

TENDER NOTICE

International Islamic University, Islamabad (IIUI) invites sealed bids from the Manufacturer or their Authorized Dealers / Authorized Distributors duly registered with Income Tax and Sales Tax Departments for the Purchase of “**Network Infrastructure Equipment**” for IIU and other items briefly elaborated below:

Sr. No.	Item Description	Tender Submission Date & Time (On OR Before)	Tender Opening Date & Time	Tender Fee (Rs.)
1.	Procurement of Network Infrastructure Equipment	23-06-2020 10:30 A. M	23-06-2020 11:00 A. M	2000/-

02. Bidding Documents, containing detailed specifications, item descriptions, terms & conditions etc. can be obtained from the Web Site of PPRA as well as IIUI.

03. Sealed bids, prepared in accordance with the instructions in the bidding documents, must reach **on OR before** the date & time mentioned above at the office of Assistant Director-II (Purchase & Store), Room No. 213, 2nd Floor, Admin Block, IIUI, Sector H-10, Islamabad. (Contact: 051-9019255) BY COURIER / BY REGISTERED MAIL. In person bids may not be accepted due to prevailing Covid-19 pandemic.

04. The bids will be opened by the **Bid Opening Committee** in the **COUNCIL HALL**, Admin Block, Sector H-10, International Islamic University Islamabad. The bidders/their representative(s) who may like to witness the bid opening proceedings may do so through video link (zoom web based video conferencing tool). Physical presence will be discouraged due to Covid-19 Pandemic.

05. International Islamic University Islamabad reserves the right to accept or reject any or all bid(s) in terms of Rule-33 of Public Procurement Rules 2004.

Project Director, Expansion and Up-gradation of IIUI, International Islamic University, Islamabad.
Tel: 051-9019242/051-9258145

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

Purchase & Store Section, Admin Block, New Campus, Sector H-10, Islamabad.

Tel: 051-9019255 Fax: 051-9258073

Tender No. 2/1/2020/P&S-

Sub: **Tender Document for "NETWORK INFRASTRUCTURE EQUIPMENT" FOR IIU**

"TERMS AND CONDITIONS"

1. Any addition, deletion or modification of any clause of the procurement terms & conditions of International Islamic University Islamabad (IIUI) by any vendor will not be acceptable and may lead to rejection of the bid.
2. Authorized Dealers / Authorized Distributors duly registered with Income Tax and Sales Tax Departments are eligible to participate in tender.
3. Documents along with Pay Order/Call Deposit/Demand Draft amounting to **Rs. 2000/-** as a tender documents fee (Non-Refundable) shall be submitted in favor of International Islamic University, Islamabad, to the address given below.
4. Part / Advance payments is not allowed.
5. The exact completion/delivery time from the date of the purchase / work order will be maximum **90 days**. The handing over / completion time is of critical importance.
6. After opening of bids, International Islamic University Islamabad will examine the bids for completeness as per tender document.
7. Purchase order(s) will be awarded to the lowest evaluated OR technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs/Compatibility requirements.
8. International Islamic University Islamabad, will follow the PPRA rule of **Single Stage One Envelope procedure**;
9. Bidders cannot challenge the findings of the evaluation or ask for reason of disqualification.
10. The bid should be submitted in a sealed envelope up to **23-06-2020** on or before **10:30 a.m** and will be opened on the same date **at 11:00 a.m** in the presence of available bidders.
11. The envelope should be marked as under;

Assistant Director-II (P&S)
Room No. 213, 2nd Floor, Admin Block,
Sector H-10, New Campus
International Islamic University, Islamabad.
Tel: 051-9019255
12. The envelope shall also bear the word "**CONFIDENTIAL**" and following identification quotation for Purchase of "**Network Infrastructure Equipment**" for IIU"

