Tender

For

Wireless Network Connectivity for the AIIMS Campus

At

All India Institute of Medical Sciences, Jodhpur

NIT Issue Date	:	**06th November, 2017**
NIT No.	:	**Admn/Tender/231/2017-AIIMS.JDH**
Pre-Bid Meeting	:	**17th November, 2017 at 03:45 PM**
Last Date of Submission	:	**07th December, 2017 at 03:00 PM**
Bid opening	:	**08th December, 2017 at 03:15 P.M**

Tender documents may be downloaded from institute's web site www.aiimsjodhpur.edu.in (for reference only) and CPPP site https://eprocure.gov.in/eprocure/app

All India Institute of Medical Sciences, Jodhpur

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All India Institute of Medical Sciences (AIIMS), Jodhpur, Rajasthan, an apex healthcare institute established by an Act of Parliament of India under aegis of Ministry of Health & Family Welfare, Government of India, invites **Online bids in two bid system for** tenders for supply & installation of the Wireless Network Connectivity at the institute. You are requested to quote your best offer along with the complete details of specifications, terms & conditions.

Chapter-I

	AIIMS Wi-Fi BOM					
1	**2**			**3**	**4**	**5**
Sr. No.	**Particulars of the items**			**Qty**	**Unit**	**EMD**
	Equipment	**S.No**	**Brief Description**			
1	Wireless LAN	1	Wireless LAN Controller for 1000 Access Points	2	Nos.	
		2	Indoor Access (2 x 2 MIMO)	500	Nos.	
		3	Indoor Access Points (4 x 4 MIMO)	10	Nos.	
		4	Outdoor Access Points (4 x 4 MIMO)	35	Nos.	
		5	Network Monitoring and Management System	1	Nos.	

Chapter-II

	AIIMS Wi-Fi BOM Quantity Requirement			
1	**2**	**3**	**4**	
S No.	**Particulars of the items**		**Qty**	**Unit**
	Equipment	**Brief Description**		
1	Access Switches	1. 24 Port PoE+ Swtich with 4 SFP Ports	25	Nos.
		2. 12 Port PoE+ Swtich with 2 SFP Ports	47	Nos.
2	LX modules	1. 1000BaseLX GBIC Modules	174	Nos.
3	Passive Copper Components (Cat-6)	1. Information Outlets	545	Nos.
		2. Single Face Plate/SMB	545	Nos.
		3. 3 ft Workstation/Equipment Cords	575	Nos.
		4. 7 ft Workstation/Equipment Cords	575	Nos.
		5. 24 Port CAT6 Patch Panel	67	Nos
		6. CAT6 UTP Cable Box	105	Nos.
4	Fiber Components	1. 6 Core SMF	4083	Mtrs.
		2. 6port LIU Loaded	46	Nos.
		3. 24 Port LIU Loaded	3	Nos.
		4. 12 Port LIU Loaded	5	Nos.
		5. SC-LC/SC FIBER PATCH CORD(3 m)	196	Nos.
5	Networking Enclosures	1. 12U Wall Mount Rack with Standard Accessories. The above racks must have all the standard accessories including wire manager, power distribution and hardware mounting ports.	65	Nos.
		2. 12U Weather Proof Box	35	Nos.
6	Services	1. Laying of CAT6 UTP Cable	32625	Mtrs.
		2. Laying of PVC Pipe/Casing Capping	12568	Mtrs.
		3. Fixing and Termination of IO's	480	Nos.

The EMD value **8,00,000** applies to Chapter-II items.

		4. Labeling, Installation & Termination of Jack Panel	67	Nos.
		5. Fixing, Installation of 12 U Rack With Proper Management of Cables	55	Nos.
		6. Fixing, Installation of weather Proof Box	30	Nos.
		7. Laying of Fiber Cable with route markers	3083	Mtrs.
		8. Fixing & Installation of LIU	48	Nos.
		9. Fusion Splicing of Pigtails on Fiber Cables	315	Nos.
		10. Laying of HDPE Pipe	3600	Mtrs.
		11. Digging of Hard Soil	400	Mtrs.
		12. Digging of Soft Soil	2750	Mtrs.
		13. Fiber Link Testing With Power Meter and OTDR for dB Loss	1	LS
		14. Certification & Documentation Charges	1	LS
7	Accessories	1. HDPE Pipe 25mm	3600	Mtrs.
		2. PVC Channel/Conduit (suitable dia) with Accessories	7000	Mtrs.
		3. 6 Mtr SS Pole	30	Nos
		4. PVC Cassing Capping (suitable dia) with Accessories	5568	Mtrs.

Instructions:

1. **Bids shall be submitted online only at CPPP website: https://eprocure.gov.in/eprocure/app.**
2. The complete bidding process in online. Bidders should be possession of valid digital Signature Certificate (DSC) of class II or III for online submission of bids. Prior to bidding DSC need to be registered on the website mentioned above. For any assistance for e-bidding process, if required, bidder may contact to the helpdesk at 0291-2740741.
3. **Tenderer/Contractor/Bidders are advised to follow the instructions provided in the 'Instructions to the Contractors/Tenderer/Bidders for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app'.**
4. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
5. **EMD Payment:**
   The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of **Rs. 8,00,000/- (Rupees Eight Lakhs Only)** by way of demand drafts or Bank Guarantee or FDR only. The demand drafts or Bank Guarantee or FDR shall be drawn in favour of "**All India Institute of Medical Sciences, Jodhpur**". The EMD of the successful bidder shall be returned after the successful submission of Bank Guarantee/ Security Deposit and for unsuccessful bidder(s) it would be returned after award of the contract. **The demand drafts or Bank Guarantee or FDR for EMD must deliver to AIIMS, Jodhpur on or before last date/time of Bid Submission.**
   a) Tenderer shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulation made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited.

   b) The Firm who are registered with National Small Industries Corporation (NSIC) / MSME OR Small Scale Industries (SSI) are exempted to submit the EMD (Copy of registration must be provide along with technical bid)

c) The EMD, in case of unsuccessful Bidders shall be retained by AIIMS, Jodhpur till the finalization of the tender. No interest will be payable by AIIMS, Jodhpur on the EMD.

6. The Hard Copy of original instruments in respect of earnest money deposit etc. must be delivered to the AIIMS, Jodhpur on or before last date/time of Bid Submission as mentioned above. The bid without EMD will be summarily rejected.

7. **Submission of Tender:**

The tender shall be submitted online in two part, viz., technical bid and financial bid. All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

The offers submitted by Telegram/Fax/email shall not be considered. No correspondence will be entertained in this matter.

i) **Technical Bid**

The following documents are to be furnished by the Contractor along with **Technical Bid** as per the tender document:

i) Signed and scanned copy of appropriate value of valid registration certificate (if any), experience certificate as per the tender notice, PAN, GST registration certificate and Tender Acceptance Letter.

ii) Signed and Scanned copy of documents like Tender Cost Earnest Money Deposit.

iii) Signed and Scanned Copy of Make and model of all systems, sub systems and additional items should be mentioned in the technical bid and complete technical details should be provided in the form of Brochures and write-ups.

Terms & Conditions:

1. **Validity:** The quoted rates must be valid for a period for 180 days from the date of closing of the tender. The overall offer for the assignment and bidder(s) quoted price shall remain unchanged during the period of validity. If the bidder quoted the validity shorter than the required period, the same will be treated as unresponsive and it may be rejected.

2. **"PRE –BID Meeting" with the intending bidders shall be held on 17th November, 2017 from 03:45 P.M. onwards at AIIMS, Jodhpur.** All the prospective bidders are requested to send comments/ representations on or before pre-bid meeting. Intending bidder will be allowed to seek clarification on specification, Conditions of Contract, etc. in writing to AIIMS, Jodhpur, within 48 hours after the pre-bid meeting.

3. In case the tenderer withdraws, modifies or change his offer during the validity period, bid is liable to be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof. The tenderer should also be ready to extend the validity, if required, without changing any terms, conditions etc. of their original tender.

4. **Delivery and Installation:**
   i) For goods supplied from India:
   All the goods ordered shall be delivered and Installed at AIIMS, Jodhpur within **180 days** from the date of issue of supply order.

   ii) For goods imported directly from abroad:
   All the goods ordered shall be delivered and Installed at AIIMS, Jodhpur within **180 days** from the date of opening of Letter of Credit for shipment.

