RSTP, MSTP, loop detection and loop prevention, Dynamic link failover, PVST+, STP Root guard.		
5.	VLAN support: Should support min. 256 VLAN or better, VLAN Support on Port-based and protocol ,IEEE 802.3ac VLAN Tagging ,Multiple VLAN and Dynamic VLAN, Voice VLAN, LLDP-MED.		
6.	Multicasting: Should Support IGMP v3 Snooping and MLD v2 Snooping and IGMP query solicitation.		

7.	L2 and QoS Feature : Support Port Trunking, Port Mirroring, Port Security , Link Aggregation ,Packet Storm Protection, Ingress Filtering, IEEE 802.1p and Police based QoS, Wire speed traffic classification with low latency essential for VoIP and video applications, 8 priority queues with a hierarchy of high priority queues for real time traffic and Strict priority, weighted round robin or mixed scheduling.		
8.	Security : ACL, Guest VLAN, DHCP Snooping, BPDU Protection, Dynamic VLAN assignment, Network Access Control, IP source guard and Dynamic ARP Inspection (DAI), private VLAN, Authentication: MAC, User and web based, RADIUS, TACACS+, SSH, SSLV3,		
10.	Management features: Support SNMP , Telnet, Web GUI, digital optical monitoring(BDM) as per SFF-8472 or equivalent, UDL/Equivalent, eco friendly and Ipv6 management from day1.		
11.	The switch also seamlessly integrates with automated LAN Infrastructure to achieve centralized management / provisioning using SDN or equivalent technology.		
12.	Switch Should be RoHS Compliant, UL, CE, TUV or equivalent certified. The proposed model should not be End of Sale and End of Life and the latest datasheet of the proposed model should be available on the OEM's Global website.		

TECHNICAL SPECIFICATIONS OF NEW ITEM NO. 15(A):**40G SM MODULE:**

S. No.	Specification	Compliance Yes/No	Remark
1.	Single mode 40G QSFP FO module support CWDM and LC type		
2.	Support upto 2 to 10 Km and Compliant with 40GbE Specification IEEE 802.3ba		
3.	Compliant with industry-standard SFF-8436		
4.	RoHS-6 compliant (LR4) and Supports Digital Diagnostics Monitoring (DDM)		
5.	Operating Temperature : 0°C to 70°C (32°F to 158°F)		
6.	Storage temperature: -20°C to 85°C (-4°F to 185°F)		
7.	Relative humidity: 0 to 85% non-condensing		
8.	Transmit Parameter : -7 to 2.3 dBm		
9.	Receiving Sensitivity : -11.5 dBm		
10.	Supports hot-swappable and MSA Compliant		
11.	All active component and FO module should be from same OEM		

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REVISED CHAPTER III**CHAPTER – III: SCHEDULE OF REQUIREMENTS
(INCLUDING SCOPE OF WORK)**

S. NO.	DESCRIPTION	QTY	UOM
Section I : ACTIVE COMPONENTS			
10G Switch			
1.	10G Aggregation Switch with 48-port SFP+ slot, 4-port QSFP slot and redundant Power Supply with all accessories , as per mentioned technical specifications	2	Nos
1(a).	16-port SFP+ stackable switch with 2 port QSFP slots as per the technical specifications table mentioned in these clarifications	2	Nos
Distribution POE+ Switch			
2.	24-Port Gigabit Distribution PoE+ Switch , with redundant Power Supply , with all accessories as per mentioned technical specifications	25	Nos
48-Port Gigabit Switch			
3.	48-port 10/100/1000T stackable switch with 4 SFP+ ports, with all accessories as per mentioned technical specifications	28	Nos
4.	48-port 10/100/1000T PoE+ stackable switch with 4 SFP+ ports with all accessories as per mentioned technical specifications	4	Nos