13. **If the vendor fails to deliver the goods to International Islamic University, Islamabad in time then the penalty will be charged as under:**
- a. 02% per month of the total Purchase Order value.
 - b. If the vendor fails to deliver the goods / services during the extended period (if granted) then the purchase / work order may be cancelled and Earnest money may be forfeited.
14. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The bidder/vendor would be required to REPLACE as per requirements mentioned in our BoQs at no cost to the IIUI, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money AND bidder will bear all cost and expenses **thereof**.
15. All prices should be quoted on **FOR Basis (inclusive of all applicable taxes)**
16. All prices should be valid for at least **120 days** Withdrawal or any modification of the original offer within the validity period shall entitle IIUI to forfeit the earnest money in favor of the IIUI and / or put a ban on such vendor participation in IIUI tenders / works.
17. It is the sole responsibility of the bidder / agent / supplier / manufacturer to comply with the applicable laws, be national or international.
18. In case of any dispute, decision of the President, IIUI will be final and binding upon the parties.
19. The IIUI reserves the right to modify the quantities of goods / services at any time before the award of purchase/ work order.
20. **The bidder is required to furnish in form of “Call Deposit” @2% (Re-fundable) of total value of the bid as Earnest Money in favor of “International Islamic University Islamabad”. Any bid not accompanied by Earnest Money shall be rejected without any right of appeal.**
21. Earnest Money of the successful bidder(s) shall be retained by the IIU till the successful completion of the warranty period of the goods.
22. International Islamic University Islamabad reserves the rights to accept or reject the bid if;
- i. Received later than the date and time fixed for tender submission
 - ii. The tender is unsigned/ unstamped
 - iii. The offer is ambiguous
 - iv. The offer is conditional
 - v. Offer is made by the unauthorized agent/ supplier/service provider of the original equipment manufacturer.
 - vi. The offer is from a firm, which is black listed by any Govt. Office.
 - vii. The offer is received by telephone/telex/fax/telegram.
 - viii. Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.
 - ix. The Company Profile, client list and detail of similar projects/works is not attached.

23. The bidder should furnish a **CERTIFICATE** on judicial STAMP PAPER worth Rs. 100 as worded below in token of acceptance of all the terms and conditions of the tender. Otherwise the tender will not be considered under any circumstances.

I / We

- **Company / Vendor Name:** _____
- **Postal Address:** _____
- **Tel. No:** _____ **Mob No.** _____
- **NTN# :** _____ **GST#:** _____

The undersigned certify that our above named Firm/Company is not blacklisted by any Govt. Office and the terms and conditions as contained in this document, viz "**Terms and Conditions**" are accepted unconditionally.

Sign & Stamp

Note:

1. Please quote the rates on our BoQs and clearly mention the quoted item(s) Make / Model / Country of Origin and Guarantee/Warranty, otherwise your bid / items may lead to rejection.
2. The quoted item(s) should be of the same specs, make/model or their equivalent.
3. In Addition to filling of the attached BoQs, supporting literature of the quoted model must be attached for verification & technical evaluation of the required specification by the bid evaluation committee. In case of any clash found between the quoted model and the literature model, the item/bid may be rejected.
4. Please also attach the Certificate supporting being Active Taxpayer as per requirement of FBR.
5. The EOL of (**Switching Section**) and (**Server & Storage Section**) must be more than five years with documentary proof from the manufacturer, as the bidder will be responsible later to provide parts for the period of five years. Quote two different quotations with standard warranty & with three (03) years warranty.
6. In Hardware Firewall EOL must be more than five years, the bidder must quote two separate quotations with three (03) year License subscription & with five (05) year subscription.
7. The UPS & batteries warranty are clearly mentioned in their section i.**for 03-Phase with 5 Years & for 01-phase with 3 years.**
8. The Software Section License & Subscription will be of three (03) Years.
9. The passive equipment must quote with standard warranty.
10. The Contract will be awarded section wise except software section.

BOQ FOR NETWORK INFRASTRUCTURE EQUIPMENT FOR IIUI

Section1: Switching

S #	Name of Item	Detail Specifications	Qty	Unit Price Incl. of GST (Rs.)	Remarks
1	Core Switch	<p>Cisco/HP/Huawei/Brocade or Equivalent Layer-3 Core Modular Switch/Extension Switch (Chassis must have modular structure or must have capabilities to adopt future Extension) 24 Ports x 40G QSFP Card/Module (Must Quote Separately) 24 Ports x 10G SFP Card/Module (Must separately quote and don't left blank)</p> <p><u>Required on Core Switch</u></p> <ul style="list-style-type: none"> • Switching capacity: 2.0 TBPS or higher • Advance Layer 3 Protocol & Security Feature: IPv4 and IPv6 Static Routes, RIP, OSPF v2 and v3, BGP,IS-IS, PIM ,GRE, ECMP, VRRP, (802.1x, DHCP Snooping, Dynamic ARP inspection, Port Security, DDoS Attack Protection and Secure Copy – SCP) and Loop Detection. • Layer 2 Features (Spanning Tree Protocol – STP, RSTP, MSTP, BPDU Guard, Loop Guard, 4k VLAN, 802.3ad, 802.1Q and IGMP Snooping v3) • Broadcast and Multicast Rate Limit • Capable of Multi-chassis Link Aggregation protocol for work as a single chassis. • Redundant Power supplies, Hot swappable modules/ fans/ power supplies • Fan airflow: front to back, Mounting Kit/Rails, Power Cables • Product category: Enterprise-class core switch. • Product should comply 3 years NBD and TAC support from Principle & Local Partner & switch must not be EOL before 5 to 7 Years • The Switch must be with all keys/licenses if any • 42U Imported Switch Rack with Power Panel 	1		
2	Distribution Layer-3 Switch	<p>CISCO/HP/Huawei /Brocade or Equivalent Fixed Configuration Layer 3 24 x 10GE SFP+ ports with atleast 2x 40G QSFP Ports (active), for Stacking and Uplink to Core Switches, 01x</p>	16		

		<p>Management Port (for Out-of-Band Management network, 01x Console (RJ45 or USB typeC))</p> <p>Required on Distribution Switch</p> <ul style="list-style-type: none"> Switching capacity 800 Gbps or higher. Advance Layer 3 Protocol & Security Feature: IPv4 and IPv6 Static Routes, RIP, OSPF v2 and v3, BGP,IS-IS, PIM ,GRE, ECMP, VRRP, (802.1x, DHCP Snooping, Dynamic ARP inspection, Port Security, DDoS Attack Protection and Secure Copy – SCP) and Loop Detection. Layer 2 Features (Spanning Tree Protocol – STP, RSTP, MSTP, BPDU Guard, Loop Guard, 4k VLAN, 802.3ad, 802.1Q and IGMP Snooping v3) Broadcast and Multicast Rate Limit Switch should support Hybrid Port Mode on all the Switch Ports. Capable of Multi-chassis Link Aggregation protocol for work as a single chassis. Rack mounting kit, Original Power cable, Redundant Power supplies Hot swappable modules/ fans/ power supplies Fan airflow: front to back Product category: Enterprise-class Aggregation switch. The Switch must be with all keys/licenses if any Product should comply 3 years NBD and TAC support from Principle and Local Partner switch must not be EOL before 5 to 7 Years 			
3	Layer-2 Manageable Switch (PoE) 24 Ports	<p>CISCO/HP/Huawei/Brocade or Equivalent Fixed Configuration Layer 2/3</p> <ul style="list-style-type: none"> 24x 01G RJ45 POE Ports + 02x 10G SFP or more 01x Management Port, 01x Console (RJ45 or USB typeC) Power budget of 370 Watt or Higher. 90 Gbps switching Capacity or higher. Security Feature required on Access Switch: (802.1x, DHCP Snooping, Dynamic ARP inspection, Port Security, DDoS Attack Protection and Secure Copy – SCP) and Loop Detection, (Spanning Tree Protocol – STP, RSTP, MSTP, BPDU Guard, Loop Guard, 4k VLAN, 802.3ad, 802.1Q and IGMP Snooping v3) Switch should support Hybrid Port Mode on all the Switch Ports. The Switch must be with all keys/licenses if any Product category: Enterprise-class Access Switching with POE+ Standard. Product should comply 3 years NBD and TAC support from Principle and Local Partner & switch must not be EOL before 5 to 7 Years 	20		
5	Layer-2 Manageable Switch 24 Ports	<p>CISCO/HP/Huawei/Brocade or Equivalent Fixed Configuration Layer 2/3</p> <ul style="list-style-type: none"> 24x 01G RJ45 Ports + 02x 10G SFP or more 01x Management Port, 01x Console (RJ45 or USB 	30		

		<ul style="list-style-type: none"> typeC) 90 Gbps switching Capacity or higher. Security Feature required on Access Switch: (802.1x, DHCP Snooping, Dynamic ARP inspection, Port Security, DDoS Attack Protection and Secure Copy – SCP) and Loop Detection, (Spanning Tree Protocol – STP, RSTP, MSTP, BPDU Guard, Loop Guard, 4k VLAN, 802.3ad, 802.1Q and IGMP Snooping v3) Switch should support Hybrid Port Mode on all the Switch Ports. The Switch must be with all keys/licenses if any Product category: Enterprise-class Access Switching with POE+ Standard. Product should comply 3 years NBD and TAC support from Principle and Local Partner & switch must not be EOL before 5 to 7 Years 				
6	Layer-2 Manageable Switch 48 Ports	<p>CISCO/HP/Huawei/Brocade or Equivalent Fixed Configuration Layer 2/3</p> <ul style="list-style-type: none"> 48 x 01G RJ45 Ports + 02x 10G SFP or more 01x Management Port, 01x Console (RJ45 or USB typeC) Power budget of 370 Watt or Higher. 90 Gbps switching Capacity or higher. Security Feature required on Access Switch: (802.1x, DHCP Snooping, Dynamic ARP inspection, Port Security, DDoS Attack Protection and Secure Copy – SCP) and Loop Detection, (Spanning Tree Protocol – STP, RSTP, MSTP, BPDU Guard, Loop Guard, 4k VLAN, 802.3ad, 802.1Q and IGMP Snooping v3) Switch should support Hybrid Port Mode on all the Switch Ports. The Switch must be with all keys/licenses if any Product category: Enterprise-class Access Switching with POE+ Standard. <p>Product should comply 3 years NBD and TAC support from Principle and Local Partner & switch must not be EOL before 5 to 7 Years</p>	15			
7	SFP/QSFP Modules	<p>a. CISCO/HP/Huawei/Brocade or Equivalent QSFP-40G-Compatible 40GBASE-QSFP+ 1310nm 5km LC DOM Transceiver Module for SMF&MMF, SM/MM compatible with Core & Distribution Switch</p> <p>b. CISCO/HP/Huawei/Brocade or Equivalent SFP-10G-Compatible 10GBASET+ 1310nm 2km LC DOM Transceiver Module for SMF&MMF, Multimode Mode</p> <p>c. CISCO/HP/Huawei/Brocade or Equivalent SFP-10G-Compatible 10GBASET+ 1310nm 2km LC DOM Transceiver Module for SMF&MMF, Single Mode</p>	50	150	60	Fiber Transceivers or DAC: 40G for Distribution and Core Connectivity (bidder should propose according to Network design)

Section2: Hardware Firewall

1	Hardware Firewall	Sangfor/ Huawei or Equivalent <ul style="list-style-type: none"> • Must Have Minimum 20Gbps NGFW Throughput or More • Must Have Unrestricted Concurrent User • Must Have Minimum 1TB Storage Capacity • Must Have Minimum 4 x 1G Ethernet Interfaces • Must Have Minimum 2 x 10G SFP+ Interfaces (Include SFP+ Module) • Must Have Dual Power Supplies, Intrusion Prevention System (IPS), Advanced Persistent Threats (APT) Prevention • Anti-Virus & Anti-Malware, Email Security Protection • Cloud-Based Security Sandbox • URL Filtering, Application Control, Bandwidth Management • 5 Years Security Licensing (IPS, Anti-Virus & Anti-Malware, URL Database, Application Database, Cloud-Based Security Sandbox, Web Application Firewall) • 3 Years Security Licensing (IPS, Anti-Virus & Anti-Malware, URL Database, Application Database, Cloud-Based Security Sandbox, Web Application Firewall) • 5 Years Software Upgrade & 24x7 Technical Support • 5 Years Return to Factory Hardware Warranty Service • Must Quote Minimum 10 Concurrent Sites Connection for IPsec VPN • Must Quote Minimum 30 Concurrent Users for SSL VPN • Must Quote Principal Onsite Configuration & Installation • Must Quote Principal Training & Certification For 2 Participants 	1		It should be noted that the next subscription will be started when the new license key will be installed any delay period will not be included in future
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Section3: Server & Storage

