

**IMPLEMENTATION OF Wi-Fi NETWORK FOR PALAYAM
AND KARIAVATTOM CAMPUSES OF
UNIVERSITY OF KERALA**

REQUEST FOR PROPOSALS



THIRUVANANTHAPURAM

APRIL 2013

TENDER NOTICE

Tender No.

Date: 22- 4 -2013

Sealed competitive bids are invited from reputed IT Companies / Organizations for the implementation of Wi-Fi NETWORK FOR PALAYAM AND KARIAVATTOM CAMPUSES OF UNIVERSITY OF KERALA.

Name of Work: Implementation of Wi-Fi network for Palayam and Kariavattom campuses of University of Kerala.

Application Fee : Rs. 2,250/- (to be submitted along with Technical bid)

Earnest Money Deposit: Rs. 50,000/- (Rs. Fifty Thousand only)

(Earnest Money Deposit is to be submitted along with Financial bid)

The amount must be remitted by crossed DD drawn in favour of The Finance Officer, University of Kerala, payable at Thiruvananthapuram. Bids without the fee will be rejected.

Date of publication of RFP document: 22- 4-2013

Last date and time for submission of

Technical and Financial bids in separate sealed covers: 09 - 5 - 2013 - 5 PM

Date & time of opening of Technical bids and evaluation: 10 -5 - 2013 - 11 AM

Financial bids submitted only by those who qualify in the technical evaluation will be opened.

Financial bids submitted by those who do not qualify in the technical evaluation will be summarily rejected and will not be considered.

Those who had submitted the application fee or EMD, in response to our earlier RFP for the same work are exempted from remitting the same fee again.

REGISTRAR
University of Kerala

SCOPE OF THE WORK

University of Kerala proposes to implement Wi-Fi network access to their entire campus both at Kariavattam & Palayam. The purpose of the implementation is to help the students in the campus connect to the Internet & Intranet through wireless network from anywhere inside the university campus and able to access the information in a secured manner.

University employees, students, and guests will have shared access to wireless network resources to support the University's mission of teaching, research, and outreach.

Anyone who wishes to connect to the University's authoritative campus network with a laptop or other wireless device must use wireless network infrastructure devices that are owned by and centrally managed by the University to ensure integrity, security, and availability for appropriate educational and business activities.

Any wireless network device that would extend the University network, and is not managed by the authoritative campus network, will be considered a rogue device, and will be subject to detection and immediate removal from the network. These devices include but are not limited to wireless controllers, access points (APs), and servers that manage the system.

Wireless APs advertise the services they provide with a name programmed into the device called a Service Set Identifier (SSID). Wireless network names that are centrally managed may not be used or operated by users or units. Authorized users of the University network are responsible for knowing and adhering to user rights and responsibilities as defined in Administrative Policy

1. Propose infrastructure for implementing Wi-Fi solution in University of Kerala campus Palayam and Kariavattom.
2. Designing the infrastructure for the proposed wireless solution
3. Create necessary Bill of Material for the proposed technical solution
4. Supplying of necessary Hardware for the proposed solution
5. Installation of Access Points in Palayam & Kariavattom Campus
6. Installation of Wireless Controller in Palayam & Kariavattom Campus
7. Provisioning & Laying out of Passive Cable within the building connecting to wireless access point & network access switch
8. Uplifting wall mounting the access points
9. Configuring all the access points for Wi-Fi access
10. Configuring the network switches & Wireless controller
11. Enabling Internet Access throughout the campus via access points
12. Configuring security features for the Wi-Fi Access
13. Configuring Radius Server for AAA authentication, Authorization & Accounting for Wi-Fi Access
14. Test & UAT