24-Port FO Switch			
5.	24-port 100/1000X SFP stackable switch with 4 SFP+ ports with all accessories as per mentioned technical specifications	4	Nos
Gigabit Access Switch			
6.	24-port 10/100/1000T stackable switch with 2 combo ports (10/100/1000T or 100/1000X SFP) and 2 SFP+ stacking/user ports as per mentioned technical specifications	100	Nos
7.	24-port 10/100/1000T PoE+ stackable switch with 2 combo ports (10/100/1000T or 100/1000X SFP) and 2 SFP+ stacking/user ports as per mentioned technical specifications	35	Nos
7 (a).	8-port Fast Ethernet PoE+ switch with 1 combo port as per the technical specifications table mentioned in these clarifications	40	Nos
Multiservice Access Switch			
8.	Multiservice access Switch with 6 Giga LAN ports, 1 FO Ports, 2 FXS Ports , with all accessories as per mentioned technical specifications	20	Nos
Center-of-Row Switch			
9.	12 slot chassis switch with all accessories as per mentioned technical specifications	2	Nos
Wireless Access Point (Indoor)			
10 (a).	Enterprise-class Indoor Wireless Access Point with IEEE 802.11ac dual-band radios as per mentioned technical specifications	160	Nos
Wireless Access Point (Outdoor)			
10 (b).	Enterprise-class Outdoor Access Point with IEEE 802.11ac dual-band radios as per mentioned technical specifications	15	Nos
Wireless Controller			
11.	Wireless controller as per mentioned technical specifications	2	Nos
FO Module			
12.	10km 1310nm 10Gbase-LR SFP+ module as per mentioned technical specifications	86	Nos
13.	10km Bi-Directional GbE SMF SFP as per mentioned technical specifications	56	Nos
10G NIC & Cable			
14.	2 x 10 Gigabit SFP+ Network Interface Card as per mentioned technical specifications	30	Nos
15.	7m SFP+ "Twinax" direct attach cable as per mentioned technical specifications	60	Nos
15(a).	40G QSFP LR4 10km supported Single Mode Module	12	Nos
10G Expansion Card for Existing Core Switch			
16.	2 x 10GbE SFP+ slots (unpopulated) expansion module as per mentioned technical specifications	2	Nos
Up-gradation of Existing Network Provisioning & Management Technology			
17.	Up-gradation of existing SDN based provisioning and mgmt tech for supporting additional nodes of this project as per mentioned technical specifications	1	Nos
Server for NMS			
18.	Server as per mentioned technical specifications	1	Nos
Section II : UPS & Rack			
1.	On-Line UPS, 4800 Watts / 6000 VA, Input 230V / Output 230V , Interface Port DB-9 RS-232, SmartSlot , Extended runtime model , Rack Height 2U	2	Nos
2.	Battery required for 60 min Backup for 6KVA UPS	2	Nos
3.	Battery Rack and Interlink cable for 6KVA UPS and TVSS	2	Nos
4.	On-line UPS 1KVA with 30 Min Back-up	75	Nos
5.	15U Rack with Accessories	60	Nos
PASSIVE COMPONENT (Fiber)			
1.	6-core Single Mode Fiber Optic Cable	5000	Mtrs
2.	LIU 12 Port with SM LC Connector loaded	28	Nos
3.	LIU 24 Port with SM LC Connector Loaded	6	Nos
4.	LC-LC duplex single-mode patch cord 3m	125	Nos
5.	LC single-mode pigtail 1.5m	500	Nos
6.	Wall Mount 12 Port LIU loaded	24	Nos
7.	LC-LC Simplex Single Mode Patch Cord 3m	48	Nos
8.	LC-SC Fiber Patch Cord 3m	50	Nos
8.a	LC-LC OM4 Single mode Patch cord of 20 mtrs length	12	Nos
PASSIVE COMPONENT (UTP)			
9.	CAT6 24 Port Patch panel loaded	150	Nos
10.	CAT6 Patch cord	1 Mtrs x 5400	Nos
		2 Mtrs x 150 (Equal Nos. in 2 different colors)	Nos
11.	Single Information Outlet with Back Box (Complete Assembly)	600	Nos
12.	CAT6 Cable Box 305 Mtrs Box	155	Nos

SECTION III : SERVICE COMPONENT			
1.	SM LC FO Connector - Splicing / Connectorization	600	Nos
2.	Rack Installation and PVC Glanding with Accessories (may require removing existing rack & shifting accessories from existing to new racks)	80	Nos
3.	FOC Laying with ISI Mark HDPE Pipe with digging and refilling (underground)	1000	Mtrs
4.	FOC Laying with ISI Mark HDPE Pipe along wall with U-clamps every 1m (overhead)	3000	Mtrs
4 (a)	FOC Laying within existing channels (overhead)	1000	Mtrs
5.	UTP Cat-6 Cable Laying with ISI Mark PVC casing and capping	35000	Mtrs
5(a).	UTP Cat-6 Cable Laying within existing PVC casing and capping	10000	Mtrs
6.	Installation charge for information outlet and panel site	600	Nos
7.	Installation charges for active switching and wireless component including 25 additional non-PoE distribution switches and 5 m GI poles for outdoor	1	Lot
8.	Installation charges for up-gradation of existing network provisioning & mgmt tech	1	Lot
9.	Installation Charge for UPS including battery setup, MS angle brackets etc.	1	Lot
10.	Project Testing, Documentation, Labeling, Commissioning, Warranty, Certification & Management with on-site free of cost support for one year	1	Lot
11.	Resident Engineer (2 nos) in CCC for Maintaining Network of this project for 3 Years	1	Nos

