



GSTIN: 30AABAI1653D1ZF

PAN: AABAI1653D

TAN: BLRI08261B

TENDER DOCUMENT**Tender No: IITGOA/2018-19/027****Date: 06-11-2018**

Dear Sir/Madam,

On behalf of the **Indian Institute of Technology GOA**, sealed quotations are invited in **two-part bid system for the supply of below mentioned Networking Items. The items are to be door delivered at IIT Goa, GEC Campus, Farmagudi, Ponda- Goa – 403401.**

Items Required at IIT Goa

Sl.No	Item Name (Specification given below)	Quantity
1	24 port Switch.	02
2	24 port POE Switch.	10
3	48 port Switch Manageable switch with 4 port OFC uplink.	16
4	OFC Modules 1Gbps.	10
5	Wireless Access points.	30
6	Cat6 Punch down Keystone	70
7	Single Face plate	70
8	Back box for faceplate	70
9	Cat6 1mtr Patch chord	70
10	1mtr SC to LC OFC Patch chord	10

Sl.No	Item Name	Specification
1	24 port Switch	<ul style="list-style-type: none"> L3 Switch should be 1RU with minimum 24 no. of 1G/5G/10G Base-T ports with support for additional 8x10G SFP+ ports id required in the future. Switch should have minimum 320 Gbps of stacking bandwidth with dedicated stacking ports and cables with minimum 4 switches in a single stack from Day 1. Switch should support internal redundant power supply and support power stacking from Day 1. Should have 8 GB RAM and 16 GB Flash Switching system shall have minimum 600 Gbps of switching fabric and minimum 450Mpps of forwarding rate. Switch should have hot swappable 1:1 redundant internal power supply. Switching system shall have minimum 32K MAC Addresses and 4K Vlans. Switch should support minimum 5K ACLs, 8K Multicast and 32K IPv4, 16K IPv6 Routes.. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.1ae, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z. Switch have MACsec 256-bit encryption algorithm Should have static routing, OSPF, OSPFv3, BGP, VRRP, VRF (Virtual routing and forwarding), IGMP v1/v2/v3, PIM and multicast routing.

		<ul style="list-style-type: none"> • Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing. • Switch should support management features like SSHv2, SNMPv2c, SNMPv3, IGMP, Netconf/YANG or equivalent • Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security. • IPv6 support in hardware, providing wire rate forwarding for IPv6 network • Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment. • Eight egress queues per port for different types. • Switch shall support application visibility and traffic monitoring with minimum 60 K sflow/jflow/netFlow entries. • Switch shall conform to UL 60950, IEC 60950, CSA 60950, EN 60950 Standards and ROHS5. • The switch OEM should be a Leader/Challenger in Gartner's Magic Quadrant last 3years
2	24 port POE Switch	<ul style="list-style-type: none"> • Switch should be 1RU with minimum 24 nos. 10/100/1000 Base-T POE/POE+ ports and minimum 370W of PoE Power and additional 4 nos. of 1G SFP uplinks ports. • The switch should support an optional Stacking Port for stacking purpose with 80Gbps dedicated stacking bandwidth. • Switch should have internal power supply. • Switch shall have minimum 108 Gbps of switching fabric and 70 Mpps of forwarding rate. • Shall have minimum 250 active Vlans. Up to 16K MAC address. • 1K multicast groups, static routes, DHCP options • Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3az, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z. • Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing. 8 hardware queues priority levels • Switch should support management features like SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ . • IPv6 First Hop Security including RA guard, ND inspection & DHCPv6 guard. MLD v1/2 snooping • Management via RMON, CLI & GUI • Switch should have UL 60950, CSA, CE mark, IPv6 Gold Logo certified. • The switch OEM should be a Leader/Challenger in Gartner's Magic Quadrant last 3years
3	48 port Switch Manageable switch with 4 port OFC uplink	<ul style="list-style-type: none"> • Switch should be 1RU with minimum 48 nos. 10/100/1000 Base-T ports and additional 2 nos. of 1G SFP port + 2 nos. of 1G SFP/RJ-45 combo uplinks ports. • Switch should have internal power supply. • Switch shall have minimum 104 Gbps of switching fabric and 90 Mpps of forwarding rate. • Shall have minimum 250 active Vlans. Up to 16K MAC address • 1K multicast groups, static routes, DHCP options. • Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3az, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z. • Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing. 8 hardware queues priority levels. • Switch should support management features like SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ . • Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, Spanning tree. • IPv6 First Hop Security including RA guard, ND inspection & DHCPv6 guard. MLD v1/2 snooping. • Management via RMON, CLI & GUI.

