

TENDER FOR SUPPLY & INSTALLATION OF NETWORKING EQUIPMENT'S FOR PERMANENT CAMPUS OF THE INSTITUTE AT OKHLAPHASE-III, NEW DELHI-110020

(IIITD/IT/NetworkingEquipments/18/2023-24)

INVITIATION FOR BIDS

Indraprastha Institute of Information Technology -Delhi (IIITD), a State University created by an Act of Govt. of NCT of Delhi, invites sealed bids for **Networking Equipment's** (as per specifications mentioned under Scope of Work below) for its campus at Okhla Phase-III New Delhi-110020.

- 1. An amount of Rs.1,00,000/- (Rupees one lakh only) towards earnest money (EMD) must be deposited in the form of demand draft in favour of "IIIT-Delhi Collections" account, payable at New Delhi. No interest will be paid on the earnest money deposited by the bidder. Tender Document without earnest money will be summarily rejected. The tender fee is exempted for MSMEs/NSIC registered suppliers (Certificate to be submitted for exemption).
- 2. The tender document can be downloaded from the Institute's web-site, may please deposit non-refundable Tender Document Fee of Rs.1,000/-+GST extra i.e.(Rs. 1,180/-) (Rupees One Thousand one Hundred Eighty only) in the form of Demand draft drawn in favour of IIIT-Delhi Collections", payable at New Delhi.
- 3. The last date for submission of bid is 4th October, 2023 up to 3:00 PM. The Technical bids shall be opened on the same day i.e. 4th October, 2023 up to 3:30. The Tender Document should be addressed to:

Registrar, Indraprastha Institute of Information Technology-Delhi Okhla Phase-III (Behind Govind Puri Metro Station) New Delhi-110020.

The document may be deposited in the Tender Box kept in the Store & Purchase department at the Room no. A 107, First Floor, Old Academic Block of the Institute. Bids received after 3:00 PM will not be accepted or considered under any circumstances.

Bidding Procedure:

- 1. Bids are invited in Two Bids System i.e. (1) Technical and (2) Financial.
 - Technical and Financial bids should be sealed separately and enclosed in a sealed envelope clearly indicating separately Technical Bid for "Networking Equipment" and Financial Bid for "Networking Equipment" addressed to Registrar IIIT-Delhi, Okhla Industrial Area Phase-III, New Delhi-110020. Otherwise the bid will not be considered.
- 2. Sealed quotations shall be received not later than 3.00 P.M. on 4th October, 2023. No bids will be accepted after this date & time under any circumstances. The Institute will not be responsible for any postal/courier delay and also for reasons beyond control of the Institute.
- 3. Technical bids must contain the EMD for specified amount, along with complete technical details as desired by this tender. Technical bids of all the bidders will be opened on pre scheduled date, time & venue. Technical bids without EMD will be summarily rejected. The financial bid will be opened after evaluation of the technical bid. Financial bid of only those meeting the requirement of the Institute will be opened and no representation in this regard will be entertained. The date, time of opening of financial bid will be communicated later.

Scope of Work(Supply & Installation)

S.N.	Item Name	Quantity
	48 Port Core Switch with dual power	
1	supply	2
	48 Port Distribution Switch with dual	
2	power supply	6
3	10G LR SFP	12

Note- All hardware, software & Licenses warranty & support should be for minimum 60 months

Technical Specifications

All Network switches, accessories & SFP should be same make (OEM). Core switch should support existing configuration, Bidder can visit & check the existing configuration before bidding. All compliance should be full field otherwise bidder will technically be disqualified

S.N.	Item Name	Bedded Model & Brand
	48 Port Core Switch with dual power	
1	supply	
	48 Port Distribution Switch with dual	
2	power supply	
3	10G LR SFP	

1:48 Port Core Switch (Qty-2)

	48 Port Core Switch (Qty-2)						
Sr. No.	Criteria	Feature Description	Compliance (Yes/No)				
		Switch shall be 1U rack mountable in standard 19" rack.					
		Minimum 48 Gigabit Ethernet 1/10/25 Gbps Fiber SFP+ Ports. Switching should be compatible with existing SFP's department has.					
		Must have scalability to add minimum 4 x 40/100 GBe Fiber QSFP+ ports from day 1					
		Minimum upto 3 Tbps Switching bandwidth capacity.					
		Minimum Packet Forwarding Rate of 900 Mpps					
1	General Requirements:	Minimum 4k VLANs IDs					
	Requirements.	Platinum rated Redundant Power Supply					
		Minimum support for 128K MAC address and 32K Multicast routes					
		Should support IPv6 protocol as per the RFC 2460 from day one					
		The downlink ports shall support 1/10G Base LX/LH/SX/ 1G BaseT transceivers					
		Port security, IEEE 802.1x, SPAN /port mirroring, SSH					
		Advanced Access Control Lists (ACL), TACACS+ and RADIUS authentication					

