

**NOTICE INVITING TENDER**

Sealed quotations are hereby invited from reputed, reliable, resourceful and experienced agencies /dealers/Retailer for the following items according to the specifications given in the enclosed sheets :-

Sl.	Description	Quantity	Make	Warranty
1	Layer 2 Managed 24 Port Gigabit Switch with 3 years warranty NBD support as per specs	2 Nos.	Vendor to Offer	3 Years
2	1000BASE-SX SFP transceiver as per specs	2 Nos.	Same make with switch	3 Years
3	UTM with full subscription – as per specs	1 No.	Vendor to offer	3 Years
4	Supply & laying of Fiber Optic Cable	150 Mts.	Vendor to offer	3 Years
5	Supply & Fixing of Fiber Optic Enclosure	2 Nos.	Vendor to offer	3 Years
6	Supply & Splicing of Pigtail	12 Nos.	Vendor to offer	3 Years
7	Supply & fixing of Fiber Optic Patch Cord	2 Nos.	Vendor to offer	3 Years
8	Numbering and Dressing of LAN			

The rate offered shall be inclusive of all taxes and duties, delivery charges of materials and other charges, if any. The quotation should reach the office of CMU at ILGUS Bhawan, HC-Block, Sector-III, Bidhannagar, Kolkata – 700 106.

Sealed quotations will be received up to 2.00 P.M. on 29.12.2015 and will be opened on the same day at 3.00 P.M.

The undersigned reserves the right to accept or reject any or all the quotations without assigning any reasons therefor.

Enclo. As stated.

Project Director, CMU

**NOTE :For tender queries contact phone no: 2337-8723**

**URL:** [www.changekolkata.org](http://www.changekolkata.org), [www.wbdma.gov.in](http://www.wbdma.gov.in)

**E-mail:** [kuspcmu@gmail.com](mailto:kuspcmu@gmail.com),

**Tender Type : Tender documents will contain two envelopes, one for technical bid and another for financial bid .Technical Bid will contain Eligibility Criteria supporting Docs, Compliance of Specifications, Data Sheets of the Items and BOQ with Part Nos. and Financial Bid Contains only the Priced Quotation as per format enclosed**

**EligibilityCriteria :**

1. The Bidder should be a reputed Company under Companies act 1956 with valid ISO 9001:2008.
2. The Bidder should produce Authorisation Certificate from the OEM as per attached format.
3. The Bidder should not have been Black-listed in any Govt./Semi-govt./PSU. An Undertaking on Bidders letterhead should be submitted.
4. The Bidder has to submit Last three years Balance Sheet and Profit & Loss Account showing profit. Minimum Turnover of the Company should be 25 Lakhs INR for last three years.
5. The bidder should have on his rolls, adequate number of technical Personnel trained / possessing certification by the OEMs whose material would be quoted. The name and details of training/ certification to be submitted as encloses to the bid
6. The Bidder should submit EMD of Rs. 10,000.00 (Ten Thousand Only) in the form of DD/Bankers Cheque/Payorder in favour of “ **Change Management Unit** ” payable at Kolkata. NSIC registered firms for IT infrastructure are exempted from submission of EMD. However the Self- attested copy of such Certificate should be produced alongwith the Bid.
7. Bidder should also produce the Self- attested Copies of PAN, Last three years Income Tax Return Acknowledgement, Service Tax Registration Certificate, Trade License, Vat Registration Certificate
8. Bidder must have office in Kolkata.

**2. Scope Of Work**

1. Ilgus Bhavan Premises consist of 3 building housing (a) ILGUS (b) CMU (c) Project Directorate of AMRUT
2. Currently 2 MBPS Internet feed in terminated on the firewall located at the server room of CMU
3. The internet feed is currently distributed to various users in the CMU. The ILGUS Bhavan based users are connected by F.O Cable landing on a distribution switch and fed to individual PCs. The distribution in the CMU premises is done through firewall and 2 nos managed switch.

