
ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI,

invites

Expression of Interest

for

“Up-gradation of Wireless Networking at AIIMS Hostels for Internet Access”

EOI document can be obtained from the Office of the Stores Officer, AIIMS or
downloaded from www.aiims.ac.in www.aiims.edu .

30th Sep 2011

Ansari Nagar, New Delhi, India – 110029.
www.aiims.ac.in, www.aiims.edu

**All India Institute of Medical Sciences,
Ansari Nagar,
New Delhi-29**

Expression of Interest for providing “Up-gradation of Wireless Networking at AIIMS Hostels for Internet Access”

The EOI form can be obtained from the office of the Store Officer, AIIMS free of cost or downloaded from AIIMS's website www.aiims.ac.in

No editing / addition / deletion of matter (in EOI document) is permitted. If such action is observed at any stage, such bidders are liable for rejection outright and decision of the Institute shall be final and binding on the agencies submitted the EOI.

Prof. P.P. Kotwal,
Prof. - In-Charge
Computer Facility, AIIMS.

DOCUMENT FOR SUBMITTING EXPRESSION OF INTEREST FOR PROVIDING “Up-gradation of Wireless Networking at AIIMS Hostels for Internet Access” AT All India Institute of Medical Sciences, Ansari Nagar.N.Delhi-29

Issue of EOI document:

From 30th Sep 2011 to 4th October 2011 between 10.00 a.m and 5.00 p.m.

Last date & time for submission of EOI:

3.30 p.m on 4th October 2011

(EOI to be submitted to the Office of the Stores Officer, (Main) under sealed cover failing which the bid shall be rejected.)

Pre-bid meeting:

Interested bidder may be present for the pre-bid meeting scheduled on 3rd October 2011 at 11 AM at Computer Facility, AIIMS.

Site Visit:

Vendors are requested to do their own site survey on 3rd October 2011 in co-ordination with computer facility department and determine the required number of outdoor access points and their locations to meet with the demand of -60 dbm signal strengths and 2 mbps speed uniformly all over the desired area of wireless facility. The vendors are requested to submit the Hardcopy & softcopy of the EOI proposal as well as make a Power Point presentation for 15 minutes at computer facility at 11 AM on 5th October 2011. Site will be selected for demo by Computer Facility and the vendors are suppose to do demonstration of their proposed solution by 12:00 Noon on 5th October 2011.

Selected sites for the demonstration will be decided by committee.

No EOIs will be accepted after the date and time given above.

INVITATION FOR EXPRESSION OF INTEREST

AIIMS is desirous of identifying agencies for establishing (plan, design, supply, install and maintain) state –of-art solution in the Secure Wi-Fi Solution domain to carry out “**Up-gradation of Wireless Networking at AIIMS Hostels for Internet Access**”

GENERAL TERMS AND CONDITIONS

1. Response to EoI should be addressed to the Director, All India Institute of Medical Sciences, Ansari Nagar, New Delhi-29 and submitted to the Office of the Stores Officer, (Main) under sealed cover failing which the bid shall be rejected.
2. The Director, AIIMS New Delhi reserves the right to cancel / reject full or any part of the EoI, which, do not fulfill the conditions, stipulated in the EoI. No correspondence will be entertained in this regard.
3. The EOI forms be clearly filled in ink legibly or typewritten giving full address of the tenderers. Alterations/overwriting/cuttings unless legibly attested by the tenderers, shall disqualify the tenders. The tenders should be signed by the tenderer himself/themselves or their authorized agent on their behalf (Authorization may be enclosed, if applicable).
4. Complete Technical details along with make, model number, complete specification, pamphlets, and literature of the systems highlighting the special features of their offer should be supplied along with the EOI.
5. AIIMS or its representative shall have the right to inspect or to evaluate the hardware / software to confirm their conformity to the specifications. The supplier shall provide all reasonable facilities and assistance to the inspector at no charge to AIIMS. In case any inspected or tested features fail to conform to the specifications, AIIMS may reject them.
6. The EOI shall clarify/state whether he/they are accredited agent or sole representative indicating principals and agent quoting on behalf of their manufacturers/principals must attach authority letter in their favor. The bids received without authority letter are liable to be rejected. No piece meal solution will be accepted; complete solution as above by single vendor is required.
7. Handwritten bids shall be accepted at the bidder's risk.
8. Any action on the part of the tender to influence anybody in the said Institute will be taken as an offence and the tender submitted by the firm will subsequently be rejected and the vendor may be liable to be debarred from bidding for AIIMS tenders in future for a period of three years.