		SSHv2 and SNMPv3, IGMPv3	
	_	Multilevel security on console access to prevent unauthorized	
2	Access Control Features:	access	
	reatures.	802.1Q Tagged VLAN	
		LLDP and LACP to bundle links and detect miscabling issues.	
		IEEE 802.1s, IEEE 802.1w, 802.1X support	
		Egress Queues , Strict priority queuing, WRR/SRR, flow based rate limiting or ACL based rate limiting	
3	VLAN Features	Traffic segmentation	
	Toutares	Traffic classification should be based on user-definable application types: Port based, Mac address, IP address, TCP/UDP port number	
		Should support routing protocol IP v4 - Static routing, OSPF v2, BGPv4, and IP v6 - BGP, OSPF v3, VRF, NAT, EVPN+VXLAN on the same hardware from day 1	
4	Protocol and Traffic	Should support BGP Prefix Origin Validation with Resource Public Key Infrastructure (RPKI)	
	Features	Should support Graceful restart for BGP, OSPF v2 and v3	
		Switch must support IP v4 VRRP and VRRP v6.	
		Switch should support VRF - Lite and VRF Route leaking functionality (or) equivalent.	
5	Routing	Should support minimum 250K Route entries for IPv4 and IPv6 routes.	
		Should Support MAC Address Filtering based on source and destination address	
		Should support AAA. It must support RADIUS and TACACS+ protocol as well. The switch must support Role Based access control (RBAC).	
		It should support Security and QOS ACL's.	
6	Security	The switch should support Port-security.	
		Should support Ingress or Egress Queuing.	
		Should support integrated security features like DHCP snooping, ARP inspection, IP Source guard	
		Should support Standard and Extended ACLs	
		Should support various type of ACLs like MAC Based, Port based, Vlan Based and routed ACLs.	
		Should support QoS scheduling with queues supported in hardware	
7	Quality of Service	Should support up to 8 queues per port	
	Scrvice	Should support ACL based traffic classification	
		Should support IPv4 and IPv6 Multicasting	
		Should Support IGMP v1/v2/v3, IGMP Snooping	
8	Multicast	Should support IPv4 Multicast with support for PIM-SM and IGMPv3.	

		Should support IPv6 Multicast with support for MLD v2. Multicast Source Discovery Protocol (MSDP)and IP Multicast Multipath.	
		USB or RS-232 console port for management via a console terminal or PC	
		SNMP v1, v2, v3	
9	Management	Should support Netflow or equivalent for traffic monitoring.	
9	Features	CLI management support.	
		Layer 2/Layer 3 trace route	
		TFTP/FTP/SCP	
		Should support secure Zero touch provisioning with options to provision Certificates artifacts on the device when it boots.	
10	Switches Operating	Switches Operating system must support telemetry of system information and real time monitoring to identify and automate the issues resolution.	
	System	should have programmability and automation support with on board python, bash and docker containers.	
11	Operating temperature	32 to 104°F (0 to 40°C)	
12	Operating relative humidity	15% to 85%, noncondensing	
13	Mounting	Switch must be rack mountable. Rack mounting kits and accessories should be supplied.	
14	Cables & Accessories	All necessary cables - power & accessories should be supplied	
15	Support & Warranty	OEM's direct 5 Years NBD support for throughout the contract period.	
16	Compliance Standard	Switch shall conform to EN 61000-3-3/60950-1, EN/IEC EN 62368-1 Standards.	
17	Certificate	The offered switches should be Common Criteria Certified (EAL/NDPP)	
18	Features	All the features asked above should be available from the day one and if any licenses to be added to achieve the same, those should be added as part of the proposals and BOM. All licenses should be Perpetual in nature from Day 1.	
19	Features	Switch should be ipv6 certified from day 1	
20	Features	Switch should support PTP (1588v2) from day 1	

2:48 Port Distribution Switch (Qty-6)