4. CMU plans to replace the firewall and the 2 switches. The newly installed devices are to work on the existing Cat 6 copper cabling. The ILGUS Bhavan OFC will have to be fed from one of the newly installed switches.
5. A 6 core F.O cable will have to be laid to connect the switch installed in Building "C". The F.O. cable will have to be laid mostly along the wall. The intermediate space between Building "B" & "C" will have to be covered by trenching and newly running the cable underground.
6. After installation the devices will have to be configured as per the configuration to be provided by CMU.
7. A basic training will have to be imparted to 3 persons nominated by CMU so that if needed they can restore the original configuration done by the vendor, and/or make minor configuration changes.
8. The cable length indicated in B.O.M is for tender evaluation purpose only. The contractor will be paid on actual length to be measured after commissioning and certified by CMU.
9. The contractor will have to do numbering of the existing cable termination so that a comprehensive network Schematic is created.
10. The configuration details of UTM and switches have to be handed over to CMU with commuted listing in a CD.

### 3.0 Technical Specification of the Items

#### 1. UTM with 3 years Warranty & Security Subscription

Sl. No.	Specification	Compliance	Deviation, if any	Remarks
<b>1</b>	<b>Interfaces</b>			
a	Minimum Copper GbE Ports: 8			
b	Console Ports (RJ45): 1			
c	Minimum USB Ports: 2			
d	Configurable Internal/DMZ/WAN Ports			
<b>2</b>	<b>Device should have following Hardware Specifications</b>			
a	Memory: 2GB or higher			
b	Compact Flash: 4GB higher			
c	HDD: 250GB or higher			
<b>3</b>	<b>System Performance</b>			
a	Minimum Firewall Throughput (UDP) (Mbps): 6500			
b	Minimum Firewall Throughput (TCP) (Mbps): 4000			
c	Minimum New sessions/second: 45000			
d	Minimum Concurrent sessions: 1,000,000			
e	Minimum IPSec VPN Throughput (Mbps): 850			
f	Minimum No. of IPSec Tunnels: 2000			
g	Minimum SSL VPN Throughput (Mbps): 300			
h	Minimum WAF Protected Throughput			

	(Mbps): 450			
i	Minimum Anti-Virus Throughput (Mbps): 1500			
j	Minimum IPS Throughput (Mbps): 1600			
k	Minimum UTM Throughput (Mbps): 850			
<b>4</b>	<b>Device should have following Stateful Inspection Firewall Features</b>			
a	Layer 8 (User - Identity) Firewall			
b	Security policies - IPS, Web Filtering, Application Filtering, Anti-virus, Anti-spam and QoS			
c	DoS and DDoS attack prevention			
d	MAC and IP-MAC filtering			
e	Spoof Prevention			
<b>5</b>	<b>Device should have following Intrusion Prevention System Features</b>			
a	Filter based selection: Category, Severity, Platform and Target (Client/Server)			
<b>6</b>	<b>Device should have following Gateway Anti-Virus &amp; Anti-Spyware Features</b>			
a	Virus, Worm, Trojan Detection and Removal			
b	Spyware, Malware, Phishing protection			
c	Automatic virus signature database update			
<b>7</b>	<b>Device should have following Gateway Anti-Spam Features</b>			
a	Inbound and Outbound Scanning			
b	Real-time Blacklist (RBL), MIME header check			
c	IP address Black list/White list			
<b>8</b>	<b>Device should have following Web Filtering Features</b>			
a	On-Cloud Web Categorization			
b	Block Malware, Phishing, Pharming URLs			
c	CIPA Compliant			
<b>9</b>	<b>Device should have following Application Filtering Features</b>			
a	Layer 7 (Applications) & Layer 8 (User - Identity) Control and Visibility			
b	Inbuilt Application Category Database			
<b>10</b>	<b>Device should have following Web Application Firewall Features</b>			
a	Positive Protection model			
b	Support for HTTP 0.9/1.0/1.1			
<b>11</b>	<b>Device should have following Virtual Private Network Features</b>			
a	IPSec, L2TP, PPTP			
b	Encryption - 3DES, DES, AES, Twofish, Blowfish, Serpent			
<b>12</b>	<b>Device should have following Networking Features</b>			