9. The tenderer shall furnish a non-blacklisting certificate attested by a Notary that the firm has not been blacklisted in the past by any government/ Private institution. The tenderer/Supplier has to give an affidavit on non-judicial stamp paper of Rs.10/- duly attested that there is no vigilance/CBI case pending against the firm/supplier and the firm has not been blacklisted in the past by any Govt. or Private Organization.

10. A proof of address, telephone number and Fax number shall be submitted. A surprise visit to the premises by the representatives of the Institute shall be made to assess the firm's capacity and standing.

11. The Expression of Interest must be accompanied with duly filled Information sheets and sufficient documentary evidence. Expression of Interest with incomplete Information Sheets or sufficient documentary evidence shall be rejected.

12. AIIMS reserves the right to modify, expand, restrict, scrap, and refloat the Expression of Interest.

13. Formal Tender (Technical and Financial bids) will be invited later from the short listed respondents of this "Expression of Interest" for selection of final agency/ agencies.

14. The Agency must be Original Equipment Manufacturer (OEM) or their authorized representative. In case of authorized representative, authorization from OEM to participate in the EOI to be attached.

15. The agency should have been in operation for the period of at least 5 years as on the last date of submission of the EOI, as evidenced by any document issued by the Govt/Statutory body to be attached.

16. The agency should have at least 5 years experience in implementation of Wi-Fi network with core competence in managed Wi-Fi implementation and supported similar solutions for reputed organization(s)/ Government Sector. Documentary proof to be attached.

17. The bidder's annual turnover in this area should be at least Rs. 5 Crore (Rupee five crore) in each of last three financial years. Attach documentary evidence (Audited balance sheet) for confirmation regarding turnover. The turnover refers to a company and not the composite turnover of its subsidiaries/ sister concerns etc. for 2008-2009, 2009-2010, 2010-2011.

18. The agency must have at least 10 (ten) network and security professionals on its rolls as on date. Documentary proof to this effect should be submitted.

19. AIIMS would understand the solution and quantities offered by all the bidder and AIIMS has the right to decide the final number of equipment (Access Points etc.) for each location.

20. The agency should be registered with Service Tax department of Govt. (Should submit its valid documentary proof of sales Tax/ VAT Number, Service Tax registration number and details of income tax registration/ PAN number).

21. All disputes arising out of this EOI shall be subject to courts in Delhi only. AIIMS reserves the right to verify/ confirm all original documentary evidence submitted by agency of above mentioned clauses of eligibility criteria. If EOI were not accompanied by all the above documents mentioned, the same would be rejected. Undertaking for subsequent submission of any the above document will not be entertained.

NOTE:-

Compliance with the eligibility criteria should be indicated item-wise in a separate sheet with the page number of the supporting document.

Technical Details

AIIMS desires to upgrade its existing Wi-Fi network at its all the Hostels at AIIMS. AIIMS already has a Wi-Fi Network in these locations. The current setup of AIIMS Wi-Fi Network is as follows:-

Introduction

AIIMS has a well developed LAN setup with servers and internet bandwidth. Existing Wi-Fi network was deployed and network is performing as per IEEE 802.11 b/g standard. Network has been deigned with signal strength within Hot-Zones as good. Equipment installed is Brovis Outdoor AP AS-1200D2HP. Because of rogue AP or wireless interference, it has been observed that received signal strength for few areas / users is affected.

It is planned to upgrade the existing wireless network.

Up-gradation is required at all the locations as indicated in the Annexure-1. These locations are already connected with the central site i. e. Computer Facility, (located in the main building) through OFC/CAT6 or wireless link.