1	Blade Server	a. IBM Blade Chassis /Equivalent Must have space of 14 Computes, with redundant Server Storage Module, with redundant switch (10 GB Ports), with fully populated power supplies	1		All modules must be compatible with blade chassis
		b. IBM Blade Compute /Equivalent i. 2 x Intel Xeon Gold 16 Cores ii. 16 x 32GB 2933MHz RDIMM or more or equivalent	6		
		c. Blade Storage i. 8TB 7.2K RPM NLSAS or more (Data Disk)	10		
		ii. 960GB SSD SATA Mixed Use or more (Cache Disk)	4		
2	Rack Server	a. Must Have 2 x Intel Xeon Gold, 16 Cores b. Must Have 8 x 3.5" Disk Slot Chassis or more c. Must Have 16 x 32GB 2933MHz RDIMM or more d. Must Have 1 x 8-Lane 12Gbps PCI Express RAID Controller e. Must Have 2 x 240G M.2 SSD (RAID1 OS Disk) f. Must Have 2 x 960GB SSD SATA g. Must Have 4 x 8TB 7.2K RPM NLSAS or more h. Must Have 2 x 1Gbps BASE-T Network Interface or more i. Must Have 4 x 10Gbps SFP+ Network Interface or more j. Must Have Redundant Power Supplies k. Must Have 5 Years Next Business Day Onsite Support l. 42U Server Rack Imported	6		

Section4: Software

1	Hyper Converged Infrastructure	<p>Sangfor/ Huawei /Open stack/VMware or Equivalent</p> <ul style="list-style-type: none"> • 3 Years Software Upgrade & 24 x 7 Remote Technical Support • Must Have Minimum 5 Local Pakistan HCI Deployment with Reference Contacts • Must Quote Principal Onsite Configuration & Installation • Must Quote Principal Training & Certification • Must Quote 5 Years of All Subscription Separately <p>Virtualization Management Software</p> <ul style="list-style-type: none"> • Must Propose High Availability Redundancy for Virtualization Management Platform • Must Support Management for Existing VMware Virtual Machines • Must Support Role-Based Management with 			
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Permission Control

- Must Support HTML5 Web Management
- Must Support Centralized Control & Visibility
- Must Support Future Scale Out Up to 64 Nodes
- Must Support to Integrate with Multiple Hypervisors

Compute Virtualization Hypervisor

- Must Support High Availability Between Nodes
- Must Support VM Snapshot, VM Clone, VM vMotion
- Must Support VM Resources Automated Hot-Add
- Must Support Distributed Resource Scheduler (DRS)
- Must Support Distributed Switch by Using Cluster-Level Network Aggregation
- Must Support Hardware Health Check to Monitor CPU, Memory, Network Interface Card, Hard Drive and RAID Controller

Storage Virtualization

- Must Be the Same Vendor as Compute Hypervisor
- Must Support 2 Copies & 3 Copies Data Redundancy
- Must Support Data Striping Technology
- Must Support SSD Cache & SSD Data Tiering
- Must Support Data Disk Balancing & Data Rebuilding

Network Virtualization

- Must Be the Same Vendor as Compute Hypervisor
- Must Support to Display Whole Data Center Network Topology
- Must Support Network L2 Bridging to Physical Environments
- Must Support Distributed Routing & Distributed Switching
- Must Support Distributed Firewalling & Micro-Segmentation
- Must Support Display Network Traffic Flow in Real-Time
- VM Backup Software Solution
- Must Support Full VM Level Backup
- Must Support Lifetime Perpetual License
- Must Support to Backup All Virtual Machines With 4 Nodes
- Must Support Incremental Backup Technology & Difference Backup Technology
- Must Support Automated Schedule Backup (Weekly, Daily, Hourly and Secondly)
- Must Support Backup Repository to Internal Virtual Storage