a	WRR based Multilink Load Balancing			
b	Automated Failover/Failback			
c	DNS-based inbound load balancing			
d	Supports HTTP Proxy, Parent Proxy with FQDN			
e	IPv6 Support			
<b>13</b>	<b>Device should have following Certification</b>			
a	Common Criteria - EAL4+			
b	ICSA Firewall – Corporate			
c	Checkmark Certification			
d	VPNC - Basic and AES interoperability			
e	IPv6 Ready Gold Logo			
f	Global Support Excellence - ITIL compliance (ISO 20000)			
<b>14</b>	<b>Compliance</b>			
a	CE			
b	FCC			
<b>15</b>	<b>Device should have following Environmental Specification</b>			
a	Operating Temperature: 0 to 40 °C			
c	Relative Humidity (Non condensing): 10 to 90%			
<b>16</b>	<b>Warranty</b>			
a	3 Years Warranty with Security Subscription			
	Make and Model : Bidder to Specify with Part No ;			

## 2. Layer 2 24 Port Gigabit Switch with 3 years warranty

Sl. No.	Specification	Compliance	Deviation, if any	Remarks
1	<b>Interface</b>			
a	10/100/1000 Ethernet Ports : 24			
b	SFP Port: 2 or higher (provision for 10G)			
<b>2</b>	<b>Device should have following Network Security Features</b>			
a	MAC-based VLAN assignment			
b	Access Control Lists (ACLs) for IPv6 and IPv4 for security and QoS ACEs			
c	TACACS+ and RADIUS authentication			
g	IGMP filtering			
<b>3</b>	<b>Device should have following Redundancy and Resiliency Features</b>			
a	IEEE 802.1s/w Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP)			
<b>4</b>	<b>Device should have following Enhanced Quality of Service Features</b>			
a	Up to eight egress queues per port and strict priority queuing			
b	802.1p class of service (CoS) and Differentiated Services Code Point (DSCP)			

	classification			
<b>5</b>	<b>Hardware Specifications</b>			
a	Flash memory: 128 MB or higher			
b	DRAM: 512 MB or higher			
c	Network Management Interface : 10/100 Mbps Ethernet (RJ-45)			
<b>6</b>	<b>Performance and Scalability</b>			
a	Forwarding bandwidth : 108 Gbps or higher			
b	Switching bandwidth : 216 Gbps or higher			
c	Maximum active VLANs : 1023 or higher			
d	VLAN IDs available : 4096 or higher			
<b>7</b>	<b>Standards</b>			
a	IEEE 802.1D Spanning Tree Protocol			
b	IEEE 802.1p CoS Prioritization			
c	IEEE 802.1Q VLAN			
d	IEEE 802.1s			
e	IEEE 802.1w			
f	IEEE 802.1X			
g	IEEE 802.1ab (LLDP)			
h	IEEE 802.3ad			
i	IEEE 802.3ah (100BASE-X single/ multimode fiber only)			
j	IEEE 802.3 10BASE-T			
k	IEEE 802.3u 100BASE-TX			
l	IEEE 802.3ab 1000BASE-T			
m	IEEE 802.3z 1000BASE-X			
n	RMON I and II standards			
o	SNMP v1, v2c, and v3			
<b>8</b>	<b>Warranty Support and Services: 3 years</b>			
a	Next-business-day advance hardware replacement as available			
	<b>Make and Model : Bidder to specify with Part No</b>			

### 3. 1000BASE-SX SFP transceiver

Sl. No.	Specification	Compliance	Deviation, if any	Remarks
<b>1</b>	<b>General specification</b>			
a	1000BASE-SX short wavelength; with DOM (digital optical monitoring )			
b	Hot swappable to maximize uptime and simplify serviceability			
c	MMF, 850-nm wavelength			
<b>9</b>	<b>Warranty Support and Services: 3 years</b>			
a	Next-business-day advance hardware replacement as available			
b	Online technical resources through Portal			
	<b>Same make and compatible with the switch: Bidder to mention the Part no.</b>			