All the aspects of safe delivery, installation and commissioning shall be the exclusive responsibility of the supplier. If the supplier fails to deliver, install and commission the goods on or before the stipulated date, then a penalty at the rate of 0.5% per week of the total order value shall be levied subject to maximum of 10% of the total order value. The successful tenderer will also provide required training for supplied items at AIIMS Jodhpur. The goods should be manufactured after adoption of latest technology.

If at any time during the currency of the contract, the supplier encounters conditions hindering timely of the goods and performance of services, the supplier shall promptly inform the AIIMS, Jodhpur for extension of the delivery schedule accordingly. On receiving the supplier's communication, the AIIMS, Jodhpur shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

In the case of package supply where the delayed portion of supply materially hampers installation and commissioning of the systems, liquidated damages charges shall be levied as above on the total value of the concerned package of the purchase order. Quantum of liquidated damages assessed and levied by the purchaser shall be final and not challengeable by the supplier.

8. **Signing the Contract: -** The successful bidder shall be required to execute the Contract Agreement accepting all terms and conditions stipulated herein on a non-judicial stamp paper of Rs. 500/- (Rs. Five Hundred only) along with performance security within fifteen days of the issue of the Letter of notification of award. In the event of failure on the part of the successful bidder to sign the Contract within the period stipulated above, the EMD shall be forfeited and the acceptance of BID shall be considered as cancelled.

9. **Performance Security:** As a guarantee towards due performance and compliance of the contract work, the successful bidder (contractor) will deposit an amount equal to 10% of order value and should be kept valid for a period of 60 day beyond completion of all the contractual obligation, including CMC period towards security deposit by way of demand draft/ bank Guarantee in favour of "All India Institute of Medical Sciences, Jodhpur "drawn on any Nationalized Bank/Scheduled Bank and payable at Jodhpur within fifteen days of the issue of the Letter of notification of award along with non-judicial stamp paper of Rs. 500/- (Contract agreement).

10. **Incidental Services:** The supplier shall be required to perform the following services:-
    a. Installation & Commissioning, Supervision and Demonstration of the goods.
    b. Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
    c. On Site Training to Doctors/ Technicians/ Staff is to be provided by Supplier for operation and maintenance of the equipment for a period of 30 working days after successful installation of the machine, as per direction of user department.
    d. Supplying required number of operation & maintenance manual for the goods.
    e. To provide non-locked open software and standard interface inter-operability conditions for networked equipment's in hospital management information system, wherever applicable.

11. **Accessories & Consumables:** The separate price list of all accessories and consumables, if any, must be attached/ enclosed along with the Financial Bid.

12. **After Sales Service:** After sales service centre should be available on 24 (hrs.) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 24 hrs to ensure an uptime of minimum 95%, wherever applicable, failing which the necessary penalty measures shall be enforced.

13. **Inspection:**

a. AIIMS, Jodhpur shall have the right to inspect and/or to test the goods to confirm their conformity to the NIT Specifications at no extra cost to the Purchaser.

b. AIIMS, Jodhpur right to inspect, test and, where necessary, reject the Goods after the goods arrival at the final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by AIIMS, Jodhpur prior to the goods shipment.

c. The Director, AIIMS Jodhpur shall be the final authority to reject full or any part of the supply which is not confirming to the specification and other terms and conditions.

d. No payment shall be made for rejected Stores. Rejected items must be removed by the Bidders within two weeks of the date of rejection at their own cost and replaced immediately. In case these are not removed, these will be auctioned at the risk and responsibility of the suppliers without any further notice.

14. **Documents:**
   a. **All pages of the Tender should be numbered and indexed**.
   b. The bidder shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully confirm to the goods and services specified by the purchaser in the tender documents. For this purpose the bidder shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the tender documents to establish technical responsiveness of the goods and services offered in its tender duly indicating relevant page numbers in the product literature.
   c. The bidder shall provide a list of major Government and Private Institutions where its relevant bid item has been supplied during last one year.

15. **Manufacturer Authorisation:** The bidder (if not original equipment manufacturer must submit Original Equipment Manufacturer authorization certificate that the tenderer is authorized for selling and maintain the equipment quoted for. Performa attached at **Annexure- III.**

16. The bidders are required to submit user certificate for the relevant equipment on the letter head of the institution (Government/ Private).

17. The successful bidder will be required to submit order copies of the supply of the equipment in Government institutions in last 12 month for rate reasonability purpose.

18. **Insurance: -** The supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. If the equipment's is not commissioned and handed over to AIIMS, Jodhpur within specified period, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the AIIMS, Jodhpur.

19. **Tender Currencies:**
   a. The bidder supplying indigenous goods or already imported goods shall quote only in Indian Rupees. Further, imported goods to be imported and supplied by the bidder are also required to be quoted in Indian Rupees.
   b. For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any, required with the goods, the same shall be quoted in Indian Rupees only, if such services are to be performed /undertaken in India.
   c. Tenders, where prices are quoted in any other way shall be treated as non -responsive and rejected.

20. **Tender Prices:** While filling up the columns of the Financial Bid, the following aspects should be noted for compliance:

For domestic goods or goods of foreign origin located within India, the prices in the corresponding Financial Bid shall be entered separately in the following manner:

a. The price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like GST, Custom Duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc.;
b. Any GST or other taxes, which will be payable on the goods in India if the contract is awarded;
c. Charges towards Packing & Forwarding, Inland Transportation, Insurance, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Financial Bid;
d. The price of Incidental Services, as mentioned in List of Requirements and Financial Bid;
e. The prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Financial Bid; and
f. The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Financial Bid.

For goods offered from abroad, the prices in the corresponding Financial Bid shall be entered separately in the following manner:

a. The price of goods quoted FOB port of shipment, as indicated in the List of Requirements and Financial Bid;
b. The price of goods quoted CIF port of entry in India as indicated in the List of Requirements and Financial Bid;
c. The price of goods quoted for delivery at AIIMS, Jodhpur as indicated in the List of Requirements, Financial Bid and Consignee List;
d. Wherever applicable, the amount of custom duty with CDEC applicable on CIF value on the goods to be imported;
e. The charges for Loading/Unloading, Inland transportation, Insurance and other local costs, Incidental cost to delivery of the goods from the port of entry in India to AIIMS, Jodhpur, as specified in the List of Requirements and Financial Bid;
f. The charges for Incidental Services, as in the List of Requirements and Financial Bid;
g. The prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Financial Bid; and
h. The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Financial Bid.

Additional information and instruction on Duties and Taxes: If the Bidder desires to ask for GST, Customs Duty etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such GST and Customs duty etc. and no claim for the same will be entertained later.

GST:
a. If reimbursement of GST is intended as extra over the quoted prices, the supplier must specifically state the same indicating the rate, quantum and nature of the GST applicable. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of GST will be entertained after the opening of tenders.
b. If a bidder chooses to quote a price inclusive of GST and also desires to be reimbursed for variation, if any, in the GST during the time of supply, the Bidder must clearly mention the same and also indicate the rate and quantum of GST included in its price. No claim on account of GST will be entertained after the opening of tenders.
c. Subject to sub clauses (i) & (ii) above, any change in GST upward/downward as a result of any statutory variation in GST taking place within contract terms shall be allowed to the extent of actual quantum of GST paid by the supplier. In case of downward revision in GST, the actual quantum of reduction of GST shall be reimbursed to the purchaser by the supplier. All such

adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

Customs Duty: In respect of imported goods offered from abroad, the bidder shall specify the rate as well as the total amount of customs duty payable with Custom Duty Exemption Certificate, if applicable, on the quoted goods in the Financial Bid. The bidder shall also indicate the corresponding Indian Customs Tariff Number applicable for the goods.
a. For transportation of imported goods offered from abroad, relevant instructions as incorporated shall be followed.
b. For insurance of goods to be supplied, relevant instructions as provided shall be followed.
c. Unless otherwise specifically indicated in this NIT document, the terms FCA, FOB, FAS, CIF, CIP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris.
d. The need for indication of all such price components by the bidders, as required in this clause is for the purpose of comparison of the tenders by the purchaser and will no way restrict the AIIMS, Jodhpur right to award the contract on the selected bidder on any of the terms offered.