		<ul style="list-style-type: none"> • Must Support Backup Repository to External SAN Storage • Must Support iSCSI, FC, Network File Sharing Protocol 			
	Monitoring Software	SolarWinds Network Performance Monitor and Solar Server Performance Monitor	1		Licensed Software

Section5: UPS & Batteries

1	UPS Pure Sinewave	a. 20 KVA (APC/Emerson/Deutsche-Power/WRL or equivalent) 20 KVA UPS with External Battery Bank with 2 x 7 KWH Super Capacitor Batteries (2 Hours Min Backup on 80-90% Load) Generator Compatible, Warranty Period with parts & onsite both for batteries & UPS: 5 Years	2		
		b. 2 KVA (APC/Emerson/ Deutsche-Power / WRL or equivalent) 2 KVA UPS with 0.6 KWH Batteries Super Capacitor 2 Hours Min Backup, Generator Compatible Warranty Period with parts & onsite both for batteries & UPS: 3Yrs	40		

Section5: Fiber Optic Cable

1	Single Mode Fiber Optic Cable OS2 Type in Meters	Corning/Molex/3M or Equivalent Direct buried armored (12/24 Core Fiber) with 2 Inch HD Pipe in meters	600 0		As per actual
2	Fiber Optic Laying with Main holes	Digging, Boring, Backfilling & Fiber Laying with HD Pipe up to 6 Feet from ground level as per PTCL Standard with main holes (where required) as required by final survey in Meters	420 0		As Per Actual
3	OFDF 24 Core	Molex/3M or Equivalent 24 Core Rack Mounted 1U	35		As per Actual
4	Pigtail Single Mode OS2 Fiber	Corning/Molex/3M or Equivalent (Connector must be compatible with 40G QSFP Module & 10 G Fiber SFP)	100 0		As Per Actual
5	Fiber Optic Patch Cord 40G/10G	Corning/Molex/3M or Equivalent 3 Meters (Connector must be compatible with 40G QSFP Module & 10 G Fiber SFP)	70		As Per Actual
6	Fiber Optic Splicing	Fiber Fusion Splicing	150 0		As Per Actual

Section5: Passive Cabling

1.	Multimode Fiber Optic Cable OM4 Type in Meters	Corning/Equivalent (12/24) Core Fiber Cable (Meter)	1500		As Per Actual
2.	Cat 6 Cable (23 AWG) , UTP, 305 m Box	Molex/3M/Equivalent	180		As Per Actual
3.	Single Gang Faceplate, 1 port, w/o shutter	Molex/3M/Equivalent	600		As Per Actual
4.	RJ45 K6 Jack, Cat 6, UTP	Molex/3M/Equivalent	30		As Per Actual
5.	Patch Panel, 48 ports Cat-6	Molex/3M/Equivalent	15		As Per Actual
6.	Patch Panel, 24 ports	Molex/3M/Equivalent	20		As Per Actual
7.	Duct Patty 10 feet Length (16x38)/(40x40)/(60x40)/(60X60)	Adam G/Equivalent	400		As Per Actual
8.	Cat 6 RJ45 to RJ45 Patch Cable, UTP, 1m	Molex/3M/Equivalent	1500		As Per Actual
9.	Cat 6 RJ45 to RJ45 Patch Cable, UTP, 3m	Molex/3M/Equivalent	1500		As Per Actual
10.	Data Cabinet 9 U	Local with Fan+ Lock	20		
11.	Cable Laying charges	Installation of Cabling (Cat-6/multimode), Ducting, Patch Panel, Face Plate, I/O, Back Box, indoor Fiber (One Job)	180000		As Per Actual

Note: Quoted items must be of same specs/model or their equivalent.

For any further query, please contact with Mr. Shahid Mehmood, Deputy Director (Networks) at his office telephone # 9019570 during office hours (09:00 AM-03:30 PM) email: shahid@iiu.edu.pk