INSTRUCTIONS TO BIDDERS

1. The tenderers are required to quote their lowest rates separately for (i) Hardware, software component (ii) Implementation, configuration and AMC charges.
2. For awarding the tender for work, the entire project will be considered as a single work. The tender will be awarded to the lowest quoted tenderer, taking the sums of all costs connected with the project. There will be no separate work divisions or separate awarding of works to different bidders.
3. Each proposal should be accompanied with a Bank Draft for ` 50,000/- (Fifty thousand only) as Earnest Money Deposit, drawn in favour of the Finance Officer, University of Kerala, Thiruvananthapuram payable at State Bank of Travancore, KUOC branch, Thiruvananthapuram or Chelan remitted to cash counter, University of Kerala. Cheques will not be accepted. This deposit will be refunded to the unsuccessful tenderers on their written request, without interest, on finalization of award of contract.
4. Proposals must reach the tendering authority on or before the last date and time specified. Late proposals will be rejected. Before commencing the work the successful bidder has to execute an agreement to successfully complete the project as per the time schedule.

GENERAL CONDITIONS

1. The proposed Network management centre must be set up at Computer Centre building, University of Kerala, Palayam Campus and Web casting centre at Kariavattom campus.
2. The proposed Network management centre must be setup as per the technical requirements provided.
3. The University has the right to ask for clarifications and to conduct negotiations with any or all vendors.
4. The University has the right to disqualify any vendor if they fail to provide the necessary clarifications or documents.

5. The University has the right to make any changes in their requirements or to change any specifications, at any time.
6. If any of the facilities provided by the vendor is not found acceptable to the University, the University has the complete right to reject the facilities without giving any compensation.
7. The University will release the payment to facilities set up by the vendor only after inspecting the facilities and satisfying that the work is done as per the requirements.
8. The vendor has to complete the work as per the time schedule proposed. The University has the right to claim compensation for the delay in completing the work as per schedule.
9. Bidder can visit the site if they required.
10. The decision of the University in all matters will be final.
11. The University has the right to cancel the work order at any time without assigning any reason.

REQUIREMENTS DETAILS

1. Buildings, as mentioned in the list, have to be connected with access points, the number and placement of access points will depend on the signal strength availability in and around the building.
2. All access points have to be connected to the building local switch.
3. All the access points will be managed and controlled by the wireless controller, which will be installed in each location (Palayam & Karyavattom). The wireless controller will be used to control all the access points inside the campus.
4. Internet access via access point will be enabled from the central hub location in each campus.
5. The access point will be wall mounted & will be positioned in and around the building for the best signal strength availability for the end user.
6. A monitoring tool can be installed for monitoring and reporting of all the access points, controller in the University campus.
7. Number of access point can vary with respect to the requirements.

ELIGIBILITY CRITERIA

1. Bidder should be a company registered in India under the Company Act or should be Public sector organisation. Furnish certificate of registration.
2. The bidder should guarantee support for the complete system (hardware and software) for the next 3 years commencing from the date of commissioning.
3. Any Government / Government agency / Banks / Financial Institutions in India should not blacklist the Bidder during the last 5 years. Self-declaration to that effect should be submitted along with the technical bid.
4. The bidder should have setup Wi-Fi networks for Organisations / institutions etc. Bidder should submit self-declaration along with appreciation letters. A minimum turnover of Rs. 2.0 Crores is necessary during the last three years.
5. Those who have participated in the previous tender are exempted from remitting the fees.

TECHNICAL REQUIREMENTS

1. The Technical Bid will comprise of a covering letter, documents / annexure as proof against minimum eligibility criteria, details of software development & maintenance facilities, responses to functional & hardware specifications, incremental IT infrastructure in general and undertaking (as given in RFP). **Please note that no price information should be indicated in the Technical Bid and shall only be quoted in the Commercial Bid.** Failure to comply with the same may result in the rejection of the Bid. In submitting additional information, please mark it as '**Supplemental**' to the required response. If the bidder wishes to propose additional services (or enhanced levels of services) beyond the scope of this RFP, the proposal must include a description of such services as a separate attachment to the proposal.
2. Bidder is expected to price all the items and services proposed in the Technical Proposal. Tendering authority may seek clarifications from the Bidder on the Technical Proposal. Any clarifications by the Bidder on the Technical Proposal should not have any commercial implications. The Commercial Proposal submitted by the Primary Bidder should be inclusive of all the items in the technical proposal and should

incorporate all the clarifications provided by the Bidder on the technical proposal during the evaluation of the technical Proposal.

3. Technical approach, methodology and work plan are key components of the Technical Proposal.
4. Applicants shall present their Technical Proposal containing:
5. **Understanding of work scope:** This section shall contain a clear and concise understanding of project requirements along with activities to be performed and deliverables to be provided based on the scope of work.
6. **Technical Approach and Methodology:** In this part, applicants should explain their understanding of the objectives of the assignment, approach to the assignment, proposed solution, proposed technology methodologies for carrying out activities and obtaining the expected outputs, and the degree of detail of such output. Applicants should also explain the proposed methodologies and highlight the compatibility of those methodologies to the proposed approach and the needs of the project. Applicant shall also include the Risk management, Business continuity plan and Quality assurance plans, etc., as a part of Approach and Methodology.
7. **Work Plan:** In this part the applicant should propose the main activities of the assignment, their content and duration, phasing and interrelations, meetings, milestones (including interim approvals by the Client), and delivery dates of the reports/documents. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the Scope of Work and ability to translate them into a feasible working plan. A list of the final documents, including reports to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule. Milestones, Deliverables, Meetings and presentations shall be clearly mentioned.
8. **Capacity building:** Bidder should submit a brief approach note on training of staff during implementation. Bidder should provide hands on training before requesting for acceptance and completion of implementation. Training and manuals should be provided to all the users

9. **Approach for Project implementation:** Detailed approach for carrying out the project implementation along with the support and maintenance during the contract. Bidders should submit a detailed approach for implementation. Bidders need to give detailed approach how they would implement complete project with integration plan.
10. **Detailed specifications:** Applicants shall also give specifications of hardware/software to be procured. Applicants must also attach attested copies of the brochures from the OEM for the equipment that they would be providing as a part of the assignment.
11. **Company profile:** Details of the Point of Contact along with brief work profile of the Bidder as well as other partner firms including relevant experiences of executing similar projects. Applicants may include relevant case studies and attested copies of completion certificates from clients in support of the case studies.
12. **Comments,** if any, on the TOR to improve performance in carrying out the project. Innovativeness shall be appreciated, including workable suggestions that could improve the quality/ effectiveness of the assignment. In this regard, unless the applicant states otherwise, it shall be assumed by tendering authority that work (time and effort) required to implement any such improvements, are included in the inputs shown in the project plan.
13. **Other Information:** Any other information relevant to the solution as preferred by the bidder can also be placed in the document. No additions or modifications are allowed at a later stage.

TECHNICAL BID

1. Sets of Technical bids prepared in an eco-friendly manner (avoid plastic cover sheets and spiral binding) should be submitted in a sealed cover, for the purpose of technical evaluation by the technical committee. The cover sheet of the document shall state "PROPOSAL FOR IMPLEMENTATION OF Wi-Fi NETWORKS OF THE UNIVERSITY OF KERALA" submitted by <name of bidder firm>.
2. It shall be a brief report having the following sections:
 - (a) Content Page
 - (b) 1-page executive summary
 - (c) Overview of the agency or company -

(d) Summary for meeting eligibility criteria - proof to be appended)

(e) Overview of the human, technical and other resources of the bidder in the field of Data centre and server room setting activities (Client list and documentary evidence may be attached as appendix)

(f) Proposed solution for the present project along with a SWOT analysis (strength, weaknesses, threats and opportunities). This should be in such a way that the technical committee will be enabled to take a decision on the bidders competence according technical requirement and terms and conditions.

3. Proposed time schedule

4. Compliance statements for ELIGIBILITY CRITERIA and TECHNICAL REQUIREMENTS.

• **ELIGIBILITY CRITERIA**

Sl. No	Criteria	Whether complied (Y/N)	Supporting documents enclosed	Remarks
1.				
2.				
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.				

• **TECHNICAL REQUIREMENTS**

Sl. No	Criteria	Whether complied (Y/N)	Supporting documents enclosed	Remarks
1.				
2.				
.				
.				