Quantities are subject to variation in accordance with the variation clause. Resident Engineers shall have 1-2 years past experience and be proficient in managing networks.

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REVISED CHAPTER 5

(IN CASE GST DOES NOT BECOME APPLICABLE BY THE LAST DATE OF BID SUBMISSION)

CHAPTER 5: PRICE SCHEDULE

(TO BE UTILISED BY THE BIDDERS FOR QUOTING THEIR PRICES)

SECTION A: FORMAT FOR SUBMISSION OF PRICE BID (ACTIVE & PASSIVE SUPPLY)

S. No.	TYPE OF EQUIPMENT	QTY	UoM	MAKE	MODEL	BASE PRICE IN INR	CD/ED/CVD IN INR	VAT/ CST/ SERVICE TAX IN INR	ANY OTHER TAX IN INR	UNIT PRICE INCL TAXES IN INR	QUANTITY	TOTAL PRICE IN INR
SECTION I: ACTIVE COMPONENTS												
1.	10G Aggregation Switch with 48-port SFP+ slot, 4-port QSFP slot and redundant Power Supply with all accessories, as per mentioned technical specifications	2	Nos									
1(a).	16-port SFP+ stackable switch with 2 port QSFP slots as per the technical specifications table mentioned in these clarifications	2	Nos									
2.	24 Port Gigabit Distribution PoE+ Switch with Redundant Power Supply with all	25	Nos									

	accessories as per mentioned technical specifications											
3.	48-port 10/100/1000T stackable switch with 4 SFP+ ports, with all accessories as per mentioned technical specifications	28	Nos									
4.	48-port 10/100/1000T PoE+ stackable switch with 4 SFP+ ports with all accessories as per mentioned technical specifications	4	Nos									
5.	24-port 100/1000X SFP stackable switch with 4 SFP+ ports with all accessories as per mentioned technical specifications	4	Nos									
6.	24-port 10/100/1000T stackable switch with 2 combo ports (10/100/1000T or 100/1000X SFP) and 2 SFP+ stacking/user ports as per mentioned technical specifications	100	Nos									
7.	24-port 10/100/1000T PoE+ stackable switch with 2 combo ports (10/100/1000T or 100/1000X SFP) and 2 SFP+ stacking/user ports as per mentioned technical specifications	35	Nos									
7 (a).	8-port Fast Ethernet PoE+ switch with 1 combo port as per the technical specifications table mentioned in these clarifications	40	Nos									
8.	Multiservice access Switch with 6 Giga	20	Nos									

	LAN ports, 1 FO Ports, 2 FXS Ports , with all accessories as per mentioned technical specifications											
9.	12 slot chassis switch with all accessories as per mentioned technical specifications	2	Nos									
10 (a).	Enterprise-class Wireless Access Point (Indoor) with IEEE 802.11ac dual-band radios as per mentioned technical specifications	160	Nos									
10 (b).	Enterprise-class Wireless Access Point (Outdoor) with IEEE 802.11ac dual-band radios as per mentioned technical specifications	15	Nos									
11.	Wireless controller as per mentioned technical specifications	2	Nos									
12.	10km 1310nm 10GBase-LR SFP+ module as per mentioned technical specifications	86	Nos									
13.	10km Bi-Directional GbE SMF SFP as per mentioned technical specifications	56	Nos									
14.	2 x 10 Gigabit SFP+ Network Interface Card as per mentioned technical specifications	30	Nos									
15.	7m SFP+ "Twinax" direct attach cable as per mentioned technical specifications	60	Nos									
15(a).	40G QSFP LR4 10km supported Single Mode Module	12	Nos									
16.	2 x 10GbE SFP+ slots (unpopulated) expansion module as per	2	Nos									

	mentioned technical specifications											
17.	Up-gradation of Existing SDN based provisioning and Management Technology for supporting Additional Nodes of this project as per mentioned technical specifications	1	Nos									
18.	Server for NMS as per mentioned technical specifications	1	Nos									
SECTION II : UPS & RACK												
1.	On-Line UPS, 4800 Watts / 6000 VA, Input 230V / Output 230V , Interface Port DB-9 RS-232, SmartSlot , Extended runtime model , Rack Height 2 U	2	Nos									
2.	Battery bank required for 60 min Backup for 6KVA UPS	2	Nos									
3.	Battery Rack and Interlink cable for 6KVA UPS and TVSS	2	Nos									
4.	On-line UPS 1KVA with 30 Min Back-up	75	Nos									
5.	15U Wall Mount Rack with Accessories	60	Nos									
PASSIVE COMPONENT (FIBER)												
1.	6-core Single Mode Fiber Optic Cable	5000	Mtrs									
2.	LIU 12 Port with SM LC Connector loaded	28	Nos									
3.	LIU 24 Port with SM LC Connector loaded	6	Nos									
4.	LC-LC duplex single-mode patch cord 3m	125	Nos									
5.	LC single-mode pigtail 1.5m	500	Nos									
6.	Wall Mount 12 Port LIU loaded	24	Nos									
7.	LC-LC Simplex Single Mode Patch Cord 3m	48	Nos									

8.	LC-SC Fiber Patch Cord 3m	50	Nos									
8(a).	LC-LC OM4 Single mode Patch cord of 20 mtrs length	12	Nos									
PASSIVE COMPONENT (UTP)												
9.	Cat-6 24 Port Patch panel loaded	150	Nos									
10.	CaT-6 Patch cord	1mtrs x 5400	Nos									
		2mtrs x 150 (Equal Nos. in 2 different colors)	Nos									
11.	Single Information Outlet with Back Box (Complete Assembly)	600	Nos									
12.	Cat-6 Cable Box 305 Mtrs Box	155	Nos									

SECTION B: FORMAT FOR SUBMISSION OF PRICE BID (SERVICES)

S. NO.	DESCRIPTION/TYPE OF SERVICE	UOM	QTY	BASE PRICE IN INR	CD/ED /CVD IN INR	VAT/ CST/ SERVICE TAX IN INR	ANY OTHER TAX IN INR	UNIT PRICE INCL TAXES IN INR	QUANTITY	TOTAL PRICE IN INR
1.	SM LC FO Connector - Splicing / Connectorization	600	Nos							
2.	Rack Installation and PVC Glanding with Accessories	80	Nos							
3.	FO Cable Laying with ISI Mark HDPE Pipe with digging and refilling (Underground)	1000	Mtrs							
4.	FO Cable Laying with ISI Mark HDPE Pipe clamped to wall with U-clamps at every 1m (Overhead)	3000	Mtrs							
4 (a).	FOC Laying within existing channels (overhead)	1000	Mtrs							
5.	UTP Cat-6 Cable Laying with ISI Mark PVC casing and capping	35000	Mtrs							
5(a).	UTP Cat-6 Cable Laying within existing PVC casing and capping	10000	Mtrs							
6.	Installation charges for Information outlet and Panel Site	600	Nos							
7.	Installation charges for active Switching and Wireless components including 25 additional non-PoE distribution switches and 5m GI poles for outdoor	1	Lot							
8.	Installation charges for Upgradation of Existing Network Provisioning & Mgmt Tech	1	Lot							
9.	Installation Charges for UPS including battery setup, MS angle brackets etc.	1	Lot							
10.	Project testing, documentation, labeling, commissioning, warranty, certification, management with on-site free of cost support for one year	1	Lot							

11.	Resident Engineer (2 nos) in CCC Block for Maintaining Data network installed under this project for 3 Years	1	Nos							
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REVISED OVERALL QUOTE FOR THE QUANTITIES OF THE ACTIVE, PASSIVE & SERVICE COMPONENTS MENTIONED IN CHAPTER – III & IV

S.NO.	COMPONENTS	TOTAL COST EXCLUSIVE OF TAXES (BASE PRICES) IN INR (A)	TOTAL COST INCLUSIVE OF TAXES IN INR (B)
1.	Total Cost of all the Active Components including Installation & fitting Accessories and Existing LAN Integration Hardware-Software		
2.	Total Cost of UPS and Installation		
3.	Total Cost of All the Passive equipments and Racks		
4.	Total Cost of Services inclusive of Documentation , Handover & Training		
5.	Other Charges (if any), please specify here		
6.	Grand Total of Complete End to End Solution Comprising of all the components enumerated above	<MENTION HERE THE GRAND TOTAL OF COSTS OF ALL COMPONENTS EXCLUDING TAXES FOR THE QUANTITIES MENTIONED IN THE TENDER (I.E., GRAND TOTAL OF BASE PRICES OF ALL COMPONENTS FOR THE QUANTITIES MENTIONED IN THE TENDER) IN INR>	<MENTION HERE SUM TOTAL OF COSTS OF ALL COMPONENTS INCLUDING TAXES FOR THE QUANTITIES MENTIONED IN THE TENDER (I.E., GRAND TOTAL OF UNIT PRICES OF ALL COMPONENTS FOR THE QUANTITIES MENTIONED IN THE TENDER) IN INR>
7.	Grand Total	<MENTION HERE IN WORDS THE GRAND TOTAL OF COSTS OF ALL COMPONENTS EXCLUDING TAXES FOR THE QUANTITIES MENTIONED IN THE TENDER (I.E., GRAND TOTAL OF BASE PRICES OF ALL COMPONENTS FOR THE QUANTITIES MENTIONED IN THE TENDER) IN INR>	<MENTION HERE IN WORDS SUM TOTAL OF COSTS OF ALL COMPONENTS INCLUDING TAXES FOR THE QUANTITIES MENTIONED IN THE TENDER (I.E., GRAND TOTAL OF UNIT PRICES OF ALL COMPONENTS FOR THE QUANTITIES MENTIONED IN THE TENDER) IN INR>

REVISED TERMS FOR EVALUATION OF L1 BIDDER:

[IN CASE GST DOES NOT BECOME APPLICABLE BY THE LAST DATE OF BID SUBMISSION]

The price bid evaluation of the technically qualified bidders shall be done on the basis of the Grand Total of Complete End to End Solution i.e., S.No. 6 of the above table

Since GST is likely to be applicable by the time of billing and tax rates shall change, the L1 bidder shall be decided on the basis of **<THE GRAND TOTAL OF COSTS OF ALL COMPONENTS EXCLUDING TAXES FOR THE QUANTITIES MENTIONED IN THE TENDER (I.E., GRAND TOTAL OF BASE PRICES OF ALL COMPONENTS FOR THE QUANTITIES MENTIONED IN THE TENDER) IN INR>**.

THE PROJECT SHALL BE AWARDED TO THE BIDDER WHOSE BID IS FOUND TECHNICALLY RESPONSIVE AND QUOTING THE LOWEST PRICE AS HIGHLIGHTED ABOVE.

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REVISED CHAPTER 5**(IN CASE GST BECOMES APPLICABLE BY THE LAST DATE OF BID SUBMISSION)****CHAPTER 5: PRICE SCHEDULE****(TO BE UTILISED BY THE BIDDERS FOR QUOTING THEIR PRICES)****SECTION A: FORMAT FOR SUBMISSION OF PRICE BID (ACTIVE & PASSIVE SUPPLY)**

S. No.	TYPE OF EQUIPMENT	QTY	UoM	MAKE	MODEL	BASE PRICE IN INR	GST	ANY OTHER TAX, DUTY, OR LEVY (%)	UNIT PRICE INCL TAXES IN INR	QUANTITY	TOTAL PRICE IN INR
SECTION I: ACTIVE COMPONENTS											
1.	10G Aggregation Switch with 48-port SFP+ slot, 4-port QSFP slot and redundant Power Supply with all accessories, as per mentioned technical specifications	2	Nos								
1(a).	16-port SFP+ stackable switch with 2 port QSFP slots as per the technical specifications table mentioned in these clarifications	2	Nos								
2.	24 Port Gigabit Distribution PoE+ Switch, with Redundant Power Supply, with all accessories as per mentioned technical specifications	25	Nos								
3.	48-port 10/100/1000T stackable switch with 4 SFP+ ports, with all accessories as per mentioned technical specifications	28	Nos								
4.	48-port 10/100/1000T PoE+ stackable switch with 4 SFP+ ports with all accessories as per mentioned technical specifications	4	Nos								
5.	24-port 100/1000X SFP stackable switch with 4 SFP+ ports with all accessories as per mentioned	4	Nos								

	technical specifications										
6.	24-port 10/100/1000T stackable switch with 2 combo ports (10/100/1000T or 100/1000X SFP) and 2 SFP+ stacking/user ports as per mentioned technical specifications	100	Nos								
7.	24-port 10/100/1000T PoE+ stackable switch with 2 combo ports (10/100/1000T or 100/1000X SFP) and 2 SFP+ stacking/user ports as per mentioned technical specifications	25	Nos								
7 (a).	8-port Fast Ethernet PoE+ switch with 1 combo port as per the technical specifications table mentioned in these clarifications	40	Nos								
8.	Multiservice access Switch with 6 Giga LAN ports, 1 FO Ports, 2 FXS Ports , with all accessories as per mentioned technical specifications	20	Nos								
9.	12 slot chassis switch with all accessories as per mentioned technical specifications	2	Nos								
10 (a).	Enterprise-class Wireless Access Point (Indoor) with IEEE 802.11ac dual-band radios as per mentioned technical specifications	160	Nos								
10 (b).	Enterprise-class Wireless Access Point (Outdoor) with IEEE 802.11ac dual-band radios as per mentioned technical specifications	15	Nos								
11.	Wireless controller as per mentioned technical specifications	2	Nos								

12.	10km 1310nm 10GBase-LR SFP+ module as per mentioned technical specifications	86	Nos								
13.	10km Bi-Directional GbE SMF SFP as per mentioned technical specifications	56	Nos								
14.	2 x 10 Gigabit SFP+ Network Interface Card as per mentioned technical specifications	30	Nos								
15.	7m SFP+ "Twinax" direct attach cable as per mentioned technical specifications	60	Nos								
15(a).	40G QSFP LR4 10km supported Single Mode Module	12	Nos								
16.	2 x 10GbE SFP+ slots (unpopulated) expansion module as per mentioned technical specifications	2	Nos								
17.	Up-gradation of Existing SDN based provisioning and Management Technology for supporting Additional Nodes of this project as per mentioned technical specifications	1	Nos								
18.	Server for NMS as per mentioned technical specifications	1	Nos								
SECTION II: UPS & RACK											
1.	On-Line UPS, 4800 Watts / 6000 VA, Input 230V / Output 230V , Interface Port DB-9 RS-232, SmartSlot , Extended runtime model , Rack Height 2 U	2	Nos								
2.	Battery bank required for 60 min Backup for 6KVA UPS	2	Nos								
3.	Battery Rack and Interlink cable for 6KVA UPS and TVSS	2	Nos								
4.	On-line UPS 1KVA with 30 Min Back-up	75	Nos								
5.	15U Wall Mount Rack with Accessories	60	Nos								

PASSIVE COMPONENT (FIBER)											
1.	6-core Single Mode Fiber Optic Cable	5000	Mtrs								
2.	LIU 12 Port with SM LC Connector loaded	28	Nos								
3.	LIU 24 Port with SM LC Connector loaded	6	Nos								
4.	LC-LC duplex single-mode patch cord 3m	125	Nos								
5.	LC single-mode pigtail 1.5m	500	Nos								
6.	Wall Mount 12 Port LIU loaded	24	Nos								
7.	LC-LC Simplex Single Mode Patch Cord 3m	48	Nos								
8.	LC-SC Fiber Patch Cord 3m	50	Nos								
8(a).	LC-LC OM4 Single mode Patch cord of 20 mtrs length	12	Nos								
PASSIVE COMPONENT (UTP)											
9.	Cat-6 24 Port Patch panel loaded	150	Nos								
10.	CaT-6 Patch cord	1mtrs x 5400	Nos								
		2mtrs x 150 (Equal Nos. in 2 different colors)	Nos								
11.	Single Information Outlet with Back Box (Complete Assembly)	600	Nos								
12.	Cat-6 Cable Box 305 Mtrs Box	155	Nos								

SECTION B: FORMAT FOR SUBMISSION OF PRICE BID (SERVICES)