	48 Port Distribution Switch (Qty-6)				
Sr. No.	Criteria	Feature Description	Compliance (Yes/No)		

1	Hardware	Switch should have 48 x 10/100/1000M ports and minimum 4 numbers of 10/25G SFP28 or higher uplinks ports.	
2	platform and architecture	Switch should support non-blocking wire rate L2 and L3 forwarding and switch should have minimum throughput of 296 Gbps & 220 MPPS	
3	High	Shall support modern modular operating system supporting fault isolation with stateful repair and live patching.	
4	Availability	Switch should support redundant Power Supply and redundant Fans	
5		Switch should support 32K mac address, MSTP, per vlan RSTP, LLDP, LACP and private-vlan	
6		Switch should support Layer-2 interface, SVI and L3 sub-interfaces	
7		Should support 9K Bytes jumbo frames, Q-in-Q	
8	L2 and L3 features	Switch should support static routing, dynamic routing with ISIS, OSPF and BGP, BGP Prefix Origin Validation with Resource Public Key Infrastructure (RPKI), VRRPv3 and VRF	
9	ieatures	Switch should support Bidirectional forwarding detection, ip unnumbered BFD, unicast-RPF, policy based routing and GRE	
10		should support latest IETF open standard for VXLAN+EVPN	
11		should support PIM-SM, PIM-BiDir, IP Multicast Multipath and anycast-RP	
12		Should support up to 16K IPv4 routes	
13		Should support up to 4K IPv6 routes.	
14		Device should support port ACL to filter traffic based on L2, L3 and L4 parameters	
15		Switch should support root guard, loop guard and bridge assurance	
16		The switch should support IEEE 802.1x providing user authentication, authorization, dynamic vlan assignment, dynamic ACL and CoA.	
17	QoS and	Should support control plane policing to protect from denial of service attacks	
18	Security	Should support role based access control with TACACS+ and Radius	
19		Switch should support Standard 802.1p CoS field classification, Differentiated services code point (DSCP) field classification and ACL based classification	
20		Switch should support policing, shaping and Marking. Minimum 8 queues per port.	
21		Switch should support priority queuing.	
22	Management, Automation	Should support SNMPv3, SSH, SFTP, SCP for secure management and file transfer	

23	and Visibility	Should support Configuration session and rollbacks, schedular and Event Manager	
24		Should support open standard for remote programmability using OpenConfig over gRPC, API and ansible.	
0.5		should support realtime streaming telemetry that can be exported to external NMS like ELK, Prometheus, etc platforms.	
25		Switches Operating system must support telemetry of system information and real time monitoring to identify and automate the issues resolution.	
26		Should support onboard programmability with python and bash.	
27		Switch should support remote port mirroring over GRE, ACL filtered mirroring session and onboard packet capture tool for troubleshooting and traffic analytics.	
28		should be certified for EAL/NDcPP common criteria UL/CSA 60950-1/EN61000-3-2, EN55035	
29		should support IPv4 and IPv6 dual-stack simultaneously	
30		should have IPv6 ready logo certification	
31	Support and Compliance	Hardware and TAC support should be directly from the OEM. OEM should have 24x7 TAC supported. OEM email-id and India Contact support no. to be provided.	
32	•	All the features asked above should be available from the day one and if any licenses to be added to achieve the same, those should be added as part of the proposals and BOM. All licenses should be Perpetual in nature from Day 1. Hardware Support OEM's direct 5 Years NBD support for throughout the contract period.	

3:10 G LR SFP (Qty-12)

	10 G LR SFP (Qty-12)				
Sr. No.	Feature Description	Compliance (Yes/No)			
1	10G LR SFP to support 10KM distance for distribution & Core Switch				
	Hardware Support OEM's direct 5 Years NBD support for throughout the				
2	contract period.				

Note- For any warranty replacement any charges like Custom duty etc. will be borne by the bidder/vendor. We need next business day hardware replacement.

I /We he	reby certify	that the i	nformati	on furn	ished a	above is	full ar	nd correct to	o the
best of n	ny/our know	vledge.							

