

# **Tender Document**

**For**

**Rate Contract for Supply and Installation of Local Area Networking  
for various locations at Madhya Pradesh**

Tender no. MPSEDC/MKTG/2010/176

(All pages of this document except for Commercial-bid to be submitted in original duly signed on each page along with the technical bid envelope. The Commercial bid in original is to be enclosed in a separate sealed envelope)

**M.P. State Electronics Development Corporation Ltd.**

**147, Zone-I, M P Nagar, Bhopal-462 011 (M.P.)  
Ph.0755-2769816,2769823, Fax: 0755-2769824  
www.mpsedc.com**

Signature of the Tenderer  
With stamp and date

# M.P. State Electronics Development Corporation Ltd.

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Tender no. MPSEDC/MKTG/2010/176

## Technical Bid

### INVITATION FOR BIDS

Addl. Chief General Manager, MPSEDC Ltd., Bhopal invites sealed bids, under two envelopes system, from bidders for Rate contract for Supply and Installation of Local Area Networking. Interested bidders may obtain further information from the office of MPSEDC Ltd., Bhopal Bids are invited for the work mentioned hereunder:

Sl. No.	Items	Description
a	Scope of Work	Rate contract for Supply and Installation of Local Area Networking
b	Cost of Tender Document	Rs.1000.00 (non-refundable) by Demand Draft/Cash
c	Sale of Tender Document	Date 02.03.10 to 06.04.10 (Between 10.30 a.m. to 5.30 p.m.)
d	Last date of submission of Tender Document	Date 07.04.10 up to 3.00 p.m.
e	Date of opening of Technical Bid	Date 07.04.10 at 4.00 p.m.
f	EMD	Rs.1,00,000/- (Rupees One Lakh Only) in the form of Demand Draft payable to MPSEDC Ltd. at Bhopal
g	Place of opening of Tender Document	MPSEDC Ltd., 147, Zone-1, Maharana Pratap Nagar, BHOPAL – 462 011(M.P.)
h	Address for communication	MPSEDC Ltd., 147, Zone-1, Maharana Pratap Nagar, BHOPAL – 462 011 (M.P.)

**Note** - Tender Document can be downloaded from the website [www.mpsedc.com](http://www.mpsedc.com). In case tender form has been downloaded from the website, the tenderer will have to enclose a Demand Draft of Rs.1000/- (Rupees One Thousand only) of any scheduled bank in favor of MPSEDC Ltd. payable at Bhopal along with the tender.

**\*Any future Corrigenda/Information shall be posted only on our website [www.mpsedc.com](http://www.mpsedc.com)**

**Addl. Chief General Manager**



## Letter for Submission of Tender

To  
MPSEDC  
147 Zone I, M P Nagar  
Bhopal (M P)

Dated ----- ,2010.

Subject : "Tender for Rate contract for Supply and Installation of Local Area Networking against Tender No. MPSEDC/MKTG/2010/176 due for opening on 07.04.10

Dear Sir,

Having examined the tender document relating to the Supply and Installation of Local Area Networking as detailed in your tender, Terms & Conditions and scope of supply and installation, Specifications etc., and having understood the provisions and requirements relating to the supply and installation and all other factors governing the tender, We hereby submit our offer for the supply and installation of the proposed items in accordance with terms and conditions and confirm our acceptance to execute the order within the time period specified in the tender document, at the rates quoted by us in the accompanying Technical & commercial Bid.

If, after the tender document is accepted, we fail to complete the supply & installation of the items as per the order. We agree that, M/s. MPSEDC Ltd., Bhopal shall have full authority to forfeit the earnest money and cancel our order with no obligation on their part.

We confirm having deposited earnest money of Rs 1,00,000/- (Rupees One lakh only) by Demand Draft No.....dated ..... drawn on .....Bank ..... Branch attached here to, and general information required are as per annexure attached.