#### 4. 6 Core MM Fiber Optic Cable

Sl. No.	Specification	Compliance	Deviation, if any	Remarks
1	Number of Core: 6			
2	Central Strength Member: Glass Reinforced Plastic(GRP)			
3	Fibre Protection (Tubes): Polybutylene Terephthalate (PBT)			
4	Water Blocking: Thixotropic Gel (Tubes) Petroleum Jelly (Interstices)			
5	Core Wrapping: Polyethylene Terephthalate Tape			
6	Inner Sheath: Polyethylene			
7	Armouring: Copolymer Laminated Steel Tape			
8	Sheath: Polyethylene (UV Stabilised)			
9	Jacket: Nylon (UV Stabilised)			
10	Core Diameter: 50±3.0µm			
11	Cladding Diameter: 125±1.0µm			
12	Max. Attenuation; At 350 nm: 3.2 dB/km At 1300 nm: 0.9 dB/km			
13	Min. Bandwidth; At 850 nm: 550MHz At 1300 nm: 600MHz			
14	Max. Bending Radius-Full load: 450mm			
15	Max. Tensile Strength-Short Term: 2500N			
16	Max. Crush Resistance-Short Term: 6000 N/10cm			
17	Operating Temperature Range: -10°C - +70°C			
18	Commercial Standards ISO/IEC 11801 - 2nd Edition; AS/ACIF S008; AS/NZS 3080			

#### 5. Fiber Optic Enclosure

Sl. No.	Specification	Compliance	Deviation, if any	Remarks
1	It should be configurable. Fits up to four 6 Pak Plates/ Angled 6 Pak plates (See 6 Pak Plate Datasheet attached)			
2	It should have Management rings within system to accommodate excess fibre cordage behind the trough adapters and maintain fibre bend radius			
3	It should have adhesive labelling for port identification			
4	It should have Sliding drawer for ease of reconfiguring fibres			
5	Should be able to accommodates 2 x 12 fibre Splice Trays			
6	Material: Powder coated mild steel			
7	Accommodation: 24 Port (Using 6 Pak			

	Plates)			
8	Should have loaded with minimum 6 nos. SC Adopter			
9	Maximum Height: 1U			

#### 6. MM Pigtail

Sl. No.	Specification	Compliance	Deviation, if any	Remarks
1	Cable: 900um Buffered			
2	Minimum bend radius: install: 30 mm			
3	Operating Temperature: -20°C to 75°C			
4	Retention Strength: 100N			
5	Commerical Standards: ISO/IEC 1108:2008. ANSI/TIA/EIA-568-C.3, EIA 492, Telecordia GR-409, ICEA-596, OS2-STD ITU-T-G652 D LSOH* IEC 61034-1&2, IEC-60332-1 IEC 60754-1&2 standards			
6	RoHS Complaint			
7	Maximum Attenuation @ 850 nm (dB/KM): 3.5			
8	Maximum Attenuation @ 1300 nm (dB/KM): 1.5			
9	Minimum Bandwidth (MHz/KM): 500			

#### 9. MM SC-LC Patch Cord

Sl. No.	Specification	Compliance	Deviation, if any	Remarks
1	Strength Member: Aramid Yarn			
2	Jacket Material: LSOH IEC 61034-1 & 2, IEC-60332-1, IEC-60754- 1 & 2			
3	Minimum Bend Radius: Install: 3.0cm.			
4	Long Term Bend Radius: 2.0cm			
5	Operating Temperature: -40°C to +85°C			
6	<b>Commercial Standards</b> ISO/IEC 1108:2008, ANSI/TIA/EIA 568.C.3, ANSI/TIA/EIA-492, TELECORDIA GR-409, ICEA-596			
7	Maximum Attenuation @ 850 nm (dB/KM): 3.5			
8	Maximum Attenuation @ 1300 nm (dB/KM): 1.5			
9	Minimum Bandwidth (MHz/KM): 500			
10	Core Diameter: 50µm			
11	Cladding Diameter: 125±1.0µm			
12	Maximum Insertion Loss of Connector @ 1300 nm: 0.30 dB			