21. **Indian Agent:-**If a foreign bidder has engaged an agent in India in connection with its bid, the foreign bidder, in addition to indicating Indian agent's commission, if any, shall also furnish the following information:
a. The complete name and address of the Indian Agent and its Permanent Account Number as allotted by the Indian Income Tax authority.
b. The details of the services to be rendered by the agent for the subject requirement.
c. Details of Service outlets in India, nearest to the AIIMS, Jodhpur to render services during Warranty and CMC period.

22. **Firm Price**
a. Unless otherwise specified in the NIT, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account.
b. However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated will apply.

23. **Conversion of tender currencies to Indian Rupees: -** In case the bid document permits the bidders to quote their prices in different currencies, all such quoted prices of the responsive bidders will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the closing exchange rates established by the Reserve Bank of India for similar transactions, as on the date of **'Last Date of Submission of Tender'.**

24. **Payment Terms:**
   i) **Payment for goods supplied from India:**
      100% payment of the total order value shall be released after the successful installation/ commissioning of the ordered goods against the submission of the inspection report.
   ii) **Payment for Imported goods:**
      For imported goods payment shall be made in the following manner:
      a) **On shipment:** 75 % payment of the contract price shall be paid 60 days after presentation of shipping documents {goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country} and upon the submission of the following documents:
         i.   Four copies of Supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
         ii. Original and four copies of the clean, on-board Bill of Lading/ Airway bill, marked freight prepaid and four copies of non-negotiable Bill of Lading/Airway bill.
         iii. Insurance Certificate;

    iv.   Certificate of origin by the chamber of commerce of the concerned country;
    v.   Certificate of country of origin;
    vi.   Manufacture's / Supplier's warranty certificate;
    vii.   Manufacturer's own factory inspection report.

b) On Acceptance: 25 % payment would be made after satisfactory installation & commissioning on issuance of Inspection certificate by the AIIMS, Jodhpur.

Note:-The supplier shall not claim any interest or any other payment under the contract.

25. **Custom Clearance:** For the Goods to be imported and supplied, the Institute will provide Custom Duty Exemption Certificate (CDEC) to successful bidder for availing concessional rate of duty as per prevailing Custom Tariff. In case, the bidder requires CDEC certificate, then the same should be specifically mentioned in the bid. The supplier is solely responsible for getting the material clearance from customs. Institute will provide all custom documents for custom clearance on the demand of supplier. Transportation of goods up to AIIMS, Jodhpur and its successful installation and commissioning is also the responsibility of the supplier. All charges/ expenses incurred in this process will be borne by the supplier. NO DEMURRAGE / WHARFAGE CHARGES WILL BE PAYBALE BY THE INSTITUTE UNDER ANY CIRCUMSTANCES. NO ADVANCE PAYMENT WILL BE PAYABLE FOR CUSTOM CLEARANCE/ FREIGHT/INSURANCE ETC.

26. **Guarantee / Warrantee Period**: The Tenderers must quote for 05 years comprehensive warranty (Including all Spares, Accessories and Labour) from the date of completion of the satisfactory installation. The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected.

Comprehensive Annual Maintenance Contract (CMC/AMC) Post Warranty
- Complete system will be covered under post warranty Comprehensive Annual Maintenance Contract as per rates quoted in the price bid for a period of 5 years from the date of completion of warranty. The post warranty comprehensive AMC shall be a separate contract for 5 years period and shall be signed at beginning of the CMC period. The post warranty comprehensive AMC rates quoted in price bid for 5 years shall be included in the evaluation.
- During the post warranty comprehensive AMC period all software / services etc. as required to rectify any defect, will be provided by the successful bidder at no extra cost to AIIMS. Material / hardware /spares as required for such maintenance would also be provided by the bidder. No extra amount is payable by AIIMS for this post warranty AMC other than quoted AMC rates.
- Comprehensive AMC comprises of the following services as a minimum
a) Routine maintenance service: This is an on-site maintenance, which should be carried out four times in a year. Purpose of visit is to check system health and problem solving.
b) Breakdown maintenance service: In case of system breakdown, Vendor shall depute Engineers to restore the system at the earliest, within 24 Hours.
c) Software support and technical services: Software additions / modifications, technical assistance to Purchaser's Engineers, technical discussions with Purchaser's Engineers /Technicians at vendor's facility etc. are included.
d) Any Software/Hardware firmware upgrade should be included at no extra cost.
e) The personnel deployed to site shall have thorough knowledge of the system and at least two years of experience in maintenance of similar system.

- Quarterly prorated payment of finalised AMC amount will be made after successful completion of each quarter of respective post warranty AMC
- AIIMS reserves the right to order for the post warranty AMC along with the main order or after the completion of the warranty period of one year, and such decision solely is at AIIMSs

discretion. AIIMS reserves the right to sign the post warranty AMC for all 3 years or part of it or none.

UPGRADES

- Any upgrades to software/Hardware with respect to firmware and revisions during the period of contract, warranty and AMC should be provided by the successful bidder at no extra cost to AIIMS.

TRAINING

- The Successful Bidder will train AIIMS personnel at two levels

  (a) Training for the worker's/security staff at locations level

  (b) Training for AIIMS supervisory staff at locations / any other places as desired by AIIMS

27. **Uptime guarantee:** The firm should provide uptime guarantee of 98%

28. **Downtime penalty Clause**
    a. During the comprehensive warranty period, the guarantee uptime of 95% of 365 days will be ensured. In case the down time exceeds the 5% limit penalty of extension of guaranty period by two days for each additional day of down time will be enforced. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least FIVE YEARS after handling over the unit to the Institute. If accessories / other attachment of the system are procured from the third party, then the vendor must produce cost of accessory / other attachment and the CMC from the third party separately along with the main offer and the third party will have to sign the CMC with the Institute if required.
    b. The principals or their authorized service providers are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.

29. **Arbitration:** If any difference arises concerning this agreement, its interpretation on payment to the made there-under, the same shall be settled out by mutual consultation and negotiation. If attempts for conciliation do not yield any result within a period of 30 days, either of the parties may make a request to the other party for submission of the dispute for decision by an Arbitral Tribunal containing Sole Arbitrator to be appointed by the Secretary, Department of Legal Affairs. Such requests shall be accompanied with a panel of names of three persons to act as the sole arbitrator. In case of such arbitrator refusing, unwilling or becoming incapable to act or his mandate having been terminated under law, another arbitrator shall be appointed in the same manner from among the panel of three persons to be submitted by the claimant. The provision of Arbitration and Conciliation Act, 1990 and the rule framed there under and in force shall be applicable to such proceedings.

30. **Subletting of Work:** The firm shall not assign or sublet the work/job or any part of it to any other person or party without having first obtained permission in writing of AIIMS, Jodhpur, which will be at liberty to refuse if thinks fit. The tender is not transferable. Only one tender shall be submitted by one tenderer.

31. **Breach of Terms and Conditions:** In case of breach of any terms and conditions as mentioned above, the Competent Authority, will have the right to cancel the work order/ job without assigning any reason thereof and nothing will be payable by AIIMS, Jodhpur in that event the security deposit shall also stands forfeited.

32. **Insolvency etc:** In the event of the firm being adjudged insolvent or having a receiver appointed for it by a court or any other order under the Insolvency Act made against them or in the case of a company the passing any resolution or making of any order for winding up, whether voluntary or otherwise, or in the event of the firm failing to comply with any of the conditions herein specified AIIMS, Jodhpur shall have the power to terminate the contract without any prior notice.

33. **Force Majeure:** If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 days from the date of occurrence thereof, neither party hall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries have been so resumed or not shall be final and conclusive.

    Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may, at least option to terminate the contract.

34. Bidder shall submit a copy of the tender document and addenda thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as mentioned in the tender enquiry document.

35. The quantity of item given in the tender is tentative, which may be increased or decreased as per the institute's requirement.

36. Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature must be enclosed with the bid.

37. After due evaluation of the bid(s) Institute will award the contract to the lowest evaluated responsive tenderer on cumulative basis. The bidder must quote for all the items otherwise bid will be treated as unresponsive.