Now proposals are invited to provide a turnkey solution for the following:

Up-gradation of existing wireless network of 2.4 / 5.8 GHz license free wireless equipment with accessories and cabling on turnkey basis which includes Supply, Installation & Commissioning of latest equipment as per the requirement specified in this document and integration with the existing network installed at AIIMS campus and update the existing network to IEEE 802.11 b/g/n standard to enhance the signal strength at all the locations mentioned in Annexure-1 to the desired level as stated in this Eol document.

Update the existing network with desired signal strength for Wi-Fi connectivity (IEEE 802.11 b/g/n) within individual locations to enable users connect to the network using Wi-Fi enabled devices to access Internet and other applications.

General instructions / guidelines for the vendors:

1. The existing network is extending 24x7 Wi-Fi Internet access to approximately 1300 student users, who stay at 18 hostel locations in and around AIIMS by creating required numbers of links from central leased line landing facility (Computer Facility) and required number of Wi-Fi hot zones (IEEE 802.11 b/g/n) in these locations.
2. Up-gradation of 2.4 GHz license free wireless equipment installed to IEEE 802.11 b/g/n.
3. Upgraded equipment should enhance connectivity to all these users.
- 4 The Wireless infrastructure should be designed confirming to IEEE 802.11b, g, n specifications.

5. The Proposed Wireless System should have automated WLAN configuration and management functions so that the network managers have the control, security, redundancy, and reliability needed to cost-effectively scale and manage the wireless networks as easily as they scale and manage their traditional wired networks.
6. The proposed Wireless system needs to be tightly integrated with a Wireless management System to support wireless data, voice, and video applications and deliver centralized security policies, wireless intrusion prevention system (IPS) capabilities, RF management, quality of service (QoS), and mobility.
7. The proposed wireless solution also needs to be easily managed through a web browser. The entire wireless system should be centrally managed. Individual network devices should be visible and manageable by the NMS.
8. The proposed solution should be able to track the locations of wireless client and display the same on a digital map of the campus on a real-time basis for the purpose of security and asset management.
9. The system design should provide access to only authorized users.
10. The proposed WLAN system should be virtually hack proof with capability to prevent a wireless activity not conforming to the security policy of AIIMS for any data leakage or unauthorized access.
11. Apart from above up-gradation of Wi-Fi network in specified locations, wireless controller switch as per requirement specified in this document to be supplied, installed and commissioned and integrated with the campus wide network. Solution is based on Centralized WLAN controller switch, single point management for configurations for WLAN, Security, Access and should support standalone access points and should provide the same features for all the access points installed in AIIMS campus wireless network.

It should be Rack Mountable with front and rear mount. Vendor should provide a 22U rack of standard make for this purpose. The wireless controller should have dual hot swappable and failover power supply. Power supply unit should comply to Indian power supply standards. It should have the facility of Automatic failover to backup controller and load balancing feature. The wireless controller should function as an authenticator for all AP and clients.

It may have built in authentication server (RADIUS / any other). If RADIUS is not built in, it should be able to interact / authenticate with all types of proxy / authentication server.

Each client (laptop / desktop) using the facility of wireless network should be provided unique user id and password which should be valid for their laptop / desktop only. The user id / password should be created / stored on wireless controller / RADIUS server for authentication.

Authentication time for client should be less than 1 minute.

The wireless controller should have backup and restore facility for configuration data, system data and authentication data. Keeping backup should be the responsibility of the vendor. For backup purpose, vendor should quote for NAS/SAN/DAS of 2TB and a tape/CD/DVD media to keep the backup for every quarter. It would be selected vendor's responsibility to provide required equipment to carry out the backup and maintain it in consultation with Computer Facility for a period of 3 years and during AMC period.

Each wireless controller should be able to accommodate minimum 1500 users and it should be scalable.

The wireless controller should be able to allocate bandwidth to each client device within the permissible bandwidth of access points. It should be able to allocate bandwidth per user id basis in association with RADIUS.

Necessary support for IPv6 upgrade should be provided without any additional charges when IPv6 migration takes place.

Wireless network user should be able to access the network from all the wireless zones seamlessly with unique user id / password.

12. Vendors are requested to do a detailed site survey before submitting response to understand the exact requirements. For site survey, vendor may contact Computer Facility, AIIMS. Based on site survey, vendor should be able to understand the required number of Access Points, controller, Network Switch, Cable etc. location wise and propose the same.

13. Vendor will provide a complete turnkey solution including all works like, installation of new tower/mast/pole, laying of cable wherever required, civil work, if any etc.

14. Commissioning of equipment and network integration with overall AIIMS network will also be the responsibility of the vendor.

15. The selected vendor should provide required numbers of personnel network certified and qualified network engineers per shift for 24x7 operations for facility operations & user support (user training, account creation coordination, logs, controls, hand holding, running and up keeping of systems, any other network/access related work etc.), trouble shooting / maintenance done for first three years, (on 3 shifts)) to be stationed at the site (AIIMS) for the system and the network being created. The sitting space for these engineers and one PC, AIIMS Internal landline for the user support facility will be provided by the AIIMS. Implementation of temporary network would be done by selected vendor as and when required by AIIMS at no additional cost to AIIMS.

16. Any Complaint/breakdown call reported should be attended the same day within 2 hours by the 1st level local site engineers. Further any complaint/breakdown call requiring repair/replacement/ stand by equipments/2nd level support are to be rectified with 4 hours if reported before 2.00 pm and if reported after 6.00 pm shall be attended by 11.00AM next day.

17. The Simple operational difficulties etc., to be attended and sorted out within 2 hours of the complaint. The selected vendor will maintain a complaint register with cell phone

for complaints and all the calls for the complaints to be registered and a complaint no. to be given to the user for further reference.

18. The selected vendor should have enough spare parts and backup of configurations and setup etc., to provide standby in case of any repair in the equipments, cables, software etc., and the repair/replacement of the original equipment should be done within 7 days.

19. Wireless equipments shall be long range outdoor router / access points for PMP and other equipments required shall be optimized for cost and efficiency.

20. Minimum 70% signal strength should be available to all the users within the locations. Received signal strength at all the client side of the wireless network should be minimum -60 dbm and all the client should operate at minimum speed of 2Mbps.

21. Seamless connectivity throughout the zone for mobile users with laptops / PDA's.

22. No black hole/ low signal within zone, there should not be any information access/communication black hole in any of the hostel rooms/corridors etc.,.

23. Secure, user authenticated access, login, password, and usage logs etc., to be provided by the selected vendor in coordination with central Computer Facility. There should be option for centralized/uniform/universal access for access/login in all wireless/wired LAN of AIIMS.

24. The system installation should be fine tuned/optimized for both cost and efficiency to meet the requirements stated above. The solutions with more than optimum required number of equipments (which is adding to the overall cost) or lower than the optimum required number of equipments (compromising the signal strength/range) will be liable for rejection. The solutions meeting the SLA's with less number of routers/access points will be given preference.

25. Initially the Hostels will be given the Internet access feed from the Internet leased line landing at Computer Facility, AIIMS. However incase of availability of a completely separate new leased line set up for the hostels, the same also need to be taken in to account by the selected vendor for later integration / compatibility etc.,

26. The vendor should have offices in Delhi or NCR region. Documentary proof to be provided.

27. The Bidder should have ISO 9001. A copy of the certificate to be attached.

28. The vendor/bidder must be reputed manufacturer or his authorized representative of the type of solution/products/equipments offered. In case of representative, the authorization letter from the manufacturer/distributor must be submitted. No piece-meal solutions shall be accepted; single vendor should submit complete solution.

29. The bidder should have implemented similar solution (Secure Wi-Fi LAN solution) with more than 1000 users (minimum two such supply orders) deployed in India or with more than 2000 users (minimum one such supply order) deployed in India preferably in educational / government institutions in last five years. Bidder should hide the price / values on the documents submitted. If any price is found on any document, bid will be rejected.