(f) Any other details - maximum 2 pages

(g) Appendices: Certified true copies of (i) Certificate for Date of Incorporation/ Registration, (ii) Commencement of Business (iii) documentary evidence for prior

experience (iii) EMD agreement (iv) Signed copy of the RFP (iv) any other material referred to in the proposal.

FINANCIAL BID

The Bidder shall quote price in clear terms. The rates quoted should be inclusive of VAT and all other taxes.

Part – A (Specification - Appendix)

i. Hardware components	Rate in Rupees inclusive of all taxes, freight etc.
ii. Software Component	

Part – B (Detailed requirements - Appendix)

Implementation charge AMC	Rate in Rupees
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Note: No other conditions or statements should be included in the financial bid. The above table should be used in bidder's letterhead and signed by authorized signatory. Lowest tender is calculated by adding Part A and Part B

EVALUATION OF BIDS

The technical competency of bidders shall be evaluated by an expert committee, which shall have the following terms of reference.

- To decide on the eligibility of the bidder.
- To decide on admitting the experience in prior projects.
- To decide on the technical competence of the bidder in implementing the project.
- To decide based on presentation and demonstration done by the bidder whether they are capable of providing feasible solution that meets the user requirements.

Appendix – Financial Bid

Wi-Fi-Networks for Kerala University Palayam Campus & Kariavattom Campus

General Conditions

1. The bidder should prepare network schemes for the two campuses and enclose with the commercial bid.
2. All equipment and components should conform to ISI Standards.
3. Connection from the Wi-Fi controller to the access parts should be through the existing LAN cables. Additional cabling if required shall be provided.
4. Connectivity between two campuses is not included in the scope.
5. The wireless network is intended to be used by the University employees for accessing private application of the University / Internet and for the University department students to access the internet. Others can use the network for accessing the information when they are within the campus.
6. The scope of the contract includes supply of equipment, materials, installation of equipment, additional cabling wherever required and maintenance of the network for 3(three) years .

Bill of Materials and broad specifications

Sl No	Item	Qty	Unit price	Total Price
1	Wireless Controller – Capacity up to 4000 simultaneous users, Protocol Support-IPV4,IPV6 Support for access control list, web authentication and encryption standards. Interfaces- 10/100/1000 for access point LAN integration with redundancy, additional port for campus to campus controller integration. High availability – shall support redundant controller for failover operations Support for configuring policies to users for accessing services(can be provided with the help of additional firewall also)	2		
2	Wireless Accessing Point- 802.11 abgn, dual band, dual radio, integrated antennas, Sealing mounting kits, 1 Port 802.3af 10/100/1000, 15.4W, Access Point license, mobility controller and software, Power adaptor, SNMP support V1,V2c,V3, web based management Power injector, PoE Patch Cords	70 nos		

3	Management Software for configuration and management of the entire Wi-Fi networks	2		
4	CAT6 cabling including terminator and I/O	3000 M ts. 30I/Os		
	Grand Total Rs.			

Rupees -----

Place
Date

(Seal)

Authorised Signatory
Name & Designation

Total access points required – 70 (can be extended up to 100 points)

Details of Access Points Required

Palayam Campus

- | | |
|--|--------------------------------|
| 1. Main Building (Senate House Building) – | 9 (Ground floor + First floor) |
| 2. Finance Building | 2 |
| 3. Public Relations office | 1 |
| 4. Publication Dept. | 1 |
| 5. English Dept | 2 |
| 6. IDE Building | 3 |
| 7. Controller of Examination building | 2 |
| 8. Guest House | 2 |
| 9. Computer Centre | 2 |
| 10. University library | 3 |

Total----- 27 numbers

Kariavattom Campus

- | | | |
|--------------------|---|----------------------------|
| Web Casting Center | 1 | |
| IMK building | 4 | Ground floor + First floor |

Geology	4
Computer Science	3
Chemistry	3
Physics	2
Bio-Technology	1
Staff College & Engg. College	6
Guest House	2
Research Hostel	2
Botany & Zoology	4
Bioinformatics	2
Geo information Centre	1
Manuscript	1
Opto electronics	2
Campus library	2
Bio chemistry	2
Administration building	1

Total ---- 43 numbers