We further confirm that –

- i. We have successfully executed orders of similar nature and we have sufficient experience and financial strength in handling orders of this value.
- ii. We have sufficient qualified manpower and necessary materials and after sales support to execute the order efficiently in the specified time schedule.
- iii. The quoted rates shall be valid till the completion of the order but not less than 90 days.
- iv. We further confirm that all chapters of the tender documents have been read, understood and signed and there is no deviation/discrepancy

Signature of the Tenderer  
With stamp and date

**GENERAL INFORMATION AND EMD DETAILS**

1	EMD Details DD No and date: Amount in Rs. Name of the Bank:	
2	Name and Address of the Tenderer:	
3	Contacts:	
4	Telephones:	
5	Fax:	
6	E-mail:	
7	Mobile No:	
8	Category of the tenderer (Whether company, partnership firm or Proprietary concern)	
9	Name of Chief Executive Officer and Telephone No.	
10	Year of Establishment	
11	Sales Tax/Commercial Tax/ CST nos.	
12	Income Tax PAN/GIR No.	
13	Yearly Turn over of the Last 2 years.	
14	Name and Address of the Banker	
15	List of major Clients and the size of orders executed	

Note: Separate sheets may be attached wherever necessary.

Signature of the Tenderer  
With stamp and date

## **Terms and Conditions**

Contents of Bidding Documents for Supply and Installation of Local Area Networking the bidding procedures and the terms of contract are prescribed here in under:

### **1. Eligibility Criteria**

Bidder must have executed at least four Networking project (minimum value Rs.1 Lakh) , one should be in the Government Sector (attach order copy) worth of Rs. 5 lakhs of networking project must have been executed by the bidder. (Attach order copy).

### **2. Amendment in Bidding Document by the Competent Authority**

At any time prior to the deadline for the submission of bids, the competent authority may, for any reason, whether on it's own or in response to a clarification requested for by a prospective bidder, modify the bidding document by way of amendment(s).

The prospective bidders having received the bidding documents will be notified of the amendment(s) so made in writing or by Fax and such amendments shall be binding on them.

In order to allow reasonable time to the prospective bidders for taking into account such amendment(s), in the preparation of their bids, the competent authority, at its discretion, may extend the deadline for the submission of bids.

### **3. Bid Price**

The bidders shall indicate on the prescribed Price Schedule, including item-wise and final Bid Price of the items listed

Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and shall not be subject to variation on any account.

A bid submitted with an adjustable price will be treated as non-responsive and rejected.

### **4. The EMD may be forfeited**

If a Bidder withdraws its bid during the period of bid validity specified by the bidder on the bid Form: or In case of a successful Bidder, if the Bidder fails:

- (i) To accept the order
- (ii) To furnish performance security
- (iii) If the supplier, after accepting the purchase order fails to deliver the material/services as per the order.

### **5. Any alterations, erasures or overwriting shall be valid only if the person or persons signing the bid initial them.**

### **6. Technical requirements**

- a. The technical specifications as per annexure are the minimum configuration required. Higher specifications may be considered but no price weightage for higher specifications shall be considered.

### **7. Service support requirement**

- a. Successful bidder will ensure the proper monitoring and ensure the timely call attending.
- b. The service support will require strengthening to suit the concerned deptt's. requirement. The acceptance for doing so with no extra cost is to be submitted along with the bid.
- c. Following are the limits of time for final closure of call.
  - i. 2 days for the LAN at concerned deptt

The successful bidder will maintain the sufficient inventory of spare items and few complete systems as well.

First component be replaced with new one before taking the old one back, as far as possible to avoid delay.

- d. In case of prolonged pending call the concerned deptt reserves the right to get the defective component repaired from other agencies at the risk of the supplier, and would recover the cost of repair from the supplier.
- e. The delay in call attending / closure will be treated as poor quality of service support and may lead to disqualification of bidder from participation in future purchases.
- f. In case of delay in call rectification beyond 2 days penalty @ of Rs 50/- per day or part thereof for each pending call.