Date:
Place:

Minimum Eligibility Requirement for technical bid:

- Bidder should be OEM/Authorized Partner/service provider of the OEM. In case the bidder is an Authorized Partner or Service Provider a valid Agency-ship/Dealership Certificate (MAF specific to this tender) to quote on behalf of OEM should also be enclosed along with the technical bid. A document in support of this must be enclosed. Bidder should also need to submit Technical Compliance on OEM Letterhead with singed and stamp with the Technical Bid.
- 2 OEM/bidders should have Sales and support office in Country. <u>A self-certified document in support of this must be enclosed.</u>
- 3 OEM/bidder should have service and support office in Delhi NCR. <u>A self-certified</u> document in support of this must be enclosed.
- 4 The warranty provided by the bidder should have a back to back arrangement with the OEM. The declaration should be the part of a Letter of Authorization and signed by competent authority at the OEM.
- 5 The bidder should be ISO 9001 or better certified. **A copy of ISO Certificate should be enclosed.**
- 6 The bidder should have support center with minimum 3 relevant support/network engineers. A self-certified document in support of this must be enclosed.
- 7 The vendor/OEM should be able to provide 24x7 NOC & Tele support of their own if required by IIITD at agreed terms. A self-certified document in support of this must be enclosed.
- 8 The bidder shall provide the Registration number of the firm along with the valid GST number with PAN Number allotted by the competent authorities. A self-certified document in support of this must be enclosed.
- 9 The bidder must not be blacklisted by Central Government, State Government or Government of Corporations in India. A certificate or undertaking to this effect must be submitted.
- 10 The bidder must be responsible for supply, deploy and support the infrastructure.
- Bidders can seek clarifications, raise technical queries etc. related to Tender by 20-09-2023 via email to rahulv@iiitd.ac.in, Yogesh@iiitd.ac.in & for financial queries to e-mail ajay@iiitd.ac.in. The replay to clarifications sought or queries raised will be replied within 03 working days and uploaded on the website of the institute under www.iiitd.ac.in Based on this the bidders may submit bids as prescribed by the due date the time. No clarifications in any other form will be provided.

Following information must accompany the financial bid:

1	Name, address and telephone number of the firm/company	
2	Name of the contact person and contact	
	details (mobile/telephone number etc.)	
3	Name of the Bank and full address	
4	Bank Account Number	
5	PAN & GSTIN (Attach self-certified	
O	copy)	
_		
6	Copy of Partnership Deed/ Certificate of	
	registration of company or any other	
	document evidencing registration of the	
	bidder	
7	Number of Years of Experience	
8	Details of DD	
	towards: Tender Fee:	
	EMD:	
9	Provide the previous PO's of the similar	
	items work executed during last three	
	years (attested copies of the Orders to be	
	enclosed)	
10	List of service canters, nearest location	
10	of support centre.	
11	Turnover of the bidder in the financial	
	years:	
	years.	
	2020-21	
	2021-22	
	2022-23	
	0	
	Please attach CA certified copy of	
	Please attach CA certified copy of the turnover.	

I /We here	by certify	that the	e inforn	nation	furnish	ed a	bove is	s full	and	correct	to t	he l	best
of my/our l	knowledge	e <u>.</u>											

(Signature of	f the authorized Signatory)
Name:	
Office Seal.	

Date: Place:

TERMS AND CONDITIONS

- 1. The financial bid should be valid for a period of not less than 60 days from the date of opening of bid.
- 2. Upon placing of the Purchase Order (PO), the successful bidder is required to submit performance Bank guarantee (PBG) equivalent to 5% of the PO value within 15 days of the date of PO, failing which the EMD amount will be forfeited and the bidder shall be notified as blacklisted. The PBG shall be valid for a period of 60 months from date of purchase order. No interest is payable on the PBG.
- The product to be supplied within a period of 6-8 weeks from the date of the PurchaseOrder by the Institute. (Can be extended maximum up to 6 months from the date of Purchase order in extreme/ unavoidable global conditions). The bidders who are not able to deliver the product within the mentioned timeline, need not to apply. Also if any delay in the delivery timeline the penalty may be imposed (Rs.5,000/- per day).
- The bidder should have their own test and repair facility with certified engineers.
- 5 PBG will be realized by IIIT-D in case of termination of the contract for unsatisfactory performance and/or non-performance of the contract.
- 6 Bids will be opened in the presence of bidder's representatives, who choose to attend on the specified date and time. Only one representative shall be allowed to attend.
- Sealed bid can be sent either by post or by messenger. The responsibility of delivery of bid lies entirely with the bidder.
- 8 100% payment will be released only on satisfactory installation as per scope of work as certified by officer in charge of the Institute and after producing the GST invoice. Bidder does not agree to above payment terms are requested not to submit their bid.
- 9 Payment will be paid only if required SLA as mentioned in scope of work is met.
- In the event of dispute, Director, IIIT-Delhi shall be the sole arbitrator and his decision shall be final and binding on both the parties.
- IIIT-Delhi does not bind itself to accept the lowest or any other offer and reserves the right to accept or reject any or all the offers either in full or in part without assigning any reason.
- In case the bidder is not able to execute the Work as per terms, EMD/PBG shall be forfeited.
- 13 The bidder must be an ISO-9000 certified organization.
- The bidder should be Original Equipment Manufacturer (OEM) or authorized service provider of the OEM (attach documentary proof). The authorization issued by the OEM must be valid and enclosed.
- 16 Bidder must submit an attested copy of every page of the tender
- Bidder should provide details of its support, certification to this effect from the OEM.
- If vendor /OEM fails to meet the SLAs(next business day hardware replacement), a fine of 2000/- Rs per day for first seven days and @ Rs.5,000/- per day from 8th day onwards will be levied.
- The selected bidder has to sign an agreement with IIITD on a stamp paper after issue of Purchase/Work order. The agreement is attached Annexure 'Y

