



**Indian Institute of Technology, Kharagpur  
Kharagpur 721 302, WB, India**

**Sub: PROCUREMENT OF INDOOR WIRELESS ACCESS POINTS**

**Ref: Tender Notice No. IIT/CIC/NETWORK/INDOOR-AP/2017-18/25 dated 4<sup>th</sup> October 2017**

Indian Institute of Technology Kharagpur, an Institute of National Importance, invites sealed bids from reputed **Original Equipment Manufacturers (OEMs)** OR **their Authorized System Integrators** who have adequate credential for supplying, installing and maintaining similar product in IITs or similar Autonomous Institutions /Universities, Government /Public Sector Undertakings, etc., for procurement of **indoor wireless access points** with **five years** comprehensive onsite warranty for regular network expansion and maintenance work.

Interested vendors are requested to send their sealed bids under a **two cover system** as per requirement mentioned in tender document, along with the Technical Specifications & Compliance Certificate (as mentioned in **Specification Annexure-I**) and the quantity as specified in tender document.

Details are also mentioned in the Institute website [www.iitkgp.ac.in](http://www.iitkgp.ac.in) [link: tenders].

The proposal has to be sent in a sealed packet, containing two separate sealed envelopes (**Technical Bid** and **Price Bid**) duly superscripted with Reference Number (Tender Notice No. **IIT/CIC/NETWORK/INDOOR-AP/2017-18/25 dated 4<sup>th</sup> October 2017**), to the Office of the **Head, Computer & Informatics Centre, Indian Institute of Technology, Kharagpur, P.O. Kharagpur Technology, PIN : 721 302 on or before 30<sup>th</sup> October 2017 at 3:00 pm.**

The **technical bids (should also contain detailed un-priced bill of material based on Table – 1) which will be opened on 30<sup>th</sup> October 2017 at 3:30 PM** in the presence of the vendors and their authorized representatives and price bids will be opened (to be notified separately), only of those firms, who will be found technically qualified/shortlisted, after evaluation of their technical bids.

**Head  
Computer & Informatics Centre**

**Copy to:**

- 1. Institute website**
- 2. Notice Board**
- 3. News Paper**
- 4. CPPP**

# PROCUREMENT OF INDOOR WIRELESS ACCESS POINTS

## Introduction

Indian Institute of Technology, Kharagpur has a campus wide network spread over academic, hostel and residential areas, based on optical fiber as a backbone. The Institute has a Wireless LAN spread over all academic complexes, Hall of residences and part of open areas at its campus. The Institute has decided to procure some indoor wireless access points to cater to different expansion works and regular maintenance of its campus network.

### 1. Scope of work:

- I. The scope of the work includes supply, installation, commissioning and integration of the indoor wireless access points as per the institute's requirement and maintenance of the same for a period of five years. All access points should be compatible with the existing wireless controllers (Cisco 5508 and 5520) and must have a comprehensive onsite OEM warranty for a period of five years.
- II. Complete delivery of the material has to be accomplished within eight Weeks of receipt of the purchase order, failing which Liquidation Damage (LD) @ 1% per month of the total order value will be imposed as per Institute purchase rules. Total liquidated damage will be capped at 5% of the PO value.
- III. The installation would be deemed as complete after the delivery, self-testing of all access points, integration of few access points with existing wireless controllers to check the compatibility, and final acceptance and certification by Head, CIC, IIT Kharagpur. The warranty period will start after the final acceptance and certification by Head, CIC, IIT Kharagpur.
- IV. Selected vendor will have to provide support to IIT Kharagpur personnel configure and integrate the access points with the existing wireless controllers as and when required within the warranty period without disturbing the current architecture of the network.
- V. Replacement of defective equipment and shipment of the same should be the responsibility of the selected vendor without any financial commitment from IIT Kharagpur. The same has to complete within ten working days after reporting the problem.
- VI. The vendor will be liable for any hardware and software up-gradation for maintenance without any extra cost during warranty period.
- VII. The vendor should supply all required hardware and software to meet the technical specifications. Part bid will not be entertained.
- VIII. The vendor should provide onsite comprehensive warranty for **FIVE YEARS** on all items as mentioned in **Table-1**. All products should have 5 years 8 x 5 x NBD (Next Business Day) support commitment with back-to-back agreement with OEM. In case of equipment failure, IIT Kharagpur should be able to log case with the OEM **both** through the vendor and directly without vendor intervention. Emergency response team should be available from OEM directly in case of any critical failures. For the entire warranty period, latest software updates for all products should be available free of any additional cost. Declaration from OEM that the above conditions will be satisfied if the vendor is selected have to be submitted.

## 2. Pre-Qualification Criteria:

- I. The bidder should have minimum 10 years of working experience in eastern India in the domain of network infrastructure and have sales and support office in Eastern India. The bidder should have at least 3 orders for supplying network equipment (each of minimum Rs.25 Lakhs) in the last 3 years either directly or through a system integrator (if bid submitted from OEM). Copies of purchase orders to be submitted as supporting documents.
- II. The bidder should be a profit making entity for each of the last 3 years. Audited P & L reports to be submitted as supporting document.
- III. The bidder should not have been blacklisted by any IITs or similar Autonomous Institutions /Universities, Government /Public Sector Undertakings on the date of submission of this bid. A declaration from the bidder must be submitted.
- IV. The bidder should have a minimum turnover of Rs. 10 Crores per annum during each of last three financial years. Audited balance sheet must be provided.
- V. The bidder should have valid ISO 27001:2013 Certification or ISO 9001:2008 Certification.
- VI. The quoted products should not be under end of sales or end of support in next five years from the date of submission.
- VII. OEM should have office and spare depot in India. Documentary proof from OEM must be submitted.
- VIII. OEM should have Industry presence in India for more than 10 years.
- IX. OEM should have 24 x7 toll free call center for providing technical assistance.

## 3. Submissions of Bids:

- I. Technical bid (should also contain the detailed un-priced bill of material) and price bid should be sealed and quoted separately. The technical bid will be evaluated first for technical suitability. Only technically qualified bids would be considered for price comparison. Price bid should be quoted in the given format (**Table-1**) indicating the tax components. Vendor may provide the priced bill of materials indicating the unit price, tax and total price of each detailed component of the materials. But total price quoted in the given price bid format as per tender should match the total price calculated from the priced bill of material. In case of any ambiguity, the unit rate quoted in the priced bill of material will be considered as the final price.
- II. The authorization letter issued by the OEM (specifically against this tender) should be enclosed in original (if OEM is not the bidder).
- III. The technical bid should contain the technical solution as per the requirement (Table-1). Bill of Materials should mention model number indicating relevant part numbers for each component.
- IV. Technical bid should contain the tender document signed by authorized signatory of the bidder as a token of acceptance of specifications, requirements and terms and conditions.
- V. The capabilities, operating characteristics and other technical details of the hardware and software offered should be furnished together with product brochures, literature, etc. in the technical bid. The bidder should ensure that the software versions being quoted if any are latest.

- VI. Technical bid should contain all relevant technical details; printed technical leaflet of models quoted and other details, which may be necessary to ensure that offer is complete in all, respect e.g. technical specification, delivery period, guarantee period, validity, etc.
- VII. Technical bid should also contain a signed “compliance certificate” (Specification Annexure – 1 ) duly counter signed by the manufacturer or bidder.
- VIII. Bidders should also enclose the following documents in the technical bid as proof of their credential:
- ❖ Tender fee
  - ❖ Earnest Money Deposit (EMD)
  - ❖ Certificate of Registration
  - ❖ Current Income Tax, Sales Tax Registration/clearance/returns, PAN Number and GST Number.
  - ❖ Banker’s Solvency Certificate.
  - ❖ Summary of Audited Statement of Accounts for the last three years.
  - ❖ Three order copies for computer networking as specified in Pre-qualification Criteria.
  - ❖ Copy of ISO Certifications.
  - ❖ Signed Tender document as a token of acceptance for the Terms & Conditions specified in various sections of the Tender Document

