

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE
2A & 2B, Raja S.C. Mullick Road, Jadavpur, Kolkata-700032

NIT No.: IACS/CCRES/CORE-SWITCH/2022-23/53

Date: 05/01/2023

Sealed tender in two bids system (technical bid and price bid) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for **“Procurement (supply, installation, testing and commissioning) of Two Cisco Core Switches along with Transceiver on Buy-back basis for replacement purpose of old Cisco core switches by ‘New and Better’ version”**.

Part-I (Technical Bid) of the tender should contain technical specifications in detail as well as commercial terms and conditions. Part-II (Price Bid) should clearly indicate item-wise price, if needed, as mentioned in the technical bid. The Technical Bid and Price Bid are to be submitted in separately sealed envelopes, distinctly marked accordingly and both to be put inside another envelope, that should be sealed and super scribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

Completed tender bids should reach to the Dispatch section, IACS on or before the scheduled date and time specified below:

Tender Notice No.	NIT No. IACS/CCRES/CORE-SWITCH/2022-23/53 Date : 05-01-2023
Last date and time of submitting Tender	27.01.2023 at 01:00 P.M. at Dispatch Section
Pre-bid meeting to discuss Technical specifications	12.01.2023 at 03:00 P.M.
Date and time of opening tender	27.01.2023 at 03:00 P.M.
Place of opening Tender	I.A.C.S., Kolkata
Contact	Email: ccresrc@iacs.res.in, admap@iacs.res.in. Tel.+91 33 2473 4971 [Ext. 1176]

The technical bids will be opened first to judge/evaluate the technical specifications of the said switches and thereafter the price bids of only technically qualified bidders will be opened.

Technical Bid Evaluation: The technical bids will be opened first to judge/evaluate the technical specifications of the said materials.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened, the date and time of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or reimburse any expenses to any of the bidders for attending opening of technical bid.

Quotations received incomplete or beyond the stipulated time will be summarily rejected.

1. TECHNICAL BID

The technical bid should contain technical specifications and should be kept in a separate sealed envelope duly super scribed as 'TECHNICAL BID' on the outer cover of the envelope as already detailed above. **It should be clearly mentioned on the envelope as "Technical Specification for Network Switches and Transceiver ".**

1.1. Bill of materials:

Description	Quantity No
Layer 3 Managed Switch equivalent to Cisco present model Switch C1-C4507R+E	1 No.
Layer 3 Managed Switch equivalent to Cisco present model Switch WS-C4503-E	1 No.
1G Multimode Fiber Transceiver	20

1.2 Technical specification:

- Layer 3 Managed Switch equivalent to Cisco present model Switches C1-C4507R+E and WS-C4503-E

S. No.	General Specifications
1	General Features & Performance :
2	Chassis based switch with at least 5 payload slots and additional 2 slot to accommodate two nos. of switch processor or CPU.
3	The proposed switch will have redundant CPUs from day-1. Should support Non-Stop Forwarding and Stateful Switchover to ensure information between supervisor engines are fully to allow the standby supervisor engine to take over in sub-second time if the primary supervisor fails.
4	Shall support In Service Software Upgrade (ISSU) to provide an upgrade of the entire chassis or an individual task/process without impacting hardware forwarding

5	Redundant Power supply from day 1.
6	Switch should support field replaceable components such as Supervisor, Linecards , Power-supply and Fan trays.
7	Should have 8 GB DRAM & 12 GB Flash from day-1
8	Each CPU/Supervisor Engine switch should have 200 GB SSD from day-1 which can be increased upto 900GB in future.
9	The switch CPU should support minimum 890 Mpps forwarding rate for IPv4 and 450 Mpps forwarding rate for IPv6.
10	IPv4 Routing entry support : 140K
11	IPv6 Routing entry support : 50K
12	Multicast Routing entry support : 16K
13	MAC addresses support: 60K
14	VLANs ID: 4K
15	ACL entry support : 16K
16	QOS entry support : 16K
17	Packet buffer : 90 MB
18	Functionality :
19	Switch should support IEEE Standards of Ethernet: IEEE 802.1D (L2 feature to prevent loops), 802.1s, 802.1w(wireless), 802.1x(authetication), 802.3ad(LACP-Link Agrregation Control Protocol), 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588.(encapsulation)
20	Switch must have functionality like static routing, RIP (Routing Information Protocol), PIM (Protocol Information Multicast), OSPF, VRRP (Virtual router Redundancy Protocol), PBR (Policy Based routing-uses route map) and QoS (Quality of Service used for running high end application and traffic) features from Day1
21	Should support advance Layer 3 protocol like BGPv4, BGPv6 , MPLS, VRF, VXLAN, IS-ISv4, OSPFv3, MP-BGP from day-1
22	STP, PVLAN, First Hop Security, Link Aggregation Protocol (LACP)
23	STP, Trunking, Private VLAN (PVLAN), Q-in-Q, Shaped Round Robin (SRR) scheduling, Committed Information Rate (CIR).
24	Should support AES-256 support with MACSEC-256 encryption algorithm on hardware
25	During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.

26	OS should have support for Management automation vis Netconf/Yang or equivalent
27	Interface
28	Should have capabilities to seamless upgrade/replacement (without interrupting running processes and services) for modular interfaces. The Switch will be populated with:
29	48 x 10/100/1000 Base-T Ports from Day 1
30	24 x 1G SFP Ports from Day 1
31	8 x 10G SFP+ ports distributed into two slots from day-1

2. PRICE BID

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope and should be submitted in the following format duly super scribed as 'PRICE BID' on the outer cover of the envelop as already detailed above. Price bids of only technically qualified bidders will be opened and they will be intimated the date and time of the opening of price-bid at their e-mail ids. Rest of the bidders will stand rejected.

Sr. No	Item	Quantity	Make/Model	HSN/SAC Code	Base price	Total Price(Without GST)	GST@	GST Value	Total price with GST
1	Layer 3 Managed Switch equivalent to Cisco present model Switch C1-C4507R+E	1							
2	Layer 3 Managed Switch equivalent to Cisco present model Switch WS-C4503-E	1							
3	Transceiver	20							
4	Buy-back value of Core Switch WS-C4503-E	2							
5	Buy-back value of Core Switch WS-C4507R+E	1							

	Total GST:	Total Price:
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3. SCOPE OF WORK:

- i. The switches will replace the existing Cisco make switches in the IACS Data centres. It consists of supply, installation, testing and commissioning of the switches as per IACS requirement and maintenance of the same for a period of 5 years in terms of onsite comprehensive warranty. Any Software or hardware updates released by the OEM should be installed by the vendor free of cost within the warranty period. The Vendor should provide onsite skill support (by deputing own representative at IACS, JADAVPUR Campus|) for the networking switches for the entire warranty period of 5 years.

4. WARRANTY:

- ii. The Comprehensive Warranty shall be for a period of 5 years from the date of satisfactory installation, testing, commissioning and handing over the equipment which covered under warranty in working order. During the Warranty period the replacement of any part(s) of the equipment or rectification of the defective product will be free of cost.
- iii. If, the tenderer is required to replace the rejected equipment and/ or other articles, he will replace them forthwith, but not later than a period of 14 (fourteen) days from the date of rejection. The tenderer shall bear all cost of such replacement, including freight, if any, of such replacement or repaired equipment and/ or other articles but without being entailed to any extra payment on that or any other account.
- iv. Vendor shall make necessary arrangements for keeping the sufficient spares at site to minimize the down time.
- v. Software or hardware updates released by the OEM should be installed by the vendor free of cost within the warranty period.
- vi. Warranty should be offered directly by the OEM.
- vii. Single point of contact for all communication related with after sales and support.

5. BID SECURITY: (Declaration vide order no. F.9/4/2020-PPD dtd. November 12, 2020)

- a. An Account payee Demand Draft/Pay Order of Nationalized Bank for Rs. 5,00,000/- (Rupees 5 Lakhs only) drawn in favor of "Indian Association for the Cultivation of Science (State Bank of India, Jadavpur University Branch, A/C No. 11079699211, IFSC: SBIN000093, MICR Code: 700002048)" is to be furnished by the bidders except those who are registered with the Central Purchase Organizations, National Small Industries Corporation or the concerned Ministry or Department, as Bid Security money or Earnest Money Deposit (EMD). Alternatively, the Bidder shall have the option to furnish the EMD in the format of Bank Guarantee (BG).
- b. The Demand Draft for the Bid-Security should have at least about 90 (ninety) days validity period of opening of the bids.
- c. In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

6. PERFORMANCE SECURITY:

An Account Payee Demand Draft on any commercial bank of India of 3% of the order value in the name of "Indian Association for the Cultivation of Science" is to be furnished by the successful bidder as Performance security. Performance Security may be furnished in the form of Fixed Deposit Receipt or Bank Guarantee from a Commercial Bank. Performance security money should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Bid security money or EMD will be refunded to successful bidder on receipt of the Performance security money.

7. TERMS OF PAYMENT:

All rates should be quoted in INR only. Payment will be made 100% on successful delivery of the switches /execution of orders. Partial payment against supply within scheduled delivery period will not be admissible.

8. ELIGIBILITY CRITERIA AND DOCUMENTS REQUIRED:

The following shall be the minimum eligibility criteria for selection of bidders technically

1. The Bidder should be an Original Equipment Manufacturer (OEM) or an authorized firm of reputation having sufficient expertise and experience in the subject tender with sound warranty/service support capability and authorization from Manufacturer.
2. Either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product.
3. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
4. The tenderer should clearly mention whether they are the OEM or authorized dealer/agent of the

manufacturers. In the case of dealer/distributor/agent, latest letter of authorization from the OEM specifically for this tender should be submitted along with the Technical Bid.

5. Submission of duly filled in and signed compliance certificate from Bidder are must with the Technical Bid.
6. Equipment offered must be supported with printed catalogue & description on OEM website.
7. Manufacturers / exclusive distributors / vendors should have history of supplying this type of switches to this or other scientific organizations. Availability of a list in this regard would be preferred.
8. Bidder should submit their past experience for supplying and successful installation of similar units to other research Institute/Universities/other organization in India. Please provide documentary proofs of such successful installation and project completion. Also, a compliance table (see below) must be prepared and submitted along with the technical bid.

Sr. No	Item	Tender specification	Your offered instrument specification	Extent of compliance
1	Layer 3 Managed Switch equivalent to Cisco present model Switches C1-C4507R+E and WS-C4503-E			

9. Attested copy of Registration certificates of the firm/company and GST details should also be submitted.
10. Manufacturers or Bidder are requested to provide ISO 9001:2015.

11. Bidder should enclose copy of following documents:

- i. Trade license.
- ii. Company Registration certificate.
- iii. Bid specific OEM Authorization certificate is mandatory.
- iv. GST registration certificate.
- v. PAN GST certificate to be submitted.
- vi. Similar 3 Purchase Order.
- vii. Income Tax Return (for the last 3 years).
- viii. Audited Balance Sheet (for the last 3 years).
- ix. A list of clients where L3/L2 Switch has been installed should also be provided.
- x. Documentary proof of Servicing facility and service engineer stationed at Kolkata.
- xi. Documentary proof of the vendor/bidder working in this field for at least last 3 years.
- xii. Annexure-I in letter head with company seal and sign.

12. Technical Supporting Staff – The bidder should have trained and qualified customer support staff with ample experience in the required field. Complete details of service centres and support staff should be provided. They should have service centre in Kolkata with proper address. The details of the service centres should be provided.

13. Documentary proof of Servicing facility and service engineer stationed at Kolkata.
14. Documentary proof of the vendor/bidder working in this field for at least last 3 years.
15. Annexure-I in letter head with company seal and sign.
16. All Active network components should be from same OEM. All Switches and fibre transceiver should be from same OEM.
17. The OEM of the active network product should have well established manufacturing plant/ Research & Development Lab in India or abroad.
18. All active network devices quoted by the bidder should be from a single OEM only and it should be supported by Single NMS/Controller.
19. The OEM of active network devices to be quoted by the bidder should have local Technical Assistance Centre (TAC) support in India through a toll-free number and Returned Materials Authorization (RMA) depot in India.
20. The OEM of active network devices to be quoted by the bidder should be present in the country from at least past 10 years.
21. Products (active) being quoted should be available as on date with the OEM and should be publicly available.
22. All active material to be procured should be from an OEM, which has not been acquired by other business entities for the period of last 3 years , this is to ensure dependable and continuous support as per warranty requirements and lifecycle of the network.

9. GENERAL INSTRUCTIONS

1. Validity of tender: Tender submitted should remain valid for at least six months from the date of opening the tender. Validity beyond six months from the date of opening of the tender shall be lapsed by mutual consent.
2. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof.
3. The existing old switches which are being used will be returned to the lowest bidder only after installation of the new one.
4. This is not a single tender, however multiple Vendors can submit their bids dealing with Cisco equipment's.
5. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the institute website. Prospective bidders are advised to occasionally visit the website (www.iacs.res.in) for any amendment.
6. Service facility: In Kolkata, supplier should mention their details of service setup and man powers that are responsible for after sales support. Response time should be within 24 hrs.
7. Proposed delivery schedule should be mentioned clearly.
8. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
9. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of the technical bids will be the following working day at the appointed time.
10. In case of any dispute, the decision of IACS authority shall be final and binding on the bidders.

11. Once the pre-bid meeting is over and issues are clarified, no query or objection or complain shall be entertained in connection with the tender. Absence of any vendors in pre-bid conference shall not be considered as justification for making query or objection thereto. Also, non-attendance in the pre-bid meeting is not a disqualification for participating in the tender process.
12. For any clarification regarding technical specifications, information etc., please send your queries to ccresrc@iacs.res.in and admap@iacs.res.in.
13. The authority of IACS reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Registrar