### **SUBMISSION OF BIDS**

#### **8. Sealing and Marking of Bids**

The bidders shall submit EMD, technical bid (containing the technical specifications offered, literature leaflets etc and original copy of commercial bid in separate sealed, envelopes all the above envelopes shall be sealed in one main envelope. All the envelopes should be distinctly marked EMD, technical bid, and commercial bid.

#### **9. Payment**

Payment shall be released by MPSEDC as per the following terms:

Payment for 90% of the value of LAN installed shall be released against proof of installation of LAN to the destination places as per work order instructions on submission of bills in triplicate. Balance 10% shall be released after successful commissioning of LAN, subject to the condition of payment receipt from concern deptt. The bills for the purpose of payment shall be submitted to MPSEDC, Bhopal. No interest shall be payable on delayed payments due to what so ever reason.

#### **10. Deadline for Submission of Bids**

Bids must reach to the competent authority at the address specified but not later than the time and date specified in the invitation of Bids. In the event of the specified date for the submission of bids being declared a holiday for the office of the competent authority, the bids will be received up to the appointed time on the next working day.

#### **11. Late Bid**

Any bid received after the deadline for submission of bids prescribed by the competent authority, will not be accepted and returned unopened to the bidder.

### **BID OPENING AND EVALUATION OF BIDS**

#### **12. Opening of Bids**

Since it is a Two-bid system, Technical and EMD envelope will be opened first by the Committee constituted for this purpose. If the technical bid specifications offered, EMD and deviations asked (if any) are found in order, the Committee will open commercial bid only for the eligible bidders.

The Committee will open the bids, in the presence of Bidders' representatives who choose to attend on the date specified at the following location:

Additional Chief General Manager  
**M. P. State Electronics Dev. Corpn. Ltd.**  
147, Zone-I, Maharana Pratap Nagar,  
BHOPAL- 462011

Prospective Bidder representatives shall sign a register evidencing their attendance.

In case, the commercial bid is not opened on the same or next day of opening of technical bid the Committee may decide to open the commercial bid on subsequent dates. In such case the date, time and place of opening of commercial bid will be intimated to the bidders or their representatives.

### **13. Preliminary Examination**

Before starting evaluation, the bids will be examined to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. In case of computational error the basic price will prevail.

If bid is determined as not substantially responsive, the competent authority will reject it and only the substantially responsive commercial bids will be considered.

The process of evaluation of bid is as follows:

- (i) The Committee, appointed by the MPSEDC LTD, will first verify that the Bank Draft for Bid Security is in order and as per requirement of the bid. The Committee will examine the bid on Eligibility Criteria as specified. The scrutiny of technical proposals will be based on the Evaluation Criteria determined.
- (ii) The commercial bid will be opened only for the proposals, which are found eligible and technically acceptable by the Committee and approved. On the day specified for the opening of bid, the Committee, appointed by the MPSEDC LTD., will open the commercial bids of eligible bidders and scrutinize the same minutely.
- (iii) After scrutiny, the MPSEDC LTD. after having examined the proposal may accept the same or accept the bid price of any other bidder found suitable or reject all or any proposal. The decision of the MPSEDC LTD. in this regard shall be final and binding.
- (iv) The successful Bidder shall be required to enter into a Rate Contract with MPSEDC Ltd. For a period of One Year. MPSEDC reserves the right to offer the lowest rates to other Bidders for entering into the Rate Contract.

### **14. Performance Security**

The successful bidder shall be required to submit performance guarantee equivalent to 10% of the order value for the satisfactory performance/completion of the complete order (Including warranty period), in the form of bank guarantee or DD or FDR (pledged in favour of MPSEDC) with MPSEDC LTD. In case the Performance Guarantee is not submitted, 10% of the value of the each bill shall be retained for the Warranty Period.

### **15. Contacting the Competent Authority**

Any effort on part of a Bidder to influence the Competent Authority or members of Technical/Monitoring committee, in its decisions on bid evaluation; bid comparison or contact award may result in rejection of the bidder's bid.

### **16. General**

- (i) Bid form shall be duly filled in, signed and complete in all respects
- (ii) The price should be inclusive of all taxes and local levies if any. On FOR destination basis.
- (iii) The rates should be free from all escalation. However, all Tax and duty benefits if applicable should be passed on to us.
- (iv) Delivery period should not exceed 45 days from the date of order under any circumstances. The MPSEDC LTD. reserves the right to extend the delivery period, in the interest of the concerned deptt.
- (v) All Networking items should be warranted for a period of one year from the date of successful installation and commissioning.
- (vi) **All products quoted (wherever relevant) should be IPv6 compliant**

(vi) Penalty- In case of delay in execution of the order, the concern deptt. may as its option either:

Recover from the supplier/contractor towards liquidated damages a sum @ ½ % (half percent) of the price of LAN for a week or Part thereof subject to maximum of 10% (ten percent). OR Purchase from elsewhere on account and at the risk of supplier, the stores not delivered.

OR

Cancel the contract reserving concern deptt right to recover damages.

The inner and outer envelopes shall be addressed to the competent authority at the following address:

Additional Chief General Manager  
M.P. state Electronics Dev. Corpo. Ltd  
147, Zone-I, Maharana Pratap Nagar, BHOPAL-462011

The envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late."

If the outer envelope is not sealed and marked, the competent authority will assume no responsibility for the bids, misplacement or premature opening.

Telex, Facsimile/Fax message Bids will be rejected

Conditional bids are liable to be rejected.

MPSEDC Ltd. does not bind themes elves to accept the lowest or any other tender and reserve the right to accept or reject any or all the tender in full or in part without assigning any reason.

**MANUFACTURERS AUTHORIZATION FORM**

**Ref No:** .....

**Dated:**.....

To,  
The Additional Chief general manager  
M.P. State Electronics dev. Corpo. Ltd  
147, Zone-I, Maharana Pratap Nagar, BHOPAL-462011

Tender No:..... Due Date: .....

Dear Sir,

We \_\_\_\_\_ who are established and reputed Manufacturers of \_\_\_\_\_ having factories. At \_\_\_\_\_ (Address of the factory) do hereby authorize M/s \_\_\_\_\_ (Name & Address of agent) to submit a bid, and subsequently negotiate and sign the contract with you against the above tender.

We hereby extend our full guarantee, warranty and support and also in meeting warranty obligations by providing necessary spares in time for the goods & services offered by the above firm against this tender, as per standard as well as MPSEDC warranty terms.

Yours faithfully

(Name)  
(Name of the Manufacturer)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having a power of attorney to bind the manufacturer. The bidder in its bid should include it.

## Technical Specification required in Local Area Networking Structured Cabling

- 1. 19", 42 U Rack**

Racks Size:  
Height - 42 U, Width - Depth: 600mm \* 1000mm  
Powder coated steel Body with front door of glass.  
Completely covered & have security locks  
All covers can be removed & operable from all sides  
Uninhibited access to all mounting points inside the racks  
Proper ventilated with four fans  
Power cable management  
Two Power strips having 10 - 5A /15A sockets each  
Adjustable shelf & accessories to accommodate equipment's  
Fitted with Copper strip for earthing the equipments
- 2. 19" 32 U Rack**

Height - 32 U, Width - Depth: 600mm \* 1000mm  
Powder coated steel Body with front door of glass.  
Completely covered & have security locks  
All covers can be removed & operable from all sides  
Uninhibited access to all mounting points inside the racks  
Proper ventilated with four fans  
Power cable management  
Two Power strips having 10 - 5A /15A sockets each  
Adjustable shelf & accessories to accommodate equipment's  
Fitted with Copper strip for earthing the equipments
- 3. 19" 12 U Wall Mount Rack**

Height - 12 U, Width – Depth: 600mm\*600mm minimum  
Powder coated steel Body with front door of glass.  
Completely covered & have security locks  
All covers can be removed & operable from all sides  
Uninhibited access to all mounting points inside the racks  
Proper ventilated with two fans  
Power cable management  
One Power strips having 6 - 5A / 15A sockets each  
Adjustable shelf & accessories to accommodate equipment's  
Fitted with Copper strip for earthing the equipments
- 4. 19" 9 U Wall Mount Rack**

Height - 9 U, Width - Depth: 600mm\*600mm minimum  
Powder coated steel Body with front door of glass.  
Completely covered & have security locks  
All covers can be removed & operable from all sides  
Uninhibited access to all mounting points inside the racks  
Proper ventilated with One fans  
Power cable management  
One Power strips having 6 - 5A/15A sockets each  
Adjustable shelf & accessories to accommodate equipment's  
Fitted with Copper strip for earthing the equipments
- 5. L2 Managed Switch 48 Ports**

**Switch Performance & Throughput**  
Forwarding Rate and Backplane for full Duplex operation  
The switch will have following ports:  
10/100/1000 baseT ports – 48 Nos including following :  
1. 1000BaseT uplink ports– 2 Nos  
2. Standard Fiber / uplink Ports – 2 Nos  
Support for 10,000 MAC addresses.

**High Availability**  
VRRP  
802.1d, 802.1w, 802.1s, STP per VLAN, RSTP per VLAN.  
256 VLANs per switch

### **Security**

IEEE 802.1x with VLAN assignment allows a dynamic VLAN assignment for a specific user regardless of where the user is connected. IEEE 802.1x with an ACL assignment allows for specific identity-based security policies regardless of where the user is connected. Secure Shell (SSH) Protocol, Kerberos, and Simple Network Management Protocol Version 3 (SNMPv3) to provide network security by encrypting administrator traffic during Telnet and SNMP sessions.

Dynamic ARP Inspection

500 Access Control entries support.

### **Manageability**

Automatic media-dependent interface crossover (MDIX) to automatically adjust transmit and receive pairs if an incorrect cable type (cross-over or straight-through) is installed.

Dynamic Trunking Protocol or equivalent.

VLAN Trunking Protocol or equivalent.

Link Aggregation Control Protocol

The integrated GUI interface should allow the management of up to 8 interconnected switches through a single IP address.

### **QoS**

802.1p Class of Service (CoS) and differentiated services code point (DSCP) field classification

Per-port broadcast, multicast, and unicast storm control to prevent faulty end stations from degrading overall systems performance.

Rate limiting should be provided based on source and destination IP address, source and destination MAC address, Layer 4 TCP/UDP information, or any combination of these fields, using QoS ACLs (IP ACLs or MAC ACLs), class maps, and policy maps.

## **6. L2 Managed Switch 24 Ports**

Specifications same as Item No. 6 with following Ports :

10/100/1000 baseT ports – 24 Nos including following :

1. 1000 BaseT uplink ports– 1 No
2. Standard Fiber / uplink Ports – 1 No

## **7. L2 Managed Switch 16 Ports**

Specifications same as Item No. 7 with following Ports :

10/100/1000 baseT ports – 16 Nos including following :

1. 1000 BaseT uplink ports– 1 No
2. Standard Fiber / uplink Ports – 1 No

## **8. Unmanaged Switch 8 Ports**

## **9. Appliance based UTM Hardware Firewall**

### **Common Specifications for all UTM Firewalls**

All Firewall should provide Support, Definition, Upgrades & Updates Subscription Charges of UTM Firewall for 3 Years.

The unit should have 10/100, 10/100/1000 Copper Gigabit Ports, 1 Console Interface, 2 USB ports

Should have LED's indicating Status (Power, Test, Alarm) LAN (Link, Activity) WAN (Link, Activity) DMZ (Link, Activity)

It should have Processor with specialized security processing cores

It should not consist of any failure devices such as Hard Disk

Should have additional Cryptographic Accelerator Processor offloading VPN computation from Main Processor

Should have a Multi-Layered Protection Technology

Should have upgradeable Firmware

Should Have a Re-Assembly Free Deep Packet Inspection engine

Should have a stateful throughput of 1 Gbps or higher Bi-directional for Firewall

Gateway Antivirus should be able to scan the 50+ Protocols including HTTP, FTP, SMTP, POP3 and IMAP

Should support the following and Standard protocols TCP/IP, UDP, ICMP, HTTP, HTTPS, IPSec, ISAKMP/IKE, SNMP, DHCP, PPPoE, L2TP, PPTP, RADIUS

Should have an integrated Intrusion Prevention System

Should be able to Scan encrypted traffic and payload for any virus threats

Should be able to provide Content Filtering services without the use of other software with more than 8 million site categorized

Should support routing functionality like RIP and OSFP

Should be able to add policy based routes on the appliance

Should have Real-time Deep Packet Inspection

Should have no size limitation has GAV/IPS scanning

Should support Site-to-Site Auto Provisioning VPN.

Should support IKEv2 Secondary Gateway, IKEv2 Dynamic Client Support

Should have Application Firewall for application Bandwidth Control, Access Control, Regulation of web traffic, email, email attachments and file transfers, scanning of files and documents for keywords and specified content, creation of custom IDS/IPS signatures

Should support Single Sign-On for user authentication

Should Inbound Load Balancing for redundancy or load balancing for multiple server applications or devices

Should support HTTPS Content Filtering

Should support SSL Control for policies to control the establishment of SSL connections

Should support Services Dashboard for global and local statistics of blocked network threats

Should support Packet Capture to capture and examine the contents of individual data packets that traverse the firewall appliance for troubleshooting, diagnostics and general network activity, decreasing the time it take to investigate potential issues

Should support Virtual Access Points

Should support Wireless IDS (Rogue Access Point Detection) to Provide real-time threat monitoring, Comprehensive detection of wireless threats and Integrated monitoring and alerting capabilities.

Should support Hardware Failover with Statesync

Should support Network Address Translation (NAT) over Virtual Private Network (VPN)

Should support Clean Virtual Private Network (VPN) technology

Should support 25000+ signature in the Gateway Antivirus (GAV)

Should support Network Antivirus (NAV) from the hardware appliance

Should support Address Resolution Protocol (ARP) binding functionality

Should support Zone Security

Should support object Based Management

Should support SPAM blocking

Should support VOIP protocol both SIP and H.323

Should support policy based Network Address Translation (NAT)

Should support WAN to WAN failover

Should support Internet Service Provider (ISP) failover

Should support Load Balancing in Round Robin and in accordance with Bandwidth & percentage

Should support Hardware Failover

Should have Console based and Browser based management facility.

The data transfer between the Management station and Firewall appliance should be encrypted up to RC4 or higher.

The appliance would be IPv6 Ready

Should support firewall modes like Nat mode, Bridge mode and transparent mode

**Logging & Reporting**

Should be able to log any traffic and activity on the unit

Should be able to divert Logs on to log server and third party software integration should be possible

Should be able to generate reports with statistic such as User login, IP address, Intrusion, URL, Virus attacks etc.

## Individual Specifications of UTM Firewall, Installation & Support

Sl. No.	Specification
9.1	UTM Firewall, Enhanced OS, Memory = 256 MB, No. of Core = 02, Network Interface= 3GbE, 6FE, Throughput Firewall=600 Mbps, VPN=150 MBPS, UTM Throughput = 110 MBPS, GAV Throughput=115 Mbps, IPS Throughput=195 Mbps, Connections/sec=2000, Site-to-Site VPN Tunnels = 25 , Global VPN Clients = 2 , HA Mode = Optional
9.2	UTM Firewall, Enhanced OS, Memory = 512 MB, No. of Core = 02, Network Interface= 6GbE, Throughput Firewall=775 Mbps, VPN=300 MBPS, UTM Throughput = 150 MBPS, GAV Throughput=160 Mbps, IPS Throughput=275 Mbps, Connections/sec=4000, Site-to-Site VPN Tunnels = 75, Global VPN Clients = 10 , HA Mode = Optional
9.3	UTM Firewall, Enhanced OS, Memory = 512 MB, No. of Core = 04, Network Interface= 6GbE, Throughput Firewall=1500 Mbps, VPN=625 MBPS, UTM Throughput = 240 MBPS, GAV Throughput=350 Mbps, IPS Throughput=750 Mbps, Connections/sec=7000, Site-to-Site VPN Tunnels = 800, Global VPN Clients = 50 , HA Mode = Optional
9.4	UTM Firewall, Enhanced OS, Memory = 512 MB, No. of Core = 08, Network Interface= 6GbE, Throughput Firewall=2750 Mbps, VPN=1000 MBPS, UTM Throughput = 600 MBPS, GAV Throughput=690 Mbps, IPS Throughput=1400 Mbps, Connections/sec=10000, Site-to-Site VPN Tunnels = 1500, Global VPN Clients = 500, HA Mode = Optional
9.5	UTM Firewall, Enhanced OS, Memory = 1 GB, No. of Core = 08, Network Interface= 8GbE, Throughput Firewall= 3900 Mbps, VPN=1700 MBPS, UTM Throughput = 850 MBPS, GAV Throughput=1000 Mbps, IPS Throughput=2000 Mbps, Connections/sec=15000, Site-to-Site VPN Tunnels = 4000, Global VPN Clients = 2000, HA Mode = Active/Passive with State Synch, Active/Active UTM
9.6	UTM Firewall, Enhanced OS, Memory = 1 GB, No. of Core = 16, Network Interface= 8GbE, Throughput Firewall= 5000 Mbps, VPN=2700 MBPS, UTM Throughput = 1590 MBPS, GAV Throughput=1690 Mbps, IPS Throughput=2300 Mbps, Connections/sec=20000, Site-to-Site VPN Tunnels = 6000, Global VPN Clients = 2000, HA Mode = Active/Passive with State Synch, Active/Active UTM
9.7	UTM Firewall, Enhanced OS, Memory = 2 GB, No. of Core = 16, Network Interface= 8GbE, Throughput Firewall= 5600 Mbps, VPN=3000 MBPS, UTM Throughput = 1700 MBPS, GAV Throughput=1840 Mbps, IPS Throughput=2580 Mbps, Connections/sec=25000, Site-to-Site VPN Tunnels = 10000, Global VPN Clients = 2000, HA Mode = Active/Passive with State Synch, Active/Active UTM

### 10. Networking work on per point basis including the following jobs:

Supply of UTP CAT 6 Cable with Cabling from Switch to individual outlets in Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including material cost.

Supply and installation of Information Outlet including termination/ impacting of cable.

Supply and installation of 2 Meters and 1 Meter Factory Crimped Patch Cords as per requirement.

Supply and installation of Patch Panel including termination of cable.

Termination of Cable at both ends.

Testing and commissioning of the Network including configuration of nodes and installation of required software for Networking (excluding the cost of Operating System and Software for Servers).

- Note** :
- a. Cable laying from one switch to another switch or router
  - b. Cable laying between two buildings
  - c. Laying of Optical Fiber Cable

**Note**

1.
  - a. All other Active and Passive Networking Components except those given below shall be of D-Link/DAX/Cisco/AMP/Molex make
  - b. All L2 Managed Switches shall be of Cisco (Linksys not included)/Juniper/Nortel/3Com(H3C not included) make
2. The Racks shall be of Comrack/President/Netrack make
3. The Firewall, UTM shall be of Checkpoint/Sonicwall/Juniper/Cisco make
4. The job does not include electrification work. Electrical points have to be provided at appropriate location by the client.
5. The speed of LAN shall be 1000 Mbps. All active components shall be 10/100/1000 Mbps to attain maximum throughput.
6. The structure of network shall be designed by us as per requirement of each building/department, and number of nodes (size of LAN) The number and location of nodes shall be decided by the concerned department, however other networking parameters shall be decided by us considering the provisions for Optical Fiber Backbone for Campus Networking.
7. The Network will have provision for future expansion.
- 8. All products quoted (wherever relevant) should be IPv6 compliant**