30. AIIMS may call the vendor for the demonstration of the proposed solution/equipments at AIIMS for evaluation at no cost/charge to AIIMS.

31. AIIMS would give preference to a more reliable & secure solution. Vendor should clearly submit a detailed methodology to carry out the required work. Vendor should follow standard procedures for all the project activities i.e. all cables to be laid within conduits, standards for laying fiber cables, mounting of poles etc.

32. The complete up-gradation of network and implementation of wireless controller should be done in phased manner in consultation with AIIMS Computer Facility to make sure of minimum disturbance to the users.

33. The complete project should be executed within 3 (three) months from the date of supply order from AIIMS. Selected vendor should provide compliance to this effect.

34. AIIMS or its representatives shall have the right to inspect or evaluate the hardware, software etc., to confirm their conformity to the ordered specifications. The supplier shall provide all reasonable facilities and assistance to the inspector at no charge to AIIMS. In case inspected tested features fail to confirm to the specifications, AIIMS may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet specifications required, free of cost to AIIMS.

35. Vendor should provide required battery backup for all the equipment which is part of Wi-Fi network for one hour of power outage.

36. In case the selected vendor fails to comply with the terms and conditions of the contract or fails to carry out the servicing/maintenance, the institute shall be entitled to forfeit the security money provided by the vendor during bidding and removal of their name from list of contractors.

37. The selected vendor will attend to any number of breaks down emergency calls without extra payment and the calls will be attended immediately.

38. In case of any component failure, the selected vendor will procure/provide these parts and set the machines/equipments in order immediately.

39. In case of non supply of material within the due date i.e. within the date of delivery and final acceptance by AIIMS within the time specified, the Director, AIIMS, New Delhi will have the right to impose penalty as deemed fit and resort to risk purchase in full or part thereof at his/her discretion, his/her decision shall be final and binding.

Scope of Work:

1. Planning and re-designing of Wireless LAN network for AIIMS Hostels as per the requirement mentioned above.
2. Supply, install, setup, support and maintain the WLAN infrastructure.
3. The vendors are required to submit detailed technical information of the proposed system with network diagrams and a write –up on how proposed solution will meet the requirement of AIIMS as mentioned above.
4. Please provide complete details about your understanding of the requirements and the solution proposed in details with diagram etc.
5. Please Provide Equipment proposed and list of Materials with complete original product literature/ details
6. The vendor should provide the complete technical details and specifications of the particular model, make proposed in the proposed solutions.
7. Prices should not be quoted in the bid.
8. The vendor should provide neat and clear network diagram with complete details of equipment locations, network route, speed, throughput, signal strength proposed etc., and the coverage area of the hot zone.
9. Vendor should provide connectivity and network diagram for each location.
10. Vendor should provide complete breakup of all the equipments and associated services with their quantities.
11. The selected vendor should provide 3 year comprehensive warranty/guarantee with onsite support and 2 years AMC (for 4th and 5th year) after warranty period of 3 years.
12. Solution is based on Centralized WLAN controller switch, single point management for configurations for WLAN, Security, Access and should support standalone access points and should provide the same features for all the access points installed in AIIMS campus wireless network.
13. Procedure of Facility operations and user support as per the requirement above and Qualifications of the personnel to be deputed at AIIMS to be provided.

Annexure - 1

Location wise details of wireless Outdoor Access Points

HOSTEL No.	TOTAL Access Point installed
1	2
2	1
3	2
4	2
5	1
6	2
7	2
8	2
9	2
10	2
11	1
MM	6
MMN	6
RPC-1	2
RPC-2	2
FTA	4
3 TYPE	5
F TYPE	3
CF*	1
TOTAL	48

*CF = Computer Facility. All others are hostels.

Vendors are requested to do their own site survey in co-ordination with computer facility department and determine the required number of outdoor access points and their location, network design, layout, other equipment to meet with the demand of -60 dbm signal strength and 2Mbps speed uniformly all over the desired area of wireless facility.

Selected sites for the demonstration will be decided by committee.