Note :Entire Fibre Optic Components should be RoHs compliant



### **3. Terms and Conditions of supply**

1. The Material has to be supplied within 20 days from the date of PO
2. Completion of Installation : within 30 days from the date of PO.
3. Vat /Sales tax to be mentioned clearly
4. Other charges, if any to be specified.
5. Service Tax to be mentioned for Subscription/ License if any
6. The offered rate should be valid for 90 days
7. Payment : 90 % payment to be released within 15 days on completion of commissioning including training and certified by CMU and submitting of commercially cleared Invoice Balance 10% to paid after 45 days of successful working of the system and submission of a performance bank guarantee for 3 years with an amount equivalent to 5% of the Total Order value. In absence of submission of PBG, the 10% balance amount will be released after successful completion of warranty period.
8. Warranty: Onsite warranty for 3 Years with subscription and licenses . The vendor should make minor changes in configuration free of cost as and when requested by CMU within warranty period within 7 days.

**MANUFACTURERS AUTHORISATION LETTER**  
( To be printed on Letterhead of the Company)

Date:

To  
The Project Director  
Change Management Unit  
ILGUS BHAVAN  
HC-Block, Sector-III,  
Bidhannagar, Kolkata – 700 106.

Ref: Tender No    and Date

Subject :manufactorurers' authorisation

Sir,

We, .....(Name of the Manufactuer/OEM) the manufacturer of  
.....( Name of the item). Hereby authorise our partner .....of  
.....( Name of the Bidder and address )to quote, negotiate and provide  
warranty maintenance on our behalf.

We, also certify that the products are current and support will be available for another 7  
years.

Thanking you

Yours sincerely  
( Name of the Company )

Singature  
Name:  
Designation ;

Company Seal

( Undertaking for non-blacklisted)  
( To be printed on Bidders letterhead )

Date:

To  
The Project Director  
Change Management U nit  
ILGUS BHAVAN  
HC-Block, Sector-III,  
Bidhannagar, Kolkata – 700 106.

Ref: Tender No      Date .....

Dear Sir,

The undersigned, .....(name with designation ) duly authorised to sign on behalf of .....( name of the Bidder with address) hereby undertake that .....( name of the Bidder ) in any form have not been blacklisted and barred to participate in tender, by any Government/Semi-Government/PSU/Banks/Corporates in India till the date of submission of this Offer.

In case this undertaking proves to be false, you may reject our bid at any stage

Thanking you

Yours sincerely  
( Name of the Bidder )

Signature

Name &Designation

Company Seal

Date:

Kolkata

Ref:

Date :

### Financial Bid

SL	ITEM DESCRIPTION	QTY	Unit Price	Tax	Total
1	24 Port Gigabit Switch with 3 years warranty NBD support as per specs	2 Nos.			
2	1000BASE-SX SFP transceiver as per specs	2 Nos.			
3	UTM with full subscription – as per specs	1 No.			
4	Warranty/subscription/License				
5	6 Core MM Outdoor Armored Fiber Optic Cable	150 Mts.*			
6	Laying of 6 Core MM Outdoor Armored Fiber Optic Cable through ISI Marked GI Pipe	150 Mts.**			
7	Rack Mounting Fiber Optic Enclosure	2 Nos.			
8	1 Mt. SC MM Pigtail	12 Nos.			
9	Pigtails Splicing	12 Nos.			
10	3 Mts. SC-LC MM Patch Cord	2 Nos.			
11	Any other Charges				

Note : this should be done on Bidders letterhead and signed by the authorised person. Any other charges if offered should be clearly mentioned /described.

Any other format other than these will not be considered

Site Survey must be done to assess the Fiber Optic Laying process (Over Ground / Under Ground / Surface through ISI Marked GI Pipe).

Signature

Name:

Designation :

Company Seal

\* The cable length is indicative only for quotation evaluation purpose. The actual length will be ascertained on final laying. The length will have to be certified by CMU. The certified length will be taken for final computation, factored by unit price.

\*\* Laying of the FO cable will be mostly (>90%) over the ground. <10% length will be underground the composite laying charge to be quoted keeping the above length criteria.