38. Conditional bid will be treated as unresponsive and it may be rejected.

39. **Demonstration:** - AIIMS Jodhpur reserves the right to ask the tenderers for arranging demonstration of their equipment for which rates have been quoted, to the concerned committee, if required.

40. The Institute reserves the right to accept in part or in full or reject any or more tender(s) without assigning any reasons or cancel the tendering process and reject all tender(s) at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).

41. **Applicable Law:**
    * The contract shall be governed by the laws and procedures established by Govt. of India,   within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings / processing.
    * Any disputes are subject to exclusive jurisdiction of Competent Court and Forum in Jodhpur, Rajasthan, India only.
    * The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Jodhpur. The decision of the Arbitrator shall be final and binding on both the partied.
    * Force Majeure: Any delay due to Force Majeure will not be attributable to the supplier.

Bidder Prequalification Criteria

In order to qualify for technical evaluation and further, bidder must meet the following minimum qualification criteria and submit relevant documents in support of following points:

1.   The bidder should be in registered in IT / ITeS related services business since last five years.

2.   The bidder should have a minimum annual turnover of Rs. 4 Crores from the IT and IT enabled Services during the last three financial years.

3.   The Bidder should have G.S.T & EPF registration certificates in India.

4.   The bidder should have following valid certificates for past two years:

   a. ISO 27001 Certificate
   b. ISO 9001 Certificate

5.   The bidder should have similar experience in any of the organizations in past three years ending 31st March 2017 as follows:

   a. Minimum one order of value Rs 3.20 Crores in one year;

   or
   b. Minimum two orders of total value of Rs 2.40 Crores in one year;

   or
   c. Minimum three orders of total value of Rs 1.60 Crores in one year.

"Similar" experience means the bidder must have experience of Supply, Installation, commissioning and maintenance of IT/ITeS Solution out of which deployed solution should be of (Wi-Fi Controller with Access Points / Active & Passive Networking).

6.   The bidder should have at least 10 technical resources on each category (Wifi Services/CCTV & NVR/Switching & Networking) on its payroll as on date of bid submission.

7.   The bidder should not be blacklisted by Any Central or State Government, Public Sector Undertakings or any other Government controlled agency.

                                                                        Administrative Officer
                                                                        AIIMS, Jodhpur

Annexure-I

Chapter-I

Technical Specification for Wireless LAN Controller for 1000 Access Points		Brand
Hardware	Hardware Appliance Populated with 1000 number of AP licenses from day 1	
	2 X 10G port and 2x 1G port, 3 x USB port, 1 x console port, dual Hotswappable PSU	
	It should be deployed in a way that connected wireless users should not face any outage and new users should be able to join in even if the connection to the cotroller goes down or controller gets rebooted. If additional controller is required for this then the same should be quoted.	
Architecture	The system architecture should provide all of these topologies	**Cisco/ HP/Extreme**
	a) Routed at controller: The WLAN controller acts like a L3 router forwarding the WLAN traffic into the LAN	
	- b) Bridged at controler: The WLAN controller acts as a L2 Switch forwarding the WLAN traffic into the LAN using specific VLANs	
	- c) Bridged at Access Point: WLAN traffic is forwarded directly at the LAN Entry port of the AP using specific VLANs.	
	· All offered access point models must be able to support these topologies simultaneously.	
	· The system must be able to change the topologies for each client after authorization	
	· Each authentication session must be controlled by individual access rule sets and VLAN Assignment	
	Qos per User or application with bandwidth limitation in and outbound	
	· Radius-Support with PreAuthentication and Pairwise Master Key (PMK) Caching providing roaming transition < 50 ms	
	· The controller architecture allows meshing of multiple controllers.	
	· VPN, Video and VoIP support with Fast Roaming and minimum five Qos Profiles for L2/L3	
	· Call Admission Control (CAC) controlled approval of new voice streams	
	· Multicast limitation per Wi-Fi service set, Bonjour support	
	· Supports UAPSD (Unscheduled Automatic Power Save Delivery)	
	· Flexible Client Access to enhance throughput of 802.11n clients	
	· Supports Location-Based-Services (EKAHAU , Aeroscout)	
	· Supports traffic mirroring configurable on per WLAN basis	
	· Supports Link Aggregation for load balancing and redundancy	

Guest portal	· Integrated Guest access System:	
	- customizable log in page	
	- Ticket-Templates	
	- local account management	
	- Ticket adminstration portal	
	· Guest access via Captive Portal authentication and limited access for unauthorized clients - Walled Garden	
	· HTML-Editor for portal customization	
Configuration	· Wizard for guided basci setup, high availability and WLAN services	
	· AP configuration and operation in L2 and L3 topologies	
	· Support of Rulesets per User,SSID, Interface and AP in all topology variations.	
	· Opportunistic Key Caching (OKC) for secure and fast roaming	
	· Supports Dynamic Meshing to establish load balanced WDS structures	
	· Administrative access must be secured via RADIUS.	
	· Controller independant management of Interference detection per channel, automatic channel switch , interference reaction and channel release after interference situation is cleared	
	· Support creation of L2 -L7 ACL / policies to control network based on MAC, IP , TCP port and known applications (such as whatsapp, FaceBook, YouTube)	
	· Detection and compensation of insufficient coverage or AP failure by automatic power control.	
	· Supports RFC-3580 tunnel-id adaption into filter rule sets	
	· MAC-Blacklist/Whitelist	
Management	· Full management of all featurs via:	
	Webinterface (HTTP/HTTPs), SNMP V1, V2.c,V3, CLI, Telnet, SSH	
	· IPv4 and v6 support	
	· Supports encrypted communication between AP and controller using IPSEC, IKEv2, AES and Diffie-Hellman protocols.	
	· Packet Encapsulation via CAPWAP Tunnelling Protocol	
	· New APs must be approved by the admin before integration.	
	· Support definition of virtual network services with several RADIUS based authentication methods and rule sets	
	· Site specific assignment of APs, network services and rule sets	
	· Supports autonomous routed IP subnet with separate DHCP service	
	· Optional support of 3rd party AP via dedicated port.	
	· Rogue Access point, Internal & External honeypot Detection and Prevention	

	· Integration in unified LAN/WAN Management with patch management, automatic config backup/restore and ruleset roll-out	
	· Supports 802.11 real time capture in wireshark format	
	· Ability to generate Network Use statistics per user with application visibility using netflow	
	Client Association, client statistics	
	WLAN and LAN interface statistics	
	· Reports can be accessed via GUI and exported via HTML and accessed via SNMPv2	
Availability	· Should be able to achieve High Availaibility with the existing Wireless Controller using any preferable open or proprietary standards. If one controller fails, the backup must be capable of covering all APs	
	· High availability by controller pairing redundancy with short poll cycles	
	· High availability with LAN using dynamic OSPF routing	
	· Fast Failover without loss of voice- or data connections	
	· Access Points are capable to operate when controller fails (local L2-Bridging)	
	· Without controller, an AP can redirect authentication requests to a local RADIUS Server.	

Technical Specifications for Indoor Access (2 x 2 MIMO)		Brand
Description / Parameters	Access Point (AP) with two integrated, independant radio units 802.11 a/b/g/n/ac and External Antennae Include Wall mounting, Ceiling mounting Bracket, Plenum Rated Operating temparature 0 - 45 deg C, Humidity 0%-95%, Should be supplied with external Power Adapters	**Cisco/ HP/Extreme**
	2,4 GHz 802.11a/n/AC, 5 GHz 802.11b/g/n/AC	
	LDPC, STBC, Maximum Likelihood (ML) Detection 802.11n: BPSK, QPSK, 16QAM, 64QAM with OFDM	
	2x2 MiMO , & minimum 40K packet per second on wired port throughput	
	1x 10/100/1000BaseTX Ethernet Port	
	Transmit Power minimum 350 mw or higher	
	Supports IPv6, Multicast to unicast Conversion on AP, Power Saving to ooptimize Multicast Traffic	
	Real time RF management of interference detection per channel, automatic channel switch , interference reaction and channel release after interference situation is cleared	
	Roaming and minimum five Qos Profiles according to IEEE 802.11e. Pre standard Legacy applications and clients must be also prioritized.	
	Packet Encapsulation via CAPWAP tunnelling protocol	
	Centralized and automatic configuration and Management in L2- and L3 environments	
	Supports min. 16 SSID per AP, support 120 user per radio	