## Commercial Offer for Structured Local Area Networking

Item No.	Product/Item	Unit	Rate	VAT	Service tax	Amount
1	Supply and Installation of 19" 42 U rack as per specifications	No.				
2	Supply and Installation of 19" 32 U rack as per specifications	No.				
3	Supply and Installation of 19" 12 U rack as per specifications	No.				
4	Supply and Installation of 19" 9 U rack as per specifications	No.				
5	Supply and Installation of L2 Managed Switch - 48 Port as per specifications	No.				
6	Supply and Installation of L2 Managed Switch - 24 Ports as per specifications	No.				
7	Supply and Installation of L2 Managed Switch - 16 Ports as per specifications	No.				
8	Supply and Installation of L2 Unmanaged Switch - 8 Ports 10/100/1000 as per specifications	No.				
9.1	Supply and Installation of UTM Firewall as per specifications upto 50 Users including configuration and 3 years support, definition upgrade and subscription charges.	No.				
9.2	Supply and Installation of UTM Firewall as per specifications upto 100 Users including configuration and 3 years support, definition upgrade and subscription charges.	No.				
9.3	Supply and Installation of UTM Firewall as per specifications upto 300 Users including configuration and 3 years support, definition upgrade and subscription charges.	No.				
9.4	Supply and Installation of UTM Firewall as per specifications upto 750 Users including configuration and 3 years support, definition upgrade and subscription charges.	No.				
9.5	Supply and Installation of UTM Firewall as per specifications upto 2000 Users including configuration and 3 years support, definition upgrade and subscription charges.	No.				
9.6	Supply and Installation of UTM Firewall as per specifications upto 3000 Users including configuration and 3 years support, definition upgrade and subscription charges.	No.				
9.7	Supply and Installation of UTM Firewall as per specifications upto 5000 Users including configuration and 3 years support, definition upgrade and subscription charges.	No.				
10.1	Networking work on per point basis as per Specifications for cable length upto 20 meters	Per point				
10.2	Networking work on per point basis as per Specifications for cable length upto 40 meters	Per point				
10.3	Networking work on per point basis as per Specifications for cable length more than 40 meters	Per point				
11	Supply and Installation of Jack Panel 48 Ports	No.				
12	Supply and Installation of Jack Panel 24 Ports	No.				

13	Supply and Installation of Jack Panel 16 Ports	No.				
14	Supply and Installation of Jack Panel 8 Ports	No.				
15 a	Cable laying underground with digging refilling and concealing the cable in GI pipe with Optical Fiber cable including splicing and termination	Per mtr.				
15 b	Cable laying underground with digging refilling and concealing the cable in GI pipe with UTP Cat 6 cable including splicing and termination	Per mtr.				
16 a	Cable laying in PVC conduit with Optical Fibre Cable including splicing and termination	Per mtr.				
16 b	Cable laying in PVC conduit/casing capping with UTP Cat 6 cable	Per mtr.				
17	Supply and Installation of 10GBASE-SR XFP Transceiver	No.				
18	Supply and Installation of 1000BASE-SX SFP Transceiver	No.				
19	Supply and Installation of 1000BASE-LX SFP Transceiver	No.				
20	Supply and Installation of 1000BASE-LH SFP Transceiver	No.				
21	Supply and Installation of 1000BASE GBIC Transceiver for multi mode Fibre	No.				
22	Supply and Installation of Fibre LIU Box 12 C Plate	No.				
23	Supply and Installation of Fibre LIU Box 24 C Plate	No.				
24	Supply and Installation of SC Coupler/Adapter for LIU	No.				
25	Supply and Installation of LC – SC Fibre Patch Cord Multi Mode	No.				
26	Supply and Installation of SC - SC Fibre Patch Cord Multi Mode	No.				
27	Supply and Installation of SC Pigtail MM	No.				
<b>Total</b>						

Signature with Seal of Tenderer