PROFORMA FOR FINANCIAL BID

S.N.	Item Details	Rate (INR)	Qty	Amount (INR)
1	48 Port Core Switch with dual power supply		2	
2	48 Port Distribution Switch with dual power supply		6	
3	10G LR SFP		12	
		Total Amount (INR)		
		Tax (18% GST)		
		All Inclusive Cost(INR) 18% GST)	(With	

- Please note the price should be quoted for each of the item should be inclusive of all taxes/charges and installation at IIIT-Delhi Okhla Phase III, New Delhi.
- The Bidder may obtain price in Forex(USD) however the quote in financial Bid should be INR only.
- -If any documents are required for availing custom duty exemption, the IIITD will provide the same. Please quote price accordingly.

Total Cost (all inclusive) of quantity mentioned above (in words) at IIIT-Delhi campus:

We accept that the rate quoted above shall remain valid for a period of 60 days from the last date of the tender document i.e. 60 days from 4^{th} October, 2023. It is certified that the rates quoted above are not more than the rates charged from any Central / State Govt. Deptt. / Institution / GeM.

(Signature and seal of the Bidder)

Annexure Y

ON NON JUDICIAL STAMP PAPER OF RS 100/-

AN AGREEMENT made on day of two thousand Twenty
One

BETWEEN

(Hereinafter called the contractor, which expression shall include its proprietor, partners, heirs, executors, administrators, legal representatives, successors and assignees) WITH REGISTERED ADDRESS......of the one part

AND

The REGISTRAR Indraprastha Institute of Information Technology Delhi, Okhla Industrial Area Phase III, New Delhi - 110020 (hereinafter called the IIITD, which expression shall include its successors and assignees) of the other part.

Whereas the IIITD had invited Bids <Please write tender name> ; vide its Bid Document No.
, which shall be deemed to be a part of this agreement; FOR THE SCOPE OF WORK/SUPPLY

Whereas the contractor submitted its TENDER Bid dated , a copy of the price bid, submitted by the contractor, is annexed hereto as Annexure;

Whereas the IIITD has accepted the Bid submitted by the contractor, on the terms and conditions mentioned in the IIITD's said Bid Document and conveyed its acceptance to the contractor; vide its letter No. dated , AND ANY OTHER CORRESPONDENCEwhich shall be deemed to be a part of this agreement;

Whereas the contractor is agreeable to the terms and conditions mentioned in the IIITD's said Bid document;

Whereas the contractor undertakes to comply with all relevant laws like Contract Labour (Regulation and Abolition) Act, 1970; Employees' State Insurance and Miscellaneous Provisions Act, 1952; Employees' State Insurance Act, 1948; Minimum Wages Act, 1948; Payment of Bonus Act, 1972; Payment of Wages Act, 1936; Income Tax Act; GST Act etc. and to indemnify the IIITD

from the contractor's acts of omission or commission, as regards the compliance with the relevant laws;

Whereas the contractor declares that he/she/it shall own all responsibility for any act of omission or commission, as regards the compliance with the relevant laws;

AND WHEREAS the IIITD is agreeable to make necessary payment to the Contractor, at the rates mentioned in the Annexure annexed hereto and as per the terms and conditions mentioned in the IIITD's said Bid Document;

In WITNESS whereof Shri (name), (designation), the authorized representative of the contractor, for and on behalf of the contractor, has hereunto set his hand and
(Signature of the authorized representative of the Contractor) Name and
designation of the contractor's representative
In the presence of
2
(Signature of witnesses with full name and full address)
Registrar
for and on behalf of the IIITD
In the presence of
1

2