Identification, containment and control for protocols like Bonjour,LLMNR,UPnP	
Onboard Encryption supports WEP, WPA2 (IEEE 802.11i, AES), IPSec, IKEv2	
Security architecture compliant to IEEE 802.1x for WLAN Clients	
Radius-Support with PreAuthentication and Pairwise Master Key (PMK) Caching providing roaming transition < 50 ms Support for Opportunistic Key Caching	
Support of X.509 Certificates	
Supports VoWLAN with SVP,WMM, 802.11e	
User based and Rule based Rate limit, SSID based Traffic prioritization	
Supports layer3 roaming day 1, Fast roaming with 802.11k and 802.11r	
Supports power save mode of VoWLAN devices and optimized roaming by defined disassociation of VoWLAN devices based on bandwidth thresholds.	
Supports branch office mode: APs can act controller independant as local Bridges with up to 4K VLAN IDs	
Supports assigining of Vlans, Access Priviledge and Bandwidth profile as per role of user based on RFC 3580 Radius Standard Users should be able to log in through a single SSID for simplicity and get assigned to individual roles as per AD / LDAP policy	
IEEE 802.11h DFS and TPC Support	
Simultanous bridging at AP and tunnelling into the controller an the same SSID	
Detects and classifies RF interference (Spectrum Analysis & Fingerprinting of interfering frequencies such a bluetooth, microwave etc) without impact to packet forwarding	
Integrated WIDS and WIPS function without impact to packet forwarding, Rogue AP detection , DOS attack prevention, Honeypot detection and prevention	
Client Load Balancing between AP's	
Airtime fairness	
Support sflow / netflow for user traffic analysis	

Technical Specifications for Indoor Access Points (4 x 4 MIMO)		Brand
Description / Parameters	Access Point (AP) with two integrated, independant radio units 802.11 a/b/g/n/ac and External Antennae Include Wall mounting and Ceiling mounting Bracket Operating temparature 0 - 45 deg C, Humidity 0%-95%	**Cisco/ HP/Extreme**
	2,4 GHz 802.11a/n/AC, 5 GHz 802.11b/g/n/AC	
	LDPC, STBC, Maximum Likelihood (ML) Detection	
	4x4 MiMO , & minimum 90K packet per second on wired port throughput	
	2x 10/100/1000BaseTX Ethernet Port	

	Transmit Power minimum 500 mw or higher, 96dBm or higher rx sensitivity
	Supports IPv6, Multicast to unicast Conversion on AP, Power Saving to optimize Multicast Traffic
	Real time RF management of interference detection per channel, automatic channel switch , interference reaction and channel release after interference situation is cleared
	Roaming and minimum five Qos Profiles according to IEEE 802.11e. Pre standard Legacy applications and clients must be also prioritized.
	Packet Encapsulation via CAPWAP tunnelling protocol
	Centralized and automatic configuration and Management in L2- and L3 environments
	Supports min. 16 SSID per AP, support 200 user per radio
	Identification, containment and control for protocols like Bonjour,LLMNR,UPnP
	Onboard Encryption supports WEP, WPA2 (IEEE 802.11i, AES), IPSec, IKEv2, SSL
	Security architecture compliant to IEEE 802.1x for WLAN Clients
	Radius-Support with PreAuthentication and Pairwise Master Key (PMK) Caching providing roaming transition < 50 ms Support for Opportunistic Key Caching
	Support of X.509 Certificates
	Supports VoWLAN with SVP,WMM, 802.11e
	User based and Rule based Rate limit, SSID based Traffic prioritization
	Supports layer3 roaming day 1, Fast roaming with 802.11k and 802.11r
	Supports power save mode of VoWLAN devices and optimized roaming by defined disassociation of VoWLAN devices based on bandwidth thresholds.
	Supports branch office mode: APs can act controller independant as local Bridges with up to 4K VLAN IDs
	Supports assigining of Vlans, Access Priviledge and Bandwidth profile as per role of user based on RFC 3580 Radius Standard Users should be able to log in through a single SSID for simplicity and get assigned to individual roles as per AD / LDAP policy
	IEEE 802.11h DFS and TPC Support
	Simultanous bridging at AP and tunnelling into the controller an the same SSID
	Detects and classifies RF interference (Spectrum Analysis & Fingerprinting of interfering frequencies such a bluetooth, microwave etc) without impact to packet forwarding
	Integrated WIDS and WIPS function without impact to packet forwarding, Rogue AP detection , DOS attack prevention, Honeypot detection and prevention
	Client Load Balancing between AP's

	Airtime fairness	
	Support sflow / netflow for user traffic analysis	

Technical Specifications for Outdoor Access Points (4x4 MIMO)		Brand
Description / Parameters	Access Point (AP) with two integrated, independant radio units 802.11 a/b/g/n/ac and External Antennae Include Wall mounting and Ceiling mounting Bracket Operating temparature -10 to 60 deg C, Humidity 0%-95% IP67 and NEMA 6 certification for weather and dust protection	**Cisco/ HP/Extreme**
	2,4 GHz 802.11a/n/AC, 5 GHz 802.11b/g/n/AC	
	LDPC, STBC, Maximum Likelihood (ML) Detection	
	4x4 MiMO , & minimum 90K packet per second on wired port throughput	
	2x 10/100/1000BaseTX Ethernet Port	
	Transmit Power minimum 500 mw or higher, 96dBm or higher rx sensitivity	
	Supports IPv6, Multicast to unicast Conversion on AP, Power Saving to optimize Multicast Traffic	
	Real time RF management of interference detection per channel, automatic channel switch , interference reaction and channel release after interference situation is cleared	
	Roaming and minimum five Qos Profiles according to IEEE 802.11e. Pre standard Legacy applications and clients must be also prioritized.	
	Packet Encapsulation via CAPWAP tunnelling protocol	
	Centralized and automatic configuration and Management in L2- and L3 environments	
	Supports min. 16 SSID per AP, support 200 user per radio	
	Identification, containment and control for protocols like Bonjour,LLMNR,UPnP	
	Onboard Encryption supports WEP, WPA2 (IEEE 802.11i, AES), IPSec, IKEv2, SSL	
	Security architecture compliant to IEEE 802.1x for WLAN Clients	
	Radius-Support with PreAuthentication and Pairwise Master Key (PMK) Caching providing roaming transition < 50 ms Support for Opportunistic Key Caching	
	Support of X.509 Certificates	
	Supports VoWLAN with SVP,WMM, 802.11e	
	User based and Rule based Rate limit, SSID based Traffic prioritization	
	Supports layer3 roaming day 1, Fast roaming with 802.11k and 802.11r	
	Supports power save mode of VoWLAN devices and optimized roaming by defined disassociation of VoWLAN devices based on bandwidth thresholds.	
	Supports branch office mode: APs can act controller independant as local Bridges with up to 4K VLAN IDs	

Supports assigining of Vlans, Access Priviledge and Bandwidth profile as per role of user based on RFC 3580 Radius Standard Users should be able to log in through a single SSID for simplicity and get assigned to individual roles as per AD / LDAP policy	
IEEE 802.11h DFS and TPC Support	
Simultanous bridging at AP and tunnelling into the controller an the same SSID	
Detects and classifies RF interference (Spectrum Analysis & Fingerprinting of interfering frequencies such a bluetooth, microwave etc) without impact to packet forwarding	
Integrated WIDS and WIPS function without impact to packet forwarding, Rogue AP detection , DOS attack prevention, Honeypot detection and prevention	
Client Load Balancing between AP's	
Airtime fairness	
Support sflow / netflow for user traffic analysis	

Technical Specification for Network Monitoring and Management System		Brand
Network Visibility	Hardware based platfform or Server with minimum Octa Core CPU, 24 GB RAM, 160 GB HDD, Quad NIC Card, Redundant PSU	
Vendor should provide a management solution meeting the following requirements as a minimum:		
Management and Monitoring	Must provide centralized management that should be able to manage all network components	**Cisco/ HP/Extreme**
	Must be able to support minimum 100 Network Device nodes and scalable to 1000 Network Device nodes	
	Must provide a utility to view and select MIB objects from a tree-based representation	
	Must have SNMP MIB compile capability to integrate any 3rd party snmp compliant device	
	Must allow for graphing or viewing in table format and multiple OIDs that are user selectable.	
	Must be able to create correlated topology based on LLDP , SNMP , L2 and L3 protocol connectivity hierarchy	
	Must allow system-level operations such as device discovery, event management, logging and application maintenance to be performed centrally.	
	Must provide the capabilities to modify, filter, and create your own flexible views of the network.	
	Must allow scheduled events or tasks that the user can perform behind the scenes or schedule an event for another time in the future.	
	Must provide a system wide deployment of VLAN configuration and monitoring capabilities.	
	Must support RADIUS or LDAP Authentication for users of the application.	