		<ul style="list-style-type: none"> The switch OEM should be a Leader/Challenger in Gartner's Magic Quadrant.
4	OFC Modules 1Gbps	<ul style="list-style-type: none"> Fiber Module Single Mode Supported Single mode and from the same OEM of switch.
5	Wireless Access points	<ul style="list-style-type: none"> Access Points proposed must include radios for 2.4 GHz and 5 GHz with 802.11ac Wave 2. An access point must include a standard OEM provided Mounting brackets for mounting on Ceiling or Roof top. Access point must support spectrum intelligence across 20-, 40-, and 80-MHz-wide channels to combat performance problems due to wireless interference. Access point must have an two ethernet port for Link aggregation Access point should have serial/console port Must have atleast 3 dBi Antenna gain on each radios. Must support 4x4:4 spatial streams for both 802.11ac and 802.11n client. Access point must support a minimum of 1.9 Gbps user throughput including both the radios. Must support minimum of 22dbm of transmit power in both 2.4Ghz and 5Ghz radios. And should follow the WPC norms. Must support AP enforced load-balance between 2.4Ghz and 5Ghz band. Must incorporate radio resource management for power, channel, coverage hole detection and performance optimization. Must have -97 dB or better Receiver Sensitivity. Must support Proactive Key Caching and/or other methods for Fast Secure Roaming. Must support Management Frame Protection. Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI). Access Points must support Hardware-based encrypted user data and management traffic between controller and Access point for better security. Must support the ability to serve clients and monitor the RF environment concurrently. Same model AP that serves clients must be able to be dedicated to monitoring the RF environment. Should support mesh capabilities for temporary connectivity in areas where no Ethernet cabling. Mesh support should support QoS for voice over wireless. Must be plenum-rated (UL2043). Must support 16 WLANs per AP for SSID deployment flexibility. Must continue serving clients when WAN link to controller is back up again, should not reboot before joining. The APs must support centralized wireless mode with the use of a controller, but the APs must also support operation in autonomous mode without the presence of any controller, when needed When operated in remote AP mode, the AP must not disconnect any clients when the connection to the controller fails or in the case the failed connection has been restored again. When operated in remote AP mode, the AP must be able to authenticate new users with local radius server directly at the AP itself in case of link failure to controller. Must support telnet and/or SSH login to APs directly for troubleshooting flexibility. Must support Power over Ethernet, local power (DC Power), and power injectors. Access Point should 802.11 DFS certified. <p>Note: We already Have Cisco Wireless Controller 5520. So the Access Points must be support to this Existing Wireless Controller</p>
6	Cat6 Punch down Keystone	Make Tyco AMP
7	Single Face plate	Make Tyco AMP
8	Back box for faceplate	Any Standard make
9	Cat6 1mtr Patch chord	Make Tyco AMP

10	1mtr SC to LC OFC Patch chord	Any Standard make
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The eligibility criteria for participation in bid are mentioned below:

1. The Bidder should have ISO 9001: 2015 certification. (Documentary evidence required)
2. The Bidder should have OEM certified partnership if the bidder is a partner. (Documentary evidence required)
3. Manufacturer Authorisation Certificate to participate in this tender with tender number.
4. Bidder should have executed minimum 3 such projects with:
 - a. At least one order amounting Rs 25 lakhs or more.
 - b. At least two orders amounting to more than Rs. 10 lakhs.
 Purchase Orders of these should be attached.
5. Bidder should have in the business since last 5 years (Attach company registration certificate) with minimum turnover of Rs 1 Crore in the last three financial years: FY17-18, FY16-17 and FY15-16) (Attach Balance Sheet for the two FYs)
6. Bidder should have valid GST Registration. (Documentary evidence required)
7. Bidder should submit last 3 FYs Balance sheet / turn over certificate. (FY 15-16, 16-17,17-18)
8. Bidder should submit last 3years income Tax Returns. (FY 15-16, 16-17,17-18)
9. Bidder should submit the contact engineer details with an escalation matrix.
- 10. Bidder should propose all Active Components from same OEM for better compatibility and Manageability.**

The above-mentioned basic eligibility conditions are broad guidelines for pre-qualification and the Director/Registrar, IIT Goa hereby reserves the right to relax / alter / modify / add any or all the conditions.

Instructions to the Bidder:

(i) Preparation of Bids: The bidders must ensure that bids are submitted in **two-part bid system (i.e.) Technical bid and Financial bid in separate envelopes.**

(ii) Technical bid: The technical bid should consist of all technical details/brochures along with commercial terms and conditions super-scribed as TECHNICAL BID with Tender No. and date and time of closing and the bidder's name and address. No prices should be included in technical bid. Bidder should submit non-commercial bill of material along with Technical Bid.

(iii) Financial (Price) Bid should indicate item-wise prices for the items with firm and fixed figures and words super-scribed with the Tender No. and date of closing of the Tender with name of supply/work and the bidder's Name and address. The price bid should not contain any conditional clauses. No price escalation for any reasons whatsoever is allowed. All prices should be given in Indian Rupees.

(iv) The technical and the financial bids duly signed by the bidders or their authorised signatories with name and seal should be put in separate cover and sealed. Both sealed covers should be put into a bigger cover duly super-scribed with PT No. and due date/time with name of supply /work. **Technical bids must either be spiral bound / stapled together. No loose sheets will be accepted. All pages must be numbered.**

(v) Submission of the tender: The complete sealed bids in all respects shall be sent to the following address well in advance either by post or by courier or by hand so as to reach this office on or before the due date and time specified in the Schedule. The bids received after closing date and time shall not be considered.

The Registrar,
Indian Institute of Technology Goa,
GEC Campus, Farmagudi,
Ponda, Goa - 403401.

While submitting the bids, the bidders must sign all the tender documents as a token of accepting of tender documents as well as terms and conditions stipulated therein. Tender documents without signature of bidders or their authorised signatories will be treated as invalid bids. No conditional offer or terms and conditions will be entertained by the institute and such bids will be treated as invalid.

(vi) The tender documents can be downloaded from IIT Goa web site: <http://www.iitgoa.ac.in/announce.php?type=tenders> or from <https://eprocure.gov.in/cppp/>

(vii) **Bid Security (EMD):** *EMD either in the form of Bank Demand Draft of Rs. 1,50,000/- initially valid up-to 90 days drawn in favour of INDIAN INSTITUTE OF TECHNOLOGY GOA payable at GOA, must be sent along-with the Technical bid only.*

The technical bid without EMD would be considered as UNSOLICITED and will be REJECTED. Photo/FAX copies of the Demand Draft/Banker's pay orders will not be accepted. No interest will be paid for the EMD and the EMD (Bid Security) will be refunded to the successful bidder on receipt of Performance Security (Security Deposit) and in case of unsuccessful bidders, the EMD will be refunded on finalisation of tender.

(viii) Bid security be forfeited without any intimation in such cases as below: -

- a) If a bidder withdraws its bid during the period of bid validity
- b) If a successful bidder fails to execute the awarded contract
- c) If a successful bidder fails to provide performance guarantee

(ix) Micro and Small Enterprises (MSEs) registered with National Small Industries Corporation are exempted from payment of Earnest Money Deposit. However, vendors covered under this category have to submit copy of registration certificate with present validity along with technical bid, failing which, the bid will be disqualified.

(x) **Modifications of specification:**

The supply to be made by the Supplier under this Purchase order can be modified or changed by the request from the IIT Goa provided that for such modifications or changes the parties shall first agree to possible addition or reduction in cost, the delivery date and such other terms and conditions occasioned by or resulting from such modification or change. Such agreement shall be effected either by way of exchange of letters duly signed by authorised representatives of the parties or by signed change order form or by minutes of meeting signed by authorised representatives of the parties, which shall constitute the necessary amendments to the contract. Possible increase or decrease in the contract price shall be calculated in accordance with unit prices. The cost of such additional jobs should be reasonably fixed with reference to the quoted price for such or similar items.

(xi) **Opening of the tender:** The Technical Bids will be opened by the tender committee duly constituted in the presence of bidders or their authorised representatives, if they desire on **30-11-2018 at 4 pm**. Then the bids will be evaluated by the Technical Evaluation Committee which will decide the suitability of the technical bids as per our requirement and terms and conditions. Once the technical evaluation is completed, the price Bids of only those bidders who are found technically acceptable will be opened in the presence of Authorized Representatives of such bidder(s), if any on a date and at a venue to be intimated by IIT Goa to the shortlisted bidders.

(xii) The bidder shall note that any unsolicited post-tender reduction by them would disqualify them from participating from the bidding and forfeit the security bid.

(xiii) Incomplete bids are liable for rejection.

(xiv) **Prices:** The price should be quoted on FOR: IIT, Goa. The bid should consist of basic price, P&F charges, freight, unloading charges, Installation and commissioning charges and applicable taxes.

(xv) **Offer validity:** The offer must be valid for 90 days from the closing date in the case of indigenous supply and 120 days for overseas supply. If the validity of offers for acceptance is less than 90 days/120 days, the same will not be considered.

IIT Goa reserves the full right to accept / reject any tender or all tenderers at any stage without assigning any reason.

Terms and Conditions:

1. The due date for the submission of the tender is **29-11-2018 at 5.30 pm.**
2. Delivery and installation must be made within 4 weeks of getting a confirmed order.
3. Payment will be done on Satisfactory Delivery and Installation.
4. GST as applicable.
5. For any query you may contact us on 0832-2490860 / 09900882272; sysad@iitgoa.ac.in / purchase@iitgoa.ac.in
6. Send the two sealed documents (Technical bid and Financial bid) in one envelope directly to The Registrar, IIT GOA, GEC Campus, Farmagudi, Ponda, Goa – 403401.

Sd/-

Asst. Registrar (S&P)