S. NO.	DESCRIPTION/TYPE OF SERVICE	UOM	QTY	BASE PRICE IN INR	GST	ANY OTHER TAX, DUTY, OR LEVY (%)	UNIT PRICE INCL TAXES IN INR	UNIT PRICE INCL TAXES IN INR	QUANTITY	TOTAL PRICE IN INR
1.	SM LC FO Connector - Splicing / Connectorization	600	Nos							
2.	Rack Installation and PVC Glanding with Accessories	80	Nos							
3.	FO Cable Laying with ISI Mark HDPE Pipe with digging and refilling (Underground)	1000	Mtrs							
4.	FO Cable Laying with ISI Mark HDPE Pipe clamped to wall with U-clamps at every 1m (Overhead)	3000	Mtrs							
4 (a).	FOC Laying within existing channels (overhead)	1000	Mtrs							
5.	UTP Cat-6 Cable Laying with ISI Mark PVC casing and capping	35000	Mtrs							
5(a).	UTP Cat-6 Cable Laying within existing PVC casing and capping	10000	Mtrs							
6.	Installation charges for Information outlet and Panel Site	600	Nos							
7.	Installation charges for active	1	Lot							

	Switching and Wireless components including 25 additional non-PoE distribution switches and 5 m GI poles for outdoor								
8.	Installation charges for Upgradation of Existing Network Provisioning & Mgmt Tech	1	Lot						
9.	Installation Charges for UPS including battery setup, MS angle brackets etc.	1	Lot						
10.	Project testing, documentation, labeling, commissioning, warranty, certification, management with on-site free of cost support for one year	1	Lot						
11.	Resident Engineer (2 nos) in CCC Block for Maintaining Data network installed under this project for 3 Years	1	Nos						

REVISED OVERALL QUOTE FOR THE QUANTITIES OF THE ACTIVE, PASSIVE & SERVICE COMPONENTS MENTIONED IN CHAPTER – III & IV

S.NO.	COMPONENTS	TOTAL COST EXCLUSIVE OF TAXES (BASE PRICES) IN INR (A)	TOTAL COST INCLUSIVE OF TAXES IN INR (B)
1.	Total Cost of all the Active Components including Installation & fitting Accessories and Existing LAN Integration Hardware-Software		
2.	Total Cost of UPS and Installation		
3.	Total Cost of All the Passive equipments and Racks		
4.	Total Cost of Services inclusive of Documentation, Handover & Training		
5.	Other Charges (if any), please specify here		
6.	Grand Total of Complete End to End Solution Comprising of all the components enumerated above	<MENTION HERE THE GRAND TOTAL OF COSTS OF ALL COMPONENTS EXCLUDING TAXES FOR THE QUANTITIES MENTIONED IN THE TENDER (I.E., GRAND TOTAL OF BASE PRICES OF ALL COMPONENTS FOR THE QUANTITIES MENTIONED IN THE TENDER) IN INR>	<MENTION HERE SUM TOTAL OF COSTS OF ALL COMPONENTS INCLUDING TAXES FOR THE QUANTITIES MENTIONED IN THE TENDER (I.E., GRAND TOTAL OF UNIT PRICES OF ALL COMPONENTS FOR THE QUANTITIES MENTIONED IN THE TENDER) IN INR>
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REVISED TERMS FOR EVALUATION OF L1 BIDDER:

IN CASE GST BECOMES APPLICABLE BY THE LAST DATE OF BID SUBMISSION then the price bid evaluation of the technically qualified bidders shall be done on the basis of the Grand Total of Complete End to End Solution i.e., S.No. 6 of the above table

The L1 bidder shall be decided on the basis of **<THE GRAND TOTAL OF COSTS OF ALL COMPONENTS INCLUDING TAXES FOR THE QUANTITIES MENTIONED IN THE TENDER (I.E., GRAND TOTAL OF BASE PRICES OF ALL COMPONENTS FOR THE QUANTITIES MENTIONED IN THE TENDER) IN INR>.**

THE PROJECT SHALL BE AWARDED TO THE BIDDER WHOSE BID IS FOUND TECHNICALLY RESPONSIVE AND QUOTING THE LOWEST PRICE AS HIGHLIGHTED ABOVE.

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REVISED DATES:

LAST DATE AND TIME FOR SUBMISSION OF BIDS	05/07/2017 upto 3:00 P.M.
DATE & TIME OF OPENING OF TECHNO-COMMERCIAL BID PART-A	05/07/2017 at 3:30 P.M.

IMPORTANT NOTE: This document is an integral part of the tender document. It has to be pre-pended to the tender document and needs to be sealed and signed by the authorized signatory of the bidder and the same needs to be enclosed with the Techno-Commercial Bid Part –A in accordance with S. No. 50 (iv) and 53 of Chapter I: Instructions to Bidders.

Rest of the conditions remain unchanged