#### 4. General Terms & Conditions:

- I. **Last Date of Submission of Sealed Bids: 30<sup>th</sup> October 2017 by 3:00 pm** (In the Office of the Head, Computer & Informatics Centre, Indian Institute of Technology Kharagpur).
- II. **Date of opening of the Technical Bids 30<sup>th</sup> October 2017 at 3:30 pm** (In the Office of the Head, Computer & Informatics Centre, Indian Institute of Technology Kharagpur).
- III. **Payment Terms:** 80% (value of the purchase order) payment will be made after the successful acceptance of the materials. Balance 20% of the payment will be made on submission of Bank Guarantee of 20% of the total purchase value valid for a period of five years plus three months.
- IV. **Price:** Price should be **quoted only in Indian Rupees** on free delivery at site **inclusive of all taxes and incidental charges.**
- V. **Custom Duty Exemption Certificate/Excise Duty Exemption Certificate/Way Bill will be issued to the Selected Bidders as applicable in Institute rules.**
- VI. **Tender Fee:** An amount of **Rs. 10,000.00** (Rupees ten thousand only) as tender fee (non refundable) has to be paid. The payment shall be made by Demand Draft from any Bank in favour of "Indian Institute of Technology Kharagpur", payable at "Kharagpur". **Quotation will not be accepted without the Tender Fee.** Tender fee should be enclosed separately in an envelope and stapled with the Technical Bid.
- VII. **Earnest Money Deposit (EMD):** An amount of **Rs.1,00,000.00** (Rupees one lakh only) (Refundable) in the form of Demand Draft drawn in favour of "**Indian Institute of Technology Kharagpur**", payable at Kharagpur or Bank Guarantee as per format at **Annexure 2. E.M.D. should be enclosed separately in an envelope and stapled with the Technical Bid document superscribing EMD.** The validity of the EMD should be 6 (six) months from the date of issue. **Any bid without EMD will summarily be rejected. No interest is payable on EMD.** EMD will be refunded to the unsuccessful bidder on finalization of the tender process. The EMD of vendor awarded with the contract to be treated as part of security deposit towards Performance Guarantee. No interest is payable on Security Deposit. Security Deposit shall be forfeited if the selected vendor after award of contract fails to execute the same.
- VIII. Conditional Offer will not be accepted.
- IX. **Period of Validity:** Bids shall remain valid for acceptance for a period of 120 days from the date of opening of the price bid but any benefit for **downward revision of prices should be extended to the IIT Authority.**
- X. Past Performance of the Vendors will be judged at the time of Technical evaluation.
- XI. Complete delivery of the material has to be accomplished within **eight Weeks** of receipt of the purchase order, failing which Liquidation Damage (LD) will be imposed as per Institute purchase rules (refer clause II of Scope of work).
- XII. The vendor should provide comprehensive onsite warranty for **FIVE YEARS** on all supplied items.
- XIII. Replacement of defective equipment and shipment of the same should be the responsibility of the selected vendor without any financial commitment from IIT Kharagpur. The same has to complete within **ten working days.**

## 5. Acceptance of Tender

- I. The Institute does not bind itself to offer any explanation to those bidders whose technical bids have not been found acceptable by the Evaluation.
- II. The Institute does not bind itself to accept the lowest tender and reserves the right to reject any or the entire tender received without assigning any reason thereof.
- III. The bids (technical and price bids) once submitted shall be the property of the Institute and shall not be returned to the vendor in future.
- IV. A bid submitted with false information will not only be rejected but the vendor may also be debarred from participation in future tendering processes.
- V. Canvassing in any form not only invites disqualification in this tender but also debar the vendor participation in the future tendering processes.
- VI. The person/officer signing the tender/bid documents should be delegated with an appropriate Power of Attorney (essentially endorsed by a Notary Public) by the Chief Executive Office/MD of the Company, to sign such documents.
- VII. **Opening of Price Bids:** The Price Bid(s) of only those vendor(s) who are found technically qualified will be opened. The date and time will be informed separately.
- VIII. Authorized representative (with proper authorization letter to attend opening of technical bids and also for opening of price bids) may choose to be present at the time of opening of Technical Bids/Price Bids.
- IX. Director may accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid. The Institute at its discretion may change the quantity/upgrade the criteria/drop any item or part thereof at any time before placing the Purchase Order. In case of any dispute, the decision of the Director of this Institute shall be final and binding on the bidders.
- X. This Tender Document and the Contract shall be governed by and interpreted in accordance with Laws in force in India. The Courts at Midnapur shall have exclusive jurisdiction in all matters arising under the contract.

For any query pertaining to this tender, correspondence may be addressed to:

**The Head, Computer & Informatics Centre  
Indian Institute of Technology,  
Kharagpur-721 302  
Email: head@cc.iitkgp.ernet.in**

In case the due date for submission and/or opening of the tender happens to be a holiday, the same will be accepted on the next working day. The timings will however remain unchanged. Please Note that the Institute remains closed during Saturdays & Sundays.

## 6. Price Bid Format

**Table 1: List of Items**

<b>S/N</b>	<b>Description of items</b>	<b>Specification</b>	<b>Qty. (no.)</b>	<b>Unit Price (Rs.) with 5 years warranty</b>	<b>Tax (Rs.)</b>	<b>Total Price (Rs.) with 5 year warranty</b>
1.	<b>Controller based Indoor wireless access point</b> with license for existing WLC to support APs with 5 years warranty	As per Annexure-1	280			
<b>Total Price including all Taxes with 5 years comprehensive onsite warranty</b>						

**ANNEXURE-1**

**SPECIFICATION FOR AP WITH INTERNAL ANTENNA**

S/N.	Specification	Comply (Yes/No)
1	The access point must be compatible with existing WLC. Bidder should upgrade image/software if required.	
2	Each access point should be supplied with AP licenses for existing WLC.	
3	The access point should be 802.11ac, Wave 2	
4	The Access Point should have at least 1 Port 10/100/1000Mb POE Uplink port, with Additional console port	
5	Access Point shall support Console port that uses Standard Port (RJ-45) type connection	
6	Access Point shall be able to perform as Wireless Controller, running standard-based, CAPWAP Protocol and act as controller for other 11n, 11ac Aps	
7	Access point must have integrated BLE with Minimum of 2 dBi of antenna gain.	
8	AP should have Dual Radios to support 2.4 GHz & 5Ghz concurrent users with 802.11 a/b/g/n capability.	
9	An access point must include a standard OEM provided Mounting brackets for mounting on Ceiling or Roof top.	
10	Must support at least 2X2 multiple-input multiple-output (MIMO) with two spatial streams	
11	Must support minimum of 20 dbm of transmit power in both 2.4Ghz and 5Ghz radios. And should follow the WPC norms for indoor WAP.	
12	Must support AP enforce load-balance between 2.4Ghz and 5Ghz band.	
13	AP should have -98 dB or better Receiver Sensitivity.	
14	AP should have technique to provide better reception for hard to hear clients and consistent performance while clients change their orientation i.e. beamforming	
15	The APs shall provide fast roaming for data and voice clients. There will be no deterioration of voice for clients roaming from one AP to another, roaming from one controller to another.	
16	At least 2 number of Integrated antenna, with min 2 dBi Gain for 2.4Ghz and 4 dBi antenna gain for 5Ghz both.	
17	Access point must support a minimum of 867 Mbps user throughput on 80Mhz in 5Ghz Or 1Gbps aggregate data rate of both the Radios	
18	Must support Management Frame Protection.	
19	Must operate as a sensor for wireless IPS.	
20	Must support 16 WLANs per AP for SSID deployment flexibility.	
21	The access point should support 802.1q VLAN tagging.	
22	System should support Authentication via 802.1X, Local (controller based) authentication database, support for RADIUS and Active Directory.	
23	The access point should support following security mechanism: WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i, EAP-TLS.	
24	Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.	
25	Must be plenum-rated (UL2043).	



## Annexure-2 Bank Guarantee Format

**MODEL BANK GUARANTEE FORMAT FOR FURNISHING EMD**

Whereas .....(hereinafter called the "tenderer") has submitted their offer dated ..... for the supply of ..... (hereinafter called the "tender") against the purchaser's tender Notice No. ....

KNOW ALL MEN by these presents that WE ..... of ..... having our registered office at ..... are bound unto ..... (hereinafter called the "Purchaser") in the sum of ..... for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this ..... Day of ..... 20 .....

THE CONDITIONS OF THIS OBLIGATION ARE

- (1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- (2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:
  - (a) If the tenderer fails to furnish the Performance Security for the due performance of the contract.
  - (b) Fails or refuses to accept/execute the contract.

WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch