

## Corrigendum for the WiFi Tender

**Name of the Tender:**

**Tender for the Supply and Installation of Controller Based WiFi Networking for the Manonmaniam Sundaranar University Campus.**

Tender notification date : 28.4.2017

Pre-bid meeting date : 05.05.2017

Last date and time for the submission of tenders: 26.05.2017 at 3.00 PM

Technical bid opening date and time : 26.05.2017 at 3.30 PM

**Corrigendum release Date: 16.5.2017**

Based on the observations and queries raised by the vendors during the pre-bid meeting conducted on 5th May 2017, following modifications are made in the tender document. The modified version of the tender document is uploaded in the University website. Vendors are informed to download the modified version of the tender document from <http://www.msuniv.ac.in>

SL NO	Page number, Section no, etc in the Tender document	Modification/Amendments/Correction details
1	Pg 7, section 6.2 text	"All prospective bidders who have received the bidding documents will be notified of the amendment in writing or by fax or by cable or by fax, and will be binding on them"  is modified as  "All prospective bidders who have purchased or downloaded the bidding documents are asked to refer the university website for any modifications/amendments/corrections in the tender documents. Amendments if any will be notified only in the university website mentioned in the Tender Schedule. The Bidders should check for the amendments or corrigendum in

		the websites till the closing date of this Tender. The purchaser will not be responsible for any ignorance of such modifications/amendments amendments"
2	Page No 11, item 16.1 first line	<p>“Bids shall remain valid for 60 days after the date of bid opening prescribed by the Purchase”</p> <p>is modified as</p> <p>“Bids shall remain valid for 90 days after the date of bid opening prescribed by the Purchase”</p>
3	Pg No 16, item 31 under the heading Notification of Award	<p>"Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by email or fax, to be confirmed in writing by letter, that its bid has been accepted."</p> <p>is modified as</p> <p>"Prior to the expiration of the period of bid validity, a Letter of Award (LOA) shall be issued, in duplicate, by the purchaser to the lowest tenderer with the condition that the lowest tenderer shall, within 7 (seven) days of the receipt of the Letter of Award (LOA), sign and return a duplicate copy of the Letter of Award (LOA) in acknowledgement thereof."</p>
4	Page 16, item 33 and 34 are added	<p>Following text is included</p> <p>33. Performance Security</p> <p>33.1 The Successful Bidder should remit a Performance Security Deposit at the rate of 5 % of the value of the contract amount in Indian rupee towards Security Deposit by way of a Demand Draft from any nationalized Bank drawn in favour of “The Registrar, Manonmaniam Sundaranar University, Tirunelveli” within a week from the date of LOA. The EMD paid can be adjusted against the Security Deposit shall be</p>

		<p>remitted. Alternatively, the Security Deposit can be paid by way of an irrevocable Bank Guarantee valid for the duration of contract period till the end of warranty. The Security Deposit will be returned to the successful Bidder after completion of contractual obligations i.e. after the expiry of warranty. If any penalty is accrued in executing warranty then the amount would be deducted from the performance security and the remaining amount would be returned after warranty period.</p> <p>33.2 The Tender Inviting Authority for exigency or any other valid reasons may allow further time to furnish the Performance Security/ Bank Guarantee.</p> <p>34 Release of Work Order</p> <p>“After the receipt of the Performance Security and execution of the Contract Agreement form specified in the tender, purchaser will release the formal work order to the Successful Bidder. The contract period will be counted from the day of signing of the contract by the successful bidder.</p>
5	Page 23, Annexure I, Pre qualification criteria, Sl No 5, Eligibility criteria	<p>“(Specify two in which one must be Govt. (Central/State) (Enclose order copy as proof)</p> <p>(Order must be for the supply &amp; installation of Controller based WiFi products)”</p> <p>is modified as</p> <p>“(Specify two completed contracts within the past three years, with not less than 100 access points in controller based installation, in which one must be Govt. (Central/State) (Enclose work order copy and completion report copy as proof)”</p>
6	Page 25, Annexure II,	"120 GB onboard storage"

	Schedule of requirements, AI.No 4, Wireless Controller description	is modified as  “should support at least 64 GB or more onboard storage”
7	Page 28, Technical compliance Sheet, item no 15	"WLAN should support captive portals configured for both wired and wireless connections. Portals can also be hosted on external servers"  is modified as  “WLAN should support Captive portals configured for wireless connections. Portals can also be hosted on external servers
8	Page 28, Technical compliance Sheet, item no 27	" Controller should support VLAN Pooling based on SSID or AP group for network load balancing in tunnel mode"  is modified as  " Controller should support AP grouping for network load balancing"
9	Page 28, Technical compliance Sheet, item no 30.	" Controller should support Static Routing and Dynamic routing protocol: RIP, OSPF(v2 & v3), BGP "  is modified as  " Controller should support static routing and dynamic routing protocols"
10	Page 28, Technical compliance sheet, item no 31c.	" Controller should be able control the bandwidth based on device type(such as windows device, Android device, Iphone, Ipad, blackberry, etc)"

		<p>is modified as</p> <p>" c) Controller should be able control the bandwidth based on user "</p>
11	<p>Page 30, Indoor Access point specifications, SI no 2, Mobility, Specification 6</p>	<p>“Should support Peak antenna gain of 4.6 dBi for 2.4 GHz, 6.3dBi for 5 GHz”</p> <p>is modified as</p> <p>" Should support Peak antenna gain of at least 4 dBi for 2.4 GHz, 6 dBi for 5 GHz”</p>
12	<p>Page 30, Indoor Access point specifications, SI no 2, Mobility, Specification 8</p>	<p>“Should support Local AP diagnostic web portal”</p> <p>is modified as</p> <p>“Should support Local AP diagnostics feature”</p>
13	<p>Page 33, Gigabit Ethernet switch specifications, SI no 17 MTBF</p>	<p>“Minimum 2,053,751hours”</p> <p>is modified as</p> <p>“Minimum 100 years”</p>
14	<p>Page 34, Annexure IV, Commercial Quote, Wireless Controller Description, Last line</p>	<p>“"120 GB onboard storage"</p> <p>is modified as</p> <p>“should support at least 64 GB or more onboard storage”</p>

**MANONMANIAM SUNDARANAR UNIVERSITY  
TIRUNELVELI-12**

**TENDER DOCUMENT**

*(Two Cover Bid System)*

**for**

**THE SUPPLY AND INSTALLATION OF  
CONTROLLER BASED WIFI NETWORKING**

**in**

**MANONMANIAM SUNDARANAR  
UNIVERSITY CAMPUS**

Cost of Tender Document : Rs. 500/-

Last date & time for Submission : 26.05.2017 at 3.00 PM

**CENTRE FOR COMPUTING**

**MANONMANIAM SUNDARANAR UNIVERSITY**

**APRIL 2017**

**COMPETITIVE BIDDING FOR**  
**THE SUPPLY AND INSALLATION OF CONTROLLER BASED WIFI**  
**NETWORKING AT MANONMANIAM SUNDARANAR UNIVERSITY CAMPUS**

**BID REFERENCE** : MSU/WIFI-Tender/2017

**TENDER PUBLISHING DATE** : 28.04.2017

**BID DOCUMENT DOWNLOAD START DATE** : 28.04.2017 AT 10.00 AM  
(Available at [www.msuniv.ac.in](http://www.msuniv.ac.in))

**SALE OF BIDDING DOCUMENT** : 28.04.2017 at 10.00 AM

**BID CLARIFICATION START DATE** : 28.04.2017 AT 10.00 AM

**PRE BID MEETING** : 05.05.2017 AT 11.30 AM

**BID CLARIFICATION END DATE** : 11.05.2017 AT 3.00 PM

**LAST DATE FOR SALE OF  
BID DOCUMENT** : 26.05.2017 at 3.00 PM

**LAST DATE AND TIME FOR  
RECEIPT OF BIDS** : 26.05.2017 at 3.00 PM

**TIME AND DATE OF OPENING  
OF TECHNICAL BIDS** : 26.05.2017 at 3.30 PM

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**PLACE OF OPENING OF TECHNICAL BIDS** : MS UNIVERSITY

**ADDRESS FOR COMMUNICATION** :

THE REGISTRAR

MANONMANIAM SUNDARANAR UNIVERSITY

TIRUNELVELI-12

(Please Quote Reference MSU/WIFI-Tender/2017 in all communications)

*(For Any clarifications Regarding Tender please contact Director, Centre for Computing  
: 9443869904)*

## Order of Documents

**All Bidders shall ensure whether the documents of the tender are prepared as per the following order before submitting / sending it.**

1. Tender Document fees Rs 500/- (DD or BPO) (shall be included for online downloaded documents)
2. Prequalification Criteria statement as per **Annexure I** along with **all proof of documents (Audit statements, Registration, TIN, PAN etc)**
3. Maintenance Capability Statement in **Annexure VII**
4. EMD original DD/BPO for Rs 25000/- in **separate sealed cover** with superscription **“EMD for the supply and installation of Controller Based WiFi Networking At MSU Campus”**. **Also write the bidder address on the back side of the cover in bold.**
5. Technical bid with details of documents, list of equipment with make and model no, Specification compliance documents as in **Annexure III**, Manufacturer authorization certificate in **Annexure VIII**, Detailed product specification sheets, Other required technical documents in support of the equipment supplied in **Separate sealed Cover** with superscription **“COVER A: Technical Bid For the Supply And Installation Of Controller Based WiFi Networking At MSU Campus”** **along with “Do not open this cover before 26.5.2017 @ 3.30 PM”**. **Also write the bidder address on the back side of the cover in bold**
6. Commercial bid with details Commercial quotes for the schedule of requirements (**Annexure IV**), Warranty quotes (**Annexure V**) in **Separate sealed Cover** with superscription **“COVER B: Commercial Bid for the supply and Installation of Controller Based WiFi Networking At MSU Campus”** **along with “Do not open this cover before 26.5.2017@ 3.30 PM”**. **Also write the bidder address on the back of the cover in bold**
7. Checklist duly signed by the Bidder as given in **Annexure IX**

(All the above documents should be put in a larger cover, sealed and with the superscription **“Tender document for the supply and installation of “Controller Based WiFi Networking at MSU Campus”** in bold on the top of the outer cover.



## **SECTION I: INVITATION FOR BIDS (IFB)**

### **COMPETITIVE BIDDING FOR THE SUPPLY AND INSALLATION OF WIFI COMPONENTS**

1. The Manonmaniam Sundaranar University, Tirunelveli, has decided to provide Controller based WIFI access facility to all the department and administrative buildings.
2. The University now invites sealed bids from interested bidders for the **SUPPLY AND INSTALLATION OF CONTROLLER BASED WIFI NETWORKING.**
3. Interested eligible Bidders may download the bidding documents at **www.msuniv.ac.in**
4. A complete set of bidding documents may also be purchased by any interested bidder on the submission of a written application to the above office and upon payment of a non-refundable fee as indicated below in the form of a Demand Draft/Bankers Pay Order (BPO).
5. The provisions in the Instructions to Bidders and in the General Conditions of contract are based on University norms
6. The bidding document may be obtained from the office of Director, Centre for Computing, M.S University, Tirunelveli-12 during office hours namely, from 9.30 hrs to 16.00 hrs, on all working days in person till 26.5.2017 3.00 pm by paying a Demand Draft/ BPO for Rs 500/- (non-refundable application form fee in favor of Registrar, M.S University, Tirunelveli-12 payable at Tirunelveli)
  - (a) Price of bidding document : Rs. 500/- (Five Hundred only)  
(non refundable)
  - (b) (EMD)(Refundable) : Rs. 25000/- (Rupees Twenty five thousand  
Only)
  - (c) Notification of Tender : 28.04.2017
  - (d) Tender document download  
Starting date : 28.04.2017 at 10.00 am
  - (e) Sale of bidding document : 28.04.2017 at 10.00 am
  - (f) Clarification start date : 28.04.2017 at 10.00 am
  - (g) Pre bid meeting : 05.05.2017 at 3.00 PM

- (h) Clarification end date : 11.05.2017 at 3.00 PM
  - (i) Last date and time for receipt of bids : 26.05.2017 at 3.00 PM
  - (j) Time and date of opening of Technical Bids : 26.05.2017 at 3.30 PM
  - (k) Place of opening of Technical bids : M.S University
7. All bids must be accompanied by a DD for RS 25000 /- as EMD specified in the bid document and must be delivered to the above office on or before the due date and time indicated above.
8. Bids will be opened in the presence of Bidders' representatives who choose to attend on the specified date and time mentioned in the tender document.
9. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.

## **SECTION II: INSTRUCTIONS TO BIDDERS**

### **TABLE OF CLAUSES**

#### **A. Introduction**

##### **1. About the Requirement**

This RFP invites proposals to provide a high throughput, secure wireless LAN connectivity to the users inside campus, in the admin building, hostels and the departmental buildings. Detailed scope of work, technical specifications and BOM are provided in subsequent sections

##### **2. Eligible Bidders**

The Company participating in the bidding should conform to the all following eligibility conditions.

- i. The company must have minimum of 5 years of existence in the field of supply installation and maintenance of Controller based WiFi networking.
- ii. Annual turnover of the company must be 1 crore or above **per year** for the past three years
- iii. Must have experience in the supply installation and maintenance of Controller based WIFI networking. Submit Proof of having 2 successfully completed orders of not less than 100 Access Points in the controller based networking. (submit the copies of work completion orders obtained from the past purchasers along with purchase orders).
- iv. Have VAT registration/Tax Index Number issued by the Commercial Tax Department of the Government of Tamil Nadu.
- v. Be registered for Service Tax, ESIC, PF, SALES TAX, VAT & LBT (Copy to be enclosed).
- vi. Have PAN number and should be an Income Tax Assesse
- vii. Have valid TIN number.

##### **3. Cost of Bidding**

- 3.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and hereinafter referred to as "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

#### **B. The Bidding Documents**

##### **4. Content of Bidding Documents**

- 4.1 The goods required, bidding procedures and contract terms are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents include:
  - (a) Instruction to Bidders (ITB);
  - (b) General Conditions of Contract (GCC);

- (c) Schedule of Requirements;
- (d) Technical Specifications;
- (e) Pre Qualification Criteria;
- (f) Bid Form and Price Schedules;
- (g) Maintenance Capability Statement Form; and
- (h) Manufacturer Authorization Form
- (i) Bidder's Checklist

4.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

## **5. Clarification of Bidding Documents**

5.1 A prospective Bidder requiring any clarification of the bidding documents may notify the Purchaser in writing or by email or cable or fax at the Purchaser's mailing address indicated in the Invitation for Bids. The Purchaser will respond to any request for clarification of the bidding documents which it receives no later than 15 days prior to the deadline for submission of bids prescribed by the Purchaser.

5.2 Pre Bid and Site Survey Meet

**Pre Bid meeting and Site Survey will be arranged on 05.05.2017** at the University Campus. Interested bidders may visit the University Campus and can perform a detailed survey regarding existing campus LAN, the locations where the placement of WiFi Controller and Access Points, other equipments such as racks, measurement of cabling, cabling and capping requirements for the implementation of the proposed project as per the schedule of requirements of goods and works. Any variations observed may be brought to the notice of the purchaser during the pre bid meeting.

## **6. Amendment of Bidding Documents**

6.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.

6.2 All prospective bidders who have purchased or downloaded the bidding documents are asked to refer the university website for any modifications/amendments /corrections in the tender documents. Amendments if any will be notified only in the university website mentioned in the Tender Schedule. The Bidders should check for the amendments or corrigendum in the websites till the closing date of this Tender. The purchaser will not be responsible for any ignorance of such modifications/corrections/amendments.

- 6.3 Before closing of the Tender, this office at its discretion may amend the Tender and may or may not extend the due date and time for the submission of Tenders on account of any amendments.

### **C. Preparation of Bids**

#### **7. Language of Bid**

The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Bid, the translation shall govern.

#### **8. Documents Constituting the Bid**

The bid prepared by the Bidder shall comprise the following components:

- (a) Bid Form and a Price Schedule
- (b) Documentary evidence that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted.
- (c) Documentary evidence established that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bidding documents; and
- (d) EMD.

#### **9. Bid Form**

The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, and their country of origin, quantity and prices.

#### **10. Bid Prices**

The Bidder shall indicate on the Price Schedule the unit prices and total bid prices of the goods it proposes to supply under the Contract.

Prices indicated on the Price Schedule shall be entered separately in the following manner:

- (i) The price of the goods, quoted (ex-works, ex-factory, ex-showroom, ex-warehouse, or off-the-shelf, as applicable), including all duties and sales and other taxes already paid or payable:
- (ii) Any Indian duties, sales and other taxes which will be payable on the goods if this Contract is awarded;
- (iii) The price for inland transportation, insurance and other local costs incidental to delivery of the goods to their final destination;
- (iv) The price of annual maintenance services for 3 years after expiry of warranty.

## 11. Bid Currencies

Prices shall be quoted only in Indian Rupees:

## 12. Documents Establishing Bidder's Eligibility and Qualifications

- 13.1 Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the Contract (as provided in **Annexure I**) if its bid is accepted.
- 13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the Purchaser's satisfaction that the Bidder, at the time of submission of its bid,
- 13.3 The documentary evidence of the Bidder's qualifications to perform the Contract if its bid is accepted, shall establish to the Purchaser's satisfaction. The Bidder has the financial, technical, and production capability necessary to perform the Contract and meets the criteria outlined in the Qualification requirements specified in Annexure I. To this end, all bids submitted shall include the following information:
- (i) The legal status, place of registration and principal place of business of the company or firm or partnership, etc.;
  - (ii) Details of experience and past performance of the bidder on equipment offered and on those of similar nature and details of current contracts in hand and other Capability to provide after sales services (suggested proforma given in **Annexure I and VII**);
  - (iii) The bidder/system integrator (SI) should be experienced in the field of Installation and Maintenance of Controller based Wi-Fi business for the minimum last five years. It is mandatory to enclose the supporting documents.
  - (iv) The bidder must have successfully executed at least two wireless controller based projects each consisting of minimum 100 access points in the controller based configuration during the last two calendar years.
  - (v) The **annual turnover per year** of the bidder for the last two financial years (2014- 2016) should be *at least Rupees One Crore per year*. Supporting documents (duly signed Audit reports and Balance sheets) must be enclosed.

## 14. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents

- 14.1 Bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services which the Bidder proposes to supply under the contract.
- 14.2 The documentary evidence of the goods and services eligibility shall consist of a statement in the Price Schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.
- 14.3 The documentary evidence of conformity of the goods and services to the bidding

documents may be in the form of literature, drawings and data, and shall consist of:

- (a) A detailed description of the essential technical and performance characteristics of the goods;
- (b) An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications;
- (c) A confirmation that the Bidder is either the owner of the intellectual Property Rights in the hardware and the software items offered, or that it has proper **Manufacturer authorization and/or license from the Original Equipment Manufacturing firm specific to this tender.**

14.4 For purposes of the commentary to be furnished pursuant above, the Bidder shall note that standards for workmanship, material and equipment, and references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

#### **15. Earnest Money Deposit (EMD)**

15.1 Bidder shall furnish, as part of its bid, a Earnest Money Deposit (EMD) for Rs 25000/- Rupees Twenty-five Thousands only.

15.2 The EMD is required to protect the Purchaser against the risk of Bidder's conduct which would warrant the security's forfeiture

15.3 The EMD shall be denominated in Indian Rupees and shall:

- (a) be in the form of either a **Demand Draft, or a Bankers Pay Order** in favor of the **Registrar, M.S University and payable at Tirunelveli**, from a nationalized bank located in India.
- (b) be submitted in its original form; copies will not be accepted; and
- (c) Remain valid for a period of at least 45 days beyond the original validity period of bids, or beyond any period of extension subsequently asked by the purchaser
- (d) EMD in any other forms will not be accepted.

15.4 **All bid documents not accompanying with proper EMD as mentioned above will be rejected by the Purchaser and marked as non-responsive.**

15.5 **Unsuccessful bidder's EMD will be discharged/returned as early as possible as but not later than 30 days after the expiration of the period of bid validity prescribed by the Purchaser**

- 15.6 The successful Bidder's EMD will be discharged upon the Bidder signing the Contract and successful completion of the Contract.
- 15.7 The EMD may be forfeited:
- (a) If a Bidder (i) withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or (ii) does not accept the correction of errors or
  - (b) In case of a successful Bidder, if the Bidder fails:
    - (i) To sign the Contract or
    - (ii) Failed to carry out the contract as per the contract order issued.

## **16. Period of Validity of Bids**

- 16.1 **Bids shall remain valid for 90 days** after the date of bid opening prescribed by the Purchaser, pursuant to. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.
- 16.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (or by cable or telex or fax). The EMD shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.

## **17. Format and Signing of Bid**

- 17.1 The Bidder shall prepare **two copies of the bid, clearly marking each "Original Bid" and "Copy Bid"**, as appropriate. In the event of any discrepancy between them, the original shall govern.
- 17.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract.
- 17.3 Any interlineations, erasures or overwriting shall be valid only if they are initialed by the persons or persons signing the bid.
- 17.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

### **D. Submission of Bids**

## **18. Sealing and Marking of Bids**

- 18.1 The Bidders shall seal the original and each copy of the bid in separate inner envelopes, duly marking the envelopes as "original" and "copy". He shall then place all the inner envelopes in an outer envelope.

**As it is a two cover bid system, Technical Bid and commercial Bids must be put in two**



**separate sealed covers with proper markings of bid name and type as given in order of the documents in page 3 of the Tender document**

**18.2 The inner and outer envelopes shall:**

(a) Be addressed to the Purchaser at the following address:

**The Registrar, Manonmaniam Sundaranar University, Tirunelveli-12**

(b) Bear the Bid Name, the Bid title and number, and a statement

**"Do not open before 15.30 hours on 26.05.2017"**

18.3 The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late".

18.4 **If the outer envelope is not sealed properly or Technical and Commercial bids are not in separate covers with proper markings**, the Purchaser will assume no responsibility for the improper bid preparations and **such bids will be considered as nonresponsive and be rejected.**

18.5 Telex, cable or facsimile and emailed bids will be rejected.

**19. Deadline for Submission of Bids**

19.1 Bids must be received by the Purchaser at the address specified no later than the time and date specified in the Invitation for Bids (Section I). In the event of the specified date for the submission of Bids being declared a holiday for the Purchaser, the Bids will be received up to the appointed time on the next working day.

19.2 The Purchaser may, at its discretion, extend this deadline for submission of bids, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

**20. Late Bids**

20.1 Any bid received by the Purchaser after the deadline given in the bid document for submission of bids prescribed by the Purchaser, will be rejected and/or returned unopened to the Bidder.

**21. Modification and Withdrawal of Bids**

21.1 The Bidder may modify or withdraw its bid after the bid's submission till the last date of submission, provided that written notice of the modification or withdrawal is received by the Purchaser ***prior to the deadline*** prescribed for submission of bids. Modification of bids after the due date is not permitted.

21.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched. A withdrawal notice may also be sent by telex or cable or fax but followed by a signed confirmation hard copy, post marked not later than the deadline for submission of bids.

- 21.3 No bid may be modified subsequent to the deadline for submission of bids.
- 21.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its EMD.

### **E. Bid Opening and Evaluation of Technical Bids**

#### **22. Opening of Bids by the Purchaser (Only Technical Bids)**

- 22.1 **Only the Technical bids submitted in proper form as per the order of documents given in page 3 of the tender document and checklist given in Annexure X along with all required documents including the EMD cover and prescribed Application fees will be opened.** The Purchaser will open the **Technical bids** in the presence of Bidders' representatives who choose to attend, at 15.30 hours on 26 05.2017 and in the location decided and intimated to bidders by the Purchaser. However, the Purchaser may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any Bidder.

The Bidders' authorized representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the time and location on an alternate day suggested by the Purchaser.

- 22.2 The bidders' names, bid modifications or withdrawals, technical specifications and the presence or absence of requisite EMD and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the Bidder.
- 22.3 Bids that are not opened (In case of not submitted the EMD or Tender document fees, or any other reasons) on the bid opening date shall not be considered further for evaluation, irrespective of the circumstances.
- 22.4 The Purchaser will prepare minutes of the bid opening.
- 22.5 **All bidders or their representatives who are present on bid opening shall produce proper authorization letter from the concerned company in the company letter head. Otherwise they will not be permitted to attend the Technical bid opening meeting.**

#### **23. Clarification of Bids**

- 23.1 During evaluation of bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted.

## **24. Preliminary Examination**

- 24.1 The Purchaser will first examine the bids to determine whether they are complete, whether all the required information and documents have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Bids without proper *Authorization from the manufacturer* as per *Annexure VIII*, shall be treated as non-responsive.
- 24.2 Technical bids are examined based on the compliance to technical specifications, Manufacturer authorization, and detailed specification documents, technical manuals and other documents including the warranty details etc.
- 24.3 The Purchaser may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any Bidder.
- 24.4 Prior to the detailed evaluation, the Purchaser will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations.
- 24.5 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

## **25. Opening of Commercial Bids**

The date of opening of the Commercial bid will be decided by the Purchaser.

## **26. Evaluation and Comparison of Bids**

- 26.1 The Purchaser will evaluate and compare the bids which have been determined to be substantially responsive.
- The Purchaser will evaluate and compare the bids previously determined to be substantially responsive. No bid will be considered if the complete requirements covered in the schedule is not included in the bid. The bid comparison process is done by the purchaser and the successful bidder will be intimated about the award of the contract at a later date decided by the purchaser.
- 26.2 The Purchaser's evaluation of a bid will exclude and not take into account:
- (a) in the case of goods manufactured in India or goods of foreign origin already located in India, sales and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder;
  - (b) Any allowance for price adjustment during the period of execution of the Contract, if provided in the bid.

26.3 The Purchaser's evaluation of a commercial bid will take into account, in addition to the bid price (Ex-factory/ex-warehouse/off-the-shelf price of the goods offered from within India, such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods in India, and Excise duty on the finished goods, if payable) and price of incidental services including the warranty quoted for the required period.

- (a) cost of inland transportation, insurance and other costs within India incidental to the delivery of the goods to their final destination;
- (b) delivery schedule offered in the bid;
- (c) the availability in India of spare parts and after-sales services for the equipment offered in the bid.

## **27. Contacting the Purchaser**

27.1 No Bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the purchaser, it should do so ONLY in writing.

27.2 Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

## **F. Award of Contract**

### **28. Post qualification**

28.1 The determination will take into account the Bidder's financial and technical Quotes. It will also be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the Purchaser deems necessary and appropriate.

28.2 An affirmative determination will be a prerequisite for award of the Contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Purchaser will proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform the contract satisfactorily.

### **29. Award of contract**

Purchaser will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

### **30. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids**

The purchaser reserves the right to accept or reject any or all of the Tenders in full or in parts without assigning any reason whatsoever. There is no obligation on the part of this office to communicate with rejected Bidders. After acceptance of the tender by this Office, the Bidder should have no right to withdraw his tender or claim higher price. The tender acceptance authority may also reject all the tenders for reasons such as change in scope of work, new technologies and lack of anticipated financial resources, court orders, accidents or calamities and other unforeseen circumstances. Tenders with incomplete information are liable for rejection.

### **31. Notification of Award**

Prior to the expiration of the period of bid validity, a Letter of Award (LOA) shall be issued, in duplicate, by the purchaser to the lowest tenderer with the condition that the lowest tenderer shall, within 7 (seven) days of the receipt of the Letter of Award (LOA), sign and return a duplicate copy of the Letter of Award (LOA) in acknowledgement thereof

### **32. Signing of Contract**

Upon the receipt of the Letter of Award, the Successful Bidder should execute the contract agreement in accordance with the format of Agreement included in **Annexure VI**, for the fulfillment of the contract in Rs.20/- Non Judicial Stamp paper purchased in Tamil Nadu in the model form given in Annexure VI of the tender document with such changes/modifications as may be indicated by the purchaser at the time of execution, within 10 days from the date of receipt of LOA. If the same is not executed within 10 days, the Performance Security/EMD of the successful Bidder will be forfeited and his tender will be held as non-responsive.

### **33. Performance Security**

33.1 The Successful Bidder should remit a Performance Security Deposit at the rate of 5 % of the value of the contract amount in Indian rupee towards Security Deposit by way of a Demand Draft from any Bank drawn in favour of "The Registrar, Manonmaniam Sundaranar University, Tirunelveli" within a week from the date of LOA. The EMD paid can be adjusted against the Security Deposit shall be remitted. Alternatively, the Security Deposit can be paid by way of an irrevocable Bank Guarantee valid for the duration of contract period. The Security Deposit will be returned to the successful Bidder after completion of contractual obligations ie after the expiry of warranty. If any penalty is accrued in executing warranty then the amount would be deducted from the performance security and the remaining amount would be returned after warranty period.

33.2 The Tender Inviting Authority for exigency or any other valid reasons may allow further time to furnish the Performance Security/ Bank Guarantee.

### **34. Release of Work Order**

After the receipt of the Performance Security and execution of the Contract Agreement form specified in the Tender, this purchaser will release the formal work order to the

Successful Bidder. The contract period will be counted from the day of signing of the contract by the successful bidder.

## SECTION III: GENERAL CONDITIONS OF CONTRACT

### 1. Definitions

1.1 In this Contract, the following terms shall be interpreted as indicated:

- (a) "The Contract" means the agreement entered into between the Purchaser and the Supplier, as recorded in the Contract Form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein;
- (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
- (c) "The Goods" means all the equipment, machinery, and/or other materials which the Supplier is required to supply to the Purchaser under the Contract;
- (d) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Supplier covered under the Contract;
- (e) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
- (f) "The Project Site", where applicable, means the place or places named in SCC.
- (g) "Day" means calendar day.

### 2. Application

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

### 3. Standards

The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

### 4. Use of Contract Documents and Information; Inspection & Audit by the Bank

4.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such

employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

- 4.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information except for purposes of performing the Contract.
- 4.3 Any document, other than the Contract itself, shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

## **5. Patent Rights**

The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

## **6. Inspections and Tests**

- 6.1 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser. Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes.
- 6.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data - shall be furnished to the inspectors at no charge to the Purchaser.
- 6.3 Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.
- 6.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.

## **7. Packing**

- 7.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

7.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, in any subsequent instructions ordered by the Purchaser.

## **8. Delivery and Documents**

Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in the Notification of Award.

## **9. Incidental Services**

The supplier may be required to provide any or all of the following services, including additional services, if any, specified by the purchaser:

- (a) performance or supervision of the on-site assembly and/or start-up of the supplied Goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (c) furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
- (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
- (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods.

## **10. Spare Parts**

The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- (a) such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- (b) In the event of termination of production of the spare parts:
  - (i) advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
  - (ii) following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

## **11. Warranty**

11.1 The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or



workmanship (except when the design and/or material is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

**11.2 This warranty shall remain valid for 36 months after the goods have been delivered, installed commissioned and the date on which the contract is accepted as completed by the purchaser at Manonmaniam Sundaranar University.**

11.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.

11.4 Upon receipt of such notice, the Supplier shall, within the period specified with all reasonable speed, repair or replace the defective Goods or parts thereof, without cost to the Purchaser other than, where applicable, the cost of inland delivery of the repaired or replaced Goods or parts from ex-works or ex-factory or ex-showroom to the final destination.

## **12. Payment**

12.1 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted and upon fulfillment of other obligations stipulated in the contract. No advance payment will be made

12.2 Payments shall be made promptly by the Purchaser but in no case later than sixty (60) days after the date of installation, commissioning and completion of the contract and submission of the invoice or claim by the Supplier.

12.3 Payment shall be made in Indian Rupees.

## **13. Prices**

Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid.

## **14. Delays in the Supplier's Performance**

14.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser in the Schedule of Requirements.

14.2 If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

## **15. Termination for Default**

15.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

- (a) if the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser; or
- (b) if the Supplier fails to perform any other obligation(s) under the Contract.
- (c) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, in competing for or in executing the Contract

15.2 In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

## **16. Termination for Convenience**

16.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

16.2 The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

- (a) to have any portion completed and delivered at the Contract terms and prices; and/or
- (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

## **17. Settlement of Disputes**

If any dispute or difference of any kind whatsoever shall arise between the Purchaser and the Supplier in connection with or arising out of the Contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.

## **18. Penalty for Non-fulfilment of Tender**

In the event of non-fulfilment or non-observance of any of the conditions stipulated in the under conditions, the Performance Security Deposit paid by the Successful Bidder in full or part as may be decided at the time will be forfeited.

### **Liquidated Damages**

Penalty will be levied at the rate of 0.1% per calendar day on the total contract value subject to a maximum of 10%, if the total work has not been completed in full within the stipulated time the tenderer shall pay damages as claimed by the Purchaser. It will also render the tenderer liable for black listing. If Force Majeure conditions cause delay to the extent of force majeure affected days the tenderer is not liable for penal consequences.

### **Penalty for Non-Fulfilment Conditions**

The Successful Bidder agrees that in the event of non-fulfilment or non-observance of any of the conditions stipulated in the tender conditions and work order, the successful tenderer shall pay as penalty an amount equivalent to 10 (Ten) percent of total value of contract or an amount equal to the actual loss incurred by the whichever is higher. Force majeure event means an unforeseen course of events, like heavy floods, Tsunami, riot, war etc., which prevents the tenderer from executing the contract, excusing the tenderer from penal consequences. It is his responsibility of the tenderer to inform the purchaser in writing about the commencement of such force majeure event deterring the tenderer from performing his contractual obligations and about the end of the force majeure event, making the situation hassle free from performance of the contract.

### **19. Taxes and Duties**

Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser.

**Annexure I**

**PRE-QUALIFICATION CRITERIA COMPLIANCE STATEMENT**

(To be filled in by the Bidder and enclosed with bid along with all supporting proof documents)

Sl no	Eligibility Criteria	Response of the bidder (Write)	Whether document proof enclosed (Yes/NO)
1	The bidder is a registered Indian Company and in existence for the past five years and engaged in the supply and installation of WiFi Networking. (Specify Reg. No)	Inception date: Experience:        yrs	
2	Specify annual turnover of the company for the past two years (Attach copies of Audit statement for the past two years)	2014-15: Rs. ....Crores 2015-16: Rs. .... Crores	
3	Whether the bidder has valid VAT /TIN No ( Copy of Registration certificate to be Enclosed)	VAT:  TIN No:	
4	Whether the bidder is an Income Tax Assesse having PAN number (Enclose previous year (2015-16) Tax return statement )	PAN	
5	Contracts Received for the past three years. ( Specify two completed contracts within the past three years, with not less than 100 access points in controller based installation, in which one must be Govt. (Central/State)  (Enclose work order copy and completion report copy as proof)	(Govt. contract)  Purchaser:  Value: Rs ..... lakhs	

		Date:	
		Purchaser:	
		Value: Rs.....lakhs	
		Date	
6	Contact successfully Completed for the past three years.  (Enclose list of Work orders giving details of Customer names, Quantity of Controller/APS, Scheduled date as per Work order, Actual completed date )		

**References:** Provide two references (full address with contact person and phone numbers) of purchasers to enquire about the bidder.

1	2
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Signature of the bidder with seal

## Annexure II

### SCHEDULE OF REQUIREMENTS

S.No	Description:	UOM	Qty
<b>Supply :</b>			
1	Cat 6 UTP cable	Length	2400 meters
2	Rj45 connectors	Nos	200
3	<p><b><u>Remote wireless AP</u></b> - 1 x 10/100/1000 (WAN with PoE PD 802.3af) with FE RJ45 ports, Single radio/Dual-band (802.11 a/b/g/n, 2x2 MIMO), 1x USB-A port</p> <p><b><u>Warranty</u></b> Care and service pack for AP HW/SW 3 year</p>	Nos	85
4	<p><b><u>Wireless Controller</u></b></p> <p>Supports min 2 GE RJ45 ports and 1 GE SFP slots, should support at least 64 GB or more onboard storage</p> <p><b><u>Warranty</u></b> Care and service pack for Controller HW/SW 3 years</p>	Nos	1
5	POE Injectors	Nos	85
6	8 port Ethernet switch	Nos	5
7	1' PVC Conduits/channels	Mtrs	1500
<b>Labour :</b>			
8	Laying of UTP cable	Mtrs	2400
9	Laying of ' PVC Conduits/.channels	Mtrs	1500
10	Testing and termination of jack	Nos	200

## **TECHNICAL SPECIFICATIONS**

## Annexure III

### TECHNICAL SPECIFICATIONS

#### 1. Wireless Controller Specifications:

Wireless Controller Specifications			
S.No.	Specification	Compliance (Yes/No)	Remarks
	<b>Wireless Controller Appliance Branches</b>		
1	It must be Rack Mountable appliance based controller. It should not be a software based or virtual controller		
2	Controller should support CAPWAP or equivalent encrypted throughput of 5Gbps		
3	Controller should be ready for supporting to a minimum of 250 AP's with necessary licenses for the Access Points of schedule quantity.		
4	Controller hardware should support min two GE RJ45 Interfaces		
5	Controller should have a capacity to inspect all <b>traffic</b> from each user session and allow or deny any traffic that does not satisfy specified policies.		
6	Controller must be capable of offloading the CAPWAP processing to hardware/ASIC or equivalent method, so it does not create CPU overhead		
7	It should support DHCP server for IPv4 and IPv6		
8	It should support IPv4 and IPv6 based firewall policies to inspect all traffic		
9	Controller should support access points deployed in Centralized deployment mode, Distributed deployment mode.		
10	The wireless controller support the following types of client load balancing:		
	a) Access Point Hand-off -If the load on an access point (ap1) exceeds a threshold then the client with the weakest signal will be signaled by wireless controller to drop off and join another nearby access point (ap2)		
	b) Frequency Hand-off - the wireless controller monitors the usage of 2.4GHz and 5GHz bands, and signals clients to switch to the lesser-used frequency automatically		
11	Controller should have ability to map SSID to VLAN and dynamic VLAN support for same SSID.		



12	The wireless Controller should support Rogue AP detection and Blocking in RF and on wire		
13	The Controller should have following Wireless Security functionality		
	a) Asleep Attack		
	b) Authentication Frame Flooding		
	c) Broadcasting De-authentication		
	d) EAPOL Packet Flooding		
	e) Invalid MAC OUI		
	f) Spoofed De-authentication		
	g) Client de-authentication rate for DOS attack		
	h) It should be able to detect the 3rd party wireless enabled Mobile devices with Hot spot programs and able to prevent the users from connecting those mobile devices		
14	Support Fast Roaming or equivalent. This includes Seamless rapid mobility across VLAN and subnets Includes 802.11i pre-auth and fast roaming		
15	WLAN should support Captive portals configured for wireless connections. Portals can also be hosted on external servers		
16	It should Include Wireless Guest Access Provisioning for Allowing staff to create Guest account, Assign Time quota, generate temp password, print, email or SMS the information to the Guest user.		
17	It should support for 802.1Q trunking and network address translation (NAT) functionality for wired LAN connectivity.		
18	The wireless Controller should support the following RF Management features		
	a) Automatic Channel Allocation		
	b) Controller should support the Radio resource management for channel allocation activity in a low-traffic period also it should have an option for schedule optimization for a fixed time.		
	c) Automatic Power Control		
	d) Supporting Neighborhood scanning of RF environment to minimize neighboring AP interference and leakage across floors.		
	e) Having Coverage Hole Detection		
	f) Having Self healing - Automatic neighboring AP power increase to fill in for coverage losses		

19	It should support the following controller discovery mechanism from AP's: a) Static IP, b)Automatic discovery via Multicast AND Broadcast C)DHCP Option, D)DNS FQDN discovery		
20	Controller should have the below Remote access point features:		
	a) It should support by all access points quoted by bidder		
	b) Enables APs to be deployed remotely (over WAN link) to the centralized wireless controller with encrypted tunnel for management and data traffic		
	c) It should support Split tunnel routing the management frame via tunnel to controller and data traffic locally		
	d) Wireless client connectivity is maintained when the wireless controller is unreachable for open and PSK type SSIDs		
	e) Controller should support Gateway-to-gateway and hub-and-spoke IPSEC VPN to establish a Secure tunnel from AP to controller in remote location		
21	Controller should support user identity based or device identity based network access policy.		
22	Controller should support 802.1X, Captive portal and open authentication integrated with Local and External server: Radius, LDAP and TACACS+		
23	Controller should support MAC filtering per SSID		
24	Controller Should support mesh capabilities for temporary connectivity in areas with no Ethernet cabling. Also it should support for multiple mesh instances. Add if any license required		
25	Support IEEE 802.11e Wi-Fi Multimedia (WMM)		
26	Controller should support RADIUS CoA (Change of Authorization)		
27	Controller should AP grouping for network load balancing		
28	Controller should have option to disable automatic registration of unknown Access points		
29	Controller should suppress DHCP, Arp, NETBIOS and other multicast and broadcast packets		
30	Controller should support Static Routing and Dynamic routing protocols		
31	Should support the below BYOD features within the controller for employee and guest personal devices. If not bidder can quote for additional devices		

	a) Detect client device Mac address, device type(such as windows device, Android device, smart phone, Ipad, etc) and host name		
	b) controller should be able to allow or deny traffic based on device type (such as windows device, Android device, smart phone, Ipad etc)		
	c) Controller should be able control the bandwidth based user		
	The controller should support Web-based GUI, SNMP, Command-line interface(CLI) via Serial port, SSH, Telnet for management		
32	<b>Certifications:</b>		
	Wifi Alliance - Wi-Fi Alliance certified (802.11a/b/g/n/d/h, WPA™ Personal, WPA™ Enterprise, WPA2™ Personal, WPA2™ Enterprise, WMM™, WMM™ Power Save)		

<b>Indoor Access Points Specifications</b>			
<b>S.No</b>	<b>Features</b>	<b>Specification</b>	<b>Compliance Yes/ No</b>
1	<b>Architecture</b>	The Access Point should support IEEE 802.11a/b/g/n/ac standards	
		Access point should support dual band 2.4Ghz and 5Ghz.	
		Should support radio1 as selectable 2.4 GHz b/g/n or 5 GHz a/n	
		Should have at least 2 Internal Antennas	
		Should have minimum 10/100/1000 Interface.	
		Should support Power over Ethernet (PoE) 802.3af (12.9W)	
		Support 2x2 MIMO dual stream or better	
		The access Point should support throughput of minimum 300 Mbps Bandwidth .	
2	<b>Mobility</b>		
		Should support L2 and L3 wireless controller discovery	
		Should support auto-selection of RF channel and transmit power	
		Should support Full-time scan as dedicated monitor	
		WME Multimedia Extensions support 4 priority queues for voice, video, data and background traffic	
		Should support 8 Simultaneous SSIDs	
		Should support Peak antenna gain of at least 4 dBi for 2.4 GHz, 6 dBi for 5 GHz”	
		Should support at least 18dBm Transmission Power	
		Should support Local AP diagnostic feature	

3	<b>Management</b>		
		Should be centrally managed through the wireless controller	
		Should support DNS based Controller discovery, DHCP Based Controller discovery	
		Should support web-based secured management interface	
		Should support Command line(CLI) to access point	
		Support Wall mounting option	
4	<b>Environment</b>		
		Operating Temperature : 32–104°F (0–40°C)	
		Low Voltage Directive , RoHS complaint	

## 2. PoE Injector:

S.No	Description	Specification	Compliance Yes/No
1	Standards	EEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3af	
2	Ports	10/100/1000Mbps Auto-Negotiation RJ45 LAN port (LAN IN), 1 10/100/1000Mbps Auto-Negotiation Must support RJ45 PoE port (POWER+DATA OUT)	
3	Basic Function	Auto-Sensing Algorithm enables providing power with 802.3af PD Delivers power and data over the same cable up to 100 meters Auto-determine the necessary power requirements Plug-and-Play	
4	Safety & Emission	FCC, CE	
5	Operating Temperature	0°C~40°C (32°F~104°F)	

## 3. Gigabit 8 Port Ethernet Switch:

S. No	Description	Specification	Compliance Yes/No
1	Number of Ports	8 Nos 10/100/1000Mbps	

2	Switching Fabric	16Gbps	
3	Standards	<ul style="list-style-type: none"> <li>• ANSI/IEEE802.3NWayauto-negotiation</li> <li>• IEEE802.3xFlowControl</li> <li>• IEEE802.1pQoS</li> <li>• IEEE802.3azEnergy-EfficientEthernet</li> </ul>	
4	Protocol	•CSMA/CD	
5	Data Transfer Rates	Gigabit Ethernet: -2000Mbps full duplex	
6	Topology	Star	
7	Media Interface Exchange	Auto MDI/MDIX adjustment for all ports	
8	LED Indicators	Per device: Power	
9	Transmission Method	Store-and-forward	
10	MAC Address Table	8K	
11	MAC Address Learning	Automatic update	
12	Packet Filtering/ Forwarding Rates	Gigabit Ethernet: 1,488,000pps per port	
13	RAM Buffer	128KB per device	
14	Jumbo Frames	9,000Bytes	
15	QoS	4 Queues, strict mode	
16	DC Input	External 5V/1A Level “V” Power Adapter	
17	MTBF	Minimum 100 years	
18	Certifications	VCCI ClassB, cUL, CB	

**4. CAT 6 Cable specifications :**

**Must be any one of the following makes**

**Krone or Molex or AMP Category 6 UTP cable**

## 5. RJ 45 Connectors Specifications:

S.No	Description	Compliance Yes/No
1	RJ45 plugs shall have eight (8) pins to which the wire strands of a cable interface electrically.	
2	The Each plug has eight locations (positions), spaced about 1mm apart, into which individual wires are inserted using special cable crimping tools	
3	RJ45 modular plug supports 4 twisted pairs, meet wiring scheme	
4	Housing: polycarbonate, 94V-2, transparent color	
5	Contact terminal: phosphor bronze	
6	Finished: 50 micro-inch gold plating, over 50 micro inch Nickel plated on contact area	
7	Cable to plug tensile strength: 7.7 kgs	
8	Terminates 24-26 AWG stranded wires, wiring scheme T568A/T568B	

## 6.Casing and Capping:

S.No	Description	Compliance Yes/No
1	3/4' PVC conduit / casing capping	
2	ISI standard	
3	HMS grade (2mm thick), accessories such as Spacers & Saddles, Couplers, Bends, inspection or non -inspection type Elbows, Tees, Junction boxes of required ways and resin/ adhesive to make all joints rigid	

## Annexure IV

### COMMERCIAL QUOTE

(in the company original letterhead with Reg No, TIN etc)

(Please put the commercial quote (Two copies) in a separate sealed covers and mark as  
Commercial Bid copy 1 and copy 2)

**PRICE SCHEDULE: (please Quote prices including 3 year onsite warranty for  
the active and passive accessories)**

S.No	Description:	UOM	Qty	Price Exclusiv e of tax	Tax % and AMT in Rs	Net Cost
<b>Supply :</b>						
1	Cat6 UTP cable	Length	2400 meters			
2	Rj45 connectors	Nos	200			
3	<b>Remote wireless AP</b> - 1 x 10/100/1000 (WAN with PoE PD 802.3af), FE RJ45 ports, Single radio/Dual-band (802.11 a/b/g/n, 2x2 MIMO), 1x USB-A port  <b>Warranty</b> Care and service pack for AP HW/SW – 3year	Nos	85			
5	<b>Wireless Controller</b>  2x GE RJ45 ports, 1x GE SFP slots, should support at least 64 GB or more onboard storage <b>Warranty</b> Care and service pack for Controller HW/SW – 3years	Nos	1			
6	POE Injectors	Nos	85			
7	8 port Ethernet switch	Nos	5			
7	1' PVC Conduits/channels	Mtrs	1500			
<b>Labour :</b>						
8	Laying of UTP cable	Mtrs	2400			
9	Laying of ' PVC Conduits/.channels	Mtrs	1500			
10	Testing and termination of jack	Nos	200			
	<b>Total supply &amp; labour</b>					

Net amount Rs. \_\_\_\_\_ In figures (Inclusive of All Taxes) Rupees \_\_\_\_\_

\_\_\_\_\_ (in Words)

**Signature of the Authorized Person with company seal**

## Annexure V

( Commercial Bid document )

### SCHEDULE FOR ANNUAL MAINTENANCE AND REPAIR COST

#### POST WARRANTY PERIOD

Schedule No.	Item Description	Quantity	Annual Maintenance Cost for all units per year Rs./Year After initial warranty in Rupees	Total Maintenance cost charges for 3 years after initial warranty in Rupees
1	Wireless Controller	1		
2	Wireless Access Point with Wall/Ceiling Mounting Kit	85		
3	PoE	85		
4	Gigabit 8 Port Ethernet Switch	5		
		Total		

Note: In case of discrepancy between unit price and total price, the unit price shall prevail.

**Signature of the Authorized Person with company seal**

**Place & Date**

Name : \_\_\_\_\_

Business Address: \_\_\_\_\_

\_\_\_\_\_



**Annexure VI:**

**CONTRACT FORM**

**THIS AGREEMENT** made the .....day of....., 20... Between .....  
(*Name of purchaser*) of ..... (*Country of Purchaser*) (hereinafter called "the Purchaser") of  
the one part and ..... (*Name of Supplier*) of ..... (*City and Country of*  
*Supplier*) (hereinafter called "the Supplier") of the other part :

**WHEREAS** the Purchaser is desirous that certain Goods and ancillary services viz.,  
..... (*Brief Description of Goods and Services*) and has accepted a bid by the  
Supplier for the supply of those goods and services in the sum of ..... (*Contract*  
*Price in Words and Figures*) (hereinafter called "the Contract Price").

**NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:**

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
  - (a) the Price Schedule submitted