	Must be able to define policies to rate-limit bandwidth, throttle the rate of new network connections, prioritize based on Layer 2 or Layer 3 QoS mechanisms, apply packet tags, isolate/quarantine a particular port or VLAN, and/or trigger pre-defined actions.	
	Should be able to integrate with the Quoted WLAN and also existing Network devices (Switches/ routers/ firewall)	
	Should be able to display heatmap to visualize Wireless connectivity status and trace user connectivity from wireless to wired backhaul.	
	Should be able to track user location on floor map and display historical movement of users across the campus.	
	Must allow IT administrators to easily define a number of pre-configured network policies, and designate select personnel to activate/deactivate these policies as appropriate	
	Must provide an audit trail (event log) of changes done	
	Must provide the ability to track attributes such as serial number, asset tag, date and time of configuration saves, firmware version, and file size.	
	Must be able to provide a centralized history of firmware and configuration changes and other inventory management operations made to a device.	
	Must be able to generate valuable, in-depth capacity reports of used and unused resources for network inventory planning purposes.	
	Must support the ability to download firmware and boot PROM images to single or multiple devices simultaneously.	
	Must be able to schedule routine device configuration back-ups.	
	Must be able to download text-based (ASCII format) configuration templates to one or more devices.	
	Must provide a interface with troubleshooting and monitoring tools (Ping / Traceroute, SSH, Telnet, Http/s)	
	Must enable diagnosis of network issues and performance through real-time Flow analysis (sflow / Netflow / jFlow)	
	Must provide user customizable reports creation and periodic email of the same to IT admin groups	
	Must be scalable to provide open XML APIs for integration with third party applications / Cloud Connect if necessary with additional licenses	
Security Access Control	Should be able to gather Detailed identity and access information with OS and device fingerprinting for at least 25 different types of OS	**Cisco/ HP/Extreme**
	Solution must be ready for minimum 3000 devices which should include Registration, onboarding, Authentication for each client device.	
	Solution must support User Validation as well as device Validation for two factor security against an AD or LDAP database. Solution should also have database in-built for user account creation.	

	Must be able to track user identity across the network and show port level connection for each individual user in an Interactive topology map
	Must be able to do vulnerability assessment and penetration testing of compute clinets to expose points of penetration for the endpoints and generate Health Check scores / state.
	Support event logging of Device Access and Activity Time Stamp
	Device search functionality by attributes such as user name / OS type / IP- MAC address / System Name
	Must support automated onboarding and self registration of users and end systems. Should not require installation of additional external application to bind specifc device to services. Must also offer the option of sponsorship capabilities to validate/ approve user access request by designated department heads without involvement of IT staff.
	Must Support location based Registration portals to redirect Users enterng through different Network Zones to different access privilge for location specific security
	Must support automated context based policy provisioning of network services for mobile devices
	Must provide comprehensive visibility into all managed mobile devices in the infrastructure.
	Must provide a vendor agnostic integration architecture that can support provisioning of access rights on any 3rd party Network device
	Must provide integration services with 3rd Party End point integrity check softwares.
	Must provide interoperability with Microsoft NAP and Trusted Computing Croup TNC.
	Must support the ability to monitor end-system events and view the health results from an end-system's latest assessment scan.
	Must provide the ability for analysts to be able to easily tailor the dashboard views to present the information in their preferred format.
	Should be capable of reporting for historical and real-time data. Should be equipped with Custom report designer to meet the needs of specific data attributes and periodic email of the same to relevant Administrative team.
	Must be able to integrate with 3rd party devices
	IPv6 support for implementation in networks with IPv6 end systems.
	Support Management Access Authentication and Change of Authorization when any of device or user attribute changes
	Support Manipulation of Radius Attributes for Authentication as well as Radius Accept
	The system should have future upgrade path to check for operating system updates and patches for Windows (2000, XP, Vista and Windows 7 / 8 /10) / MAC operating systems

	Detailed Technical Specifications	Brand
Network Analytics	Solution should be able to cater to minimum 3000 Flows per minute from day 1 and scale to 500K flow as required.	**Cisco/ HP/Extreme**
	Solution should be based on unsampled flow and data collection so as to give accurate reports and stat analysis.	
	Solution should be able to provide deep packet inspection and application visibility for the entire network.	
	Solution shoud be able to Gain Layer 4-7 application visibility using Network-based Application Recognition to help identify and improve the performance of business-critical applications	
	Troubleshoot performance problems consistently using detailed flow- and packet-based analytics	
	Validate infrastructure updates such as WAN optimization, and QoS policy changes	
	Should be equipped with prepackaged dashboards, interactive and customizable reports to enhance operational efficiency	
	Should be able to recognize 12000 + fingerprints and 7000+ applications. Should also support option to add signature for customized inhouse application.	
	Should be able to provide network performance versus applications performance to pinpoint area of trouble	
	Should be able to associate additional contextual information such as user, role, location, time, device, and more with any application.	
	Should be able to categorise impact of a new application introduced in the network and its usage	
	Should be able to categorise usage pattern for individual network locations (eg Storage / DMZ / Data Center / Business Units) in terms of bandwidth, types & name s of application used , network and application performance in real time as well historical output.	

Chapter-II

S. No	Technical Specifications for Switches 24 Port with 4 SFP Ports	
	Detailed Technical Specifications	**Brand**
1	Enterprise classs switch with Minimum 24 ports of 10/100/1000 base-T with POE and 4 additional SFP uplink ports	**Cisco/HP/ Extreme/Juniper**
2	1 U Rack mountable and should support stacking	
3	56 Gbps or higher Backplane capacity and minimum 40 Mpps of forwarding rate	
4	Switch should have min of POE/POE+ power budget of 400W.	
5	Should support Non-blocking and distributed forwarding hardware architecture	
6	All interfaces should provide wire speed forwarding for both Fiber and copper modules	
7	Memory: 512MB DRAM, 1GB Flash	
8	Support for at least 1000 VLANs & 16k MAC address	
9	It should have static IP routing and RIP from Day 1	
10	It should have Address Resolution Protocol (ARP) entries: 2,000	

11	Switch should have IPv4 unicast routes in hardware: 6000
12	Switch should support 8 hardware queues per port
13	Dynamic Host Configuration Protocol (DHCP) snooping
14	Switch Should Support OSPF
15	Switch Should Support Bidirectional forwarding detection
16	Switch should support LLDP and LLDP-MED capabilities
17	Should support IP source guard & DAI
18	Should support Secure Shell (SSH) Protocol and Simple Network Management Protocol Version 3 (SNMPv3).
19	Switch needs to have console port for administration & management
20	Management using CLI, GUI using Web interface should be supported
21	FTP/TFTP for upgrading the operating System
22	IEEE 802.1x support
23	IEEE 802.1D Spanning-Tree Protocol
24	IEEE 802.1p class-of-service (CoS) prioritization
25	IEEE 802.1Q VLAN
26	IEEE 802.3 10BASE-T specification
27	IEEE 802.3u 100BASE-TX specification
28	Switch should able to support management via CLI, Web interface
29	SNMP v1,v2,v3
30	Switch should be manageable through both IPv4 & IPv6.
31	Switch should be UL-UL60950-1, EN 55022 Class A, CE and ROHS
32	Should have modular OS and should support configuration roll back to recover mis-configured switch to last known good configuration
33	The switch should be EAL 3/NDPP certified under Common Criteria.
34	OEM should have atleast 8 spare depot in India.
35	**Approved Makes**

Technical Specifications for 12 Port Switch with 2 SFP Ports		
S. No	**Detailed Technical Specifications**	**Brand**
1	Enterprise classs switch with Minimum 12 ports of 10/100/1000 base-T with POE and 2 additional SFP uplink ports	**Cisco/HP/ Extreme/Juni per**
2	1 U Rack mountable and should support stacking	
3	28 Gbps or higher Backplane capacity and minimum 20 Mpps of forwarding rate	
4	Switch should have min of POE/POE+ power budget of 100W.	
5	Should support Non-blocking and distributed forwarding hardware architecture	
6	All interfaces should provide wire speed forwarding for both Fiber and copper modules	

7	Memory: 512MB DRAM, 1GB Flash
8	Support for at least 1000 VLANs & 16k MAC address
9	It should have static IP routing and RIP from Day 1
10	It should have Address Resolution Protocol (ARP) entries: 2,000
11	Switch should have IPv4 unicast routes in hardware: 6000
12	Switch should support 8 hardware queues per port
13	Dynamic Host Configuration Protocol (DHCP) snooping
14	Switch Should Support OSPF
15	Switch Should Support Bidirectional forwarding detection
16	Switch should support LLDP and LLDP-MED capabilities
17	Should support IP source guard & DAI
18	Should support Secure Shell (SSH) Protocol and Simple Network Management Protocol Version 3 (SNMPv3).
19	Switch needs to have console port for administration & management
20	Management using CLI, GUI using Web interface should be supported
21	FTP/TFTP for upgrading the operating System
22	IEEE 802.1x support
23	IEEE 802.1D Spanning-Tree Protocol
24	IEEE 802.1p class-of-service (CoS) prioritization
25	IEEE 802.1Q VLAN
26	IEEE 802.3 10BASE-T specification
27	IEEE 802.3u 100BASE-TX specification
28	Switch should able to support management via CLI, Web interface
29	SNMP v1,v2,v3
30	Switch should be manageable through both IPv4 & IPv6.
31	Switch should be UL-UL60950-1, EN 55022 Class A, CE and ROHS
32	Should have modular OS and should support configuration roll back to recover mis-configured switch to last known good configuration
33	The switch should be EAL 3/NDPP certified under Common Criteria.
34	OEM should have atleast 8 spare depot in India.
35	**Approved Makes**

Technical Specifications for Fiber Components		
S. No	**Item**	**Decription**
1	**Fiber Components**	1. 6 Core SMF- unitube armored with 2 rod as a central strength member.
		2. 6port LIU Loaded (WR CRS with coupler & pigtails)
		3. 24 Port LIU Loaded (WR CRS with coupler & pigtails)
		4. SC-LC/SC FIBER PATCH CORD(3 m)
2	**Approved Makes**	**Molex/Panduit/ Siemon**

S. No	Item	Decription
	Technical Specifications for Passive Copper Components	
1	**Passive Copper Components (Cat-6)**	1. Information Outlets (Shutter Jack)
		2. Single Face Plate/SMB (86mm x 86mm)
		3. 3 ft Workstation/Equipment Cords
		4. 7 ft Workstation/Equipment Cords
		5. 24 Port CAT6 Patch Panel (loaded with shutter jack with rear cable manager)
		6. CAT6 UTP Cable Box FRPVC 23AWG.
2	**Approved Makes**	**Molex/Panduit/ Siemon**

S. No	Item	Description
	Technical Specifications for Networking Enclosures	
1	**General Requirements**	Rack should be designed to provide **Secure, Store, Streamline and Systemize IT Equipment's**
		Racks should be manufactured out of steel sheet punched, formed, welded and powder coated
		Rack should have 100% assured compatibility with all equipment's conforming to **DIN 41494** (General Industrial Standard for equipment's) or Equivalent **EIA /ISO / EN** Standard
		Rack should have 2 No Adjustable, 19" verticals with Punched 9mm Square Hole and Universal 12.7mm-15.875mm-15.875mm alternating hole pattern offering greater mounting flexibility and maximizes usable mounting space
		The Racks should be 550mm in width and 500 in depth for Network application
2	**Physical Specifications**	The Dimensions of the racks should be - HxWxD = 613x550x500
		Standard for Rack configuration should be welded frame integrated with side panel and vented top cover
		Usable Height should be 12U
3	**Equipment Access & Installation**	The front door should open to allow easy access.
		Rack should have 1 Packet of mounting hardware, Pack of 20.
		All weight bearing components should be made from steel with a thickness not less than 1mm
		All sheet metal parts should be Pre-Treated and powder coated meeting ASTM Standard.
4	**Certifications, Environmental and Safety Requirements**	Racks should be manufactured by **ISO9001:2008, ISO14001:2004 & OHSAS18001:2007** Certified company and should have proper EHS Policy
		Products must be **UL** Certified
		Manufacturer must certify that the products are **RoHS** Compliance
		Manufacturer must certify that the products are Comply DIN41494 and Equivalent EIA/ISO/EN /CEA Standard.

		The rack should comply minimum of IP 20 rating for protection against touch, ingress of foreign bodies and ingress of water.
		The enclosure should both protect the user from mechanical hazards and generally meet the requirements for a mechanical enclosure (stability, mechanical strength, aperture sizes, etc.) as defined in IEC 60950 Third Edition
		Rack should have 1 no. Power Distribution Units with 6No 5A Indian Round Pin with PDU Rating 1.8KVA
		Rack should have 1 no. Horizontal Cable Organizer with plastic loops
		Rack should have provision for cable Entry and Exit from both top and bottom
		Rack should have 1 no. Cantilever Shelf for mounting NON-Rack Mountable Equipment's
		Rack should have Front Toughened Glass Door with lock and key
		The unit should be shipped fully assembled as one orderable Unit
		The manufacturer should offer an inside-delivery shipping option which includes reasonable delivery to the inside of the building and removal and disposal of shipping material and packaging.
5	**Warranty and Support**	The Products manufactured should provide warranty for 3 year from date of invoice, the warranty does not cover wrong Usage or miss-handling the products
		Electrical items such as Sockets, switches, fans etc. should have warranty for 3 year from date of installation
		For malfunction of any units/item in the rack, the support should be provided within the next business day
		Warranty claim has to be attended within 72 working hours
6	**Approved Makes**	**APC/Netrack/Panduit**

Technical Specifications for Outdoor Weather Proof Boxes/Racks		
S. No	**Item**	**Description**
1	**General Requirements**	Rack should be designed to provide **Secure, Store, Streamline and Systemize IT Equipment's**
		Rack should have 100% assured compatibility with all equipment's conforming to **DIN 41494** (General Industrial Standard for equipment's) or Equivalent **EIA /ISO / EN** Standard
		The Rack should have 4 No Adjustable, 19" verticals with Punched 10mm Square Hole and Universal 12.7mm-15.875mm-15.875mm alternating hole pattern offering greater mounting flexibility, with numbered U positions
		The Rack should be 613mm in height, 600mm in width and 500mm in depth
2	**Physical Specifications**	Rack should support static load of 30 kgs (Uniformly distributed in U space)
		Rack should be associated with front metal door with Knob lock & key and should have provision to mount on Wall/Pole
		Rack should have PU Gasket associated with the door

		Rack should be fully welded frame with integrated side panel
3	Equipment Access & Installation	The Rack should have 12U usable Space
		The Rack should have 2No's adjustable, 19" verticals with punched 10mm square hole and Universal 12.7mm-15.875mm-15.875mm alternating hole pattern offers greater mounting flexibility, with numbered U positions
		The OEM should include 20 No of Mounting hardware for equipment fixing.
		The front door should be easily detachable.
		The front door should open to allow easy access.
		Side panels should have integrated with the frame so that overall width of the unit does not change with the side panels installed
4	Certifications, Environmental and Safety Requirements	All weight bearing components should be made from CRCA with a thickness not less than 1.5 mm, 19" equipment mounting angle should be 1.5MM and other parts not less than 1.5mm
		All sheet metal parts should be Pre-Treated, primer Coated fallowed by powder coated meeting ASTM Standard and Out Door / IP55 Requirement
		Racks should be manufactured by **ISO9001:2008, ISO14001:2004 & OHSAS18001:2007** Certified company and should have proper EHS Policy\
		Manufacturer must certify that the products are **RoHS** Compliance
		Manufacturer must certify that the products are Comply DIN41494 and Equivalent EIA/ISO/EN /CEA Standard.
		The rack should comply minimum of IP 55 rating for protection against touch, ingress of foreign bodies and ingress of water.
		The enclosure should both protect the user from mechanical hazards and generally meet the requirements for a mechanical enclosure (stability, mechanical strength, aperture sizes, etc.) as defined in IEC 60950 Third Edition.
		Provision to Fix Exhaust Fans on the bottom panel with Louvers.
5	Type Of PDU	Normal
6	Phase	1Phase
7	Rating	3.6 KVA
8	Current	16A
9	Type Of Out Let	Indian Round Pin
10	No Of Out let	6
11	PDU Mounting	Horizontal
12	Space Requirement	2
13	Warranty and Support	The Products manufactured should provide warranty for 3 year from date of invoice the warranty does not cover wrong Usage or miss-handing the products.
		Electrical items such as Sockets, switches, fans etc. should have warranty for 3 year from date of installation.
		For malfunction of any units/item in the rack, the support should be provided within the next business day.
		Warranty claim has to be attended within 72 working hours
14	Approved Makes	**APC/Netrack/Panduit**

Technical Specifications for Passive Items (UTP Cable & Optical Fiber Cable)
General Requirements:
All UTP Components should be from the same OEM. The OEM should be ISO 9001:2000 & ISO-14001. The OEM should be ISO 9001:2000 Certified.
In the changing needs of the global resources if the company has environmental management systems in place like ISO 14001 accreditation the same shall be added advantage.
The cabling should be certified to have application support warranty for next 20 years and above. The complete cabling system offered shall be upgradeable to the intelligent system by simply bringing in additional hardware and software.
All passive items (Copper & Fiber with component) will be single OEM.
Installation & Commissioning
This includes the cost of labour and any other material required such as:
Patch connectors, Patch leads, mounting and fitting hardware, plugs, sockets, any hardware/software,
Laying/tagging of cables in conduits/HDPE pipe/Flexible pipe, necessary excavation, and network components.
Digging & resurfacing of hard surface, concrete works, fitting, fixing, testing of whole system etc. as required to complete installation and commissioning of the whole
Wireless Lan Infrastructure surveillance system project of a terminal including **five (5) year onsite warranty support** of all equipment's & accessories etc.

Annexure-II

TECHNICAL BID

Name of Firm/Contractor/Supplier	
Complete Address & Telephone No.	
Name of Proprietor/Partner/Managing Director/Director.	
Phone No:- Mobile No:- Email Id:-	
Name and address of service centre nearby Jodhpur.	
Whether the firm is a registered firm Yes/No (attached copy of certificate).	
PAN No. (enclose the attested copy of PAN Card).	
GSTIN (enclose the attested copy of GST Registration Certificate).	
Whether the firm has enclosed the Bank Draft/Pay Order/Banker's cheque of Earnest Money Deposit.	
Whether the Firm/Agency has signed each and every page of Tender/NIT.	
Please provide full list of consumables.	
Any other information, if necessary.	

Authorized signatory of the bidder with seal.

Annexure-III

MANUFACTURER's / PRINCIPAL's AUTHORIZATION FORM

To

The Administrative Officer,
All India Institute of Medical Sciences, Jodhpur

Sir,

TENDER: _____.

we, _____ ,who

areestablished and reputable manufacturers of _____,

having factories at _____ and_____,

hereby authorize Messrs. _____ (name and address of

agents)

to bid, negotiate and conclude the contract with you against Tender

No._____ for the above goods manufactured by

us. No company or firm or individual other than Messrs._____ are

authorized to bid, negotiate and conclude the contract in regard to this business

against this specific tender.

We hereby extend our full guarantee and warranty as per the conditions of tender for

the goods offered for supply against this tender by the above firm.

The authorization is valid up to _____

                                                                            Yours faithfully,

                                                                            (Name)
                                            For and on behalf of Messrs. _____
                                                    (Name of manufacturers)/Principal.

Annexure-IV
Financial Bid

Chapter-I

1	2		3	4	5	6
AIIMS Wi-Fi BOM						
S. No.	**Particulars of the items**		**Qty**	**Unit**	**Unit Rate inclusive of all taxes (In Rs.)**	**Total amount inclusive of all taxes (3*5)**
	Equipment	**Brief Description**				
1	Wireless LAN	Wireless LAN Controller for 1000 Access Points	2	Nos.		
		Indoor Access (2 x 2 MIMO)	500	Nos.		
		Indoor Access Points (4 x 4 MIMO)	10	Nos.		
		Outdoor Access Points (4 x 4 MIMO)	35	Nos.		
		Network Monitoring and Management System	1	Nos.		
		Amount in Total for Chapter I in Rs.				

Chapter-II

1	2		3	4	5	6
AIIMS Wi-Fi BOM Quantity Requirement						
S No.	**Particulars of the items**		**Qty**	**Unit**	**Unit Rate inclusive of all taxes (In Rs.)**	**Total amount inclusive of all taxes (3*5)**
	Equipment	**Brief Description**				
1	Access Switches	1. 24 Port PoE+ Swtich with 4 SFP Ports	25	Nos.		
		2. 12 Port PoE+ Swtich with 2 SFP Ports	47	Nos.		
2	LX modules	1. 1000BaseLX GBIC Modules	174	Nos.		
3	Passive Copper Components (Cat-6)	1. Information Outlets	545	Nos.		
		2. Single Face Plate/SMB	545	Nos.		
		3. 3 ft Workstation/Equipment Cords	575	Nos.		
		4. 7 ft Workstation/Equipment Cords	575	Nos.		
		5. 24 Port CAT6 Patch Panel	67	Nos		
		6. CAT6 UTP Cable Box	105	Nos.		
4	Fiber Components	1. 6 Core SMF	4083	Mtrs.		
		2. 6port LIU Loaded	46	Nos.		
		3. 24 Port LIU Loaded	3	Nos.		
		4. 12 Port LIU Loaded	5	Nos.		

		5. SC-LC/SC FIBER PATCH CORD(3 m)	196	Nos.			
5	Networking Enclosures	1. 12U Wall Mount Rack with Standard Accessories. The above racks must have all the standard accessories including wire manager, power distribution and hardware mounting ports.	65	Nos.			
		2. 12U Weather Proof Box	35	Nos.			
6	Services	1. Laying of CAT6 UTP Cable	32625	Mtrs.			
		2. Laying of PVC Pipe/Casing Capping	12568	Mtrs.			
		3. Fixing and Termination of IO's	480	Nos.			
		4. Labeling, Installation & Termination of Jack Panel	67	Nos.			
		5. Fixing, Installation of 12 U Rack With Proper Management of Cables	55	Nos.			
		6. Fixing, Installation of weather Proof Box	30	Nos.			
		7. Laying of Fiber Cable with route markers	3083	Mtrs.			
		8. Fixing & Installation of LIU	48	Nos.			
		9. Fusion Splicing of Pigtails on Fiber Cables	315	Nos.			
		10. Laying of HDPE Pipe	3600	Mtrs.			
		11. Digging of Hard Soil	400	Mtrs.			
		12. Digging of Soft Soil	2750	Mtrs.			
		13. Fiber Link Testing With Power Meter and OTDR for dB Loss	1	LS			
		14. Certification & Documentation Charges	1	LS			
7	Accessories	1. HDPE Pipe 25mm	3600	Mtrs.			
		2. PVC Channel/Conduit (suitable dia) with Accessories	7000	Mtrs.			
		3. 6 Mtr SS Pole	30	Nos			
		4. PVC Cassing Capping (suitable dia) with Accessories	5568	Mtrs.			
		Amount in Total for Chapter II in Rs.					
		Total amount (Chapter I + Chapter II) in figures in Rs.					
		Total amount (Chapter I + Chapter II) in words in Rs.					

Note:
1.   L1 will be decided on cumulative basis i.e. total of Chapter I and Chapter II. The bidder must quote for all the items otherwise bid will be treated as unresponsive.
2.   I/We have gone through the terms & conditions as stipulated in the tender and confirm to accept and abide the same.

Date:
Place:
Signature & Seal of the Contractor
Full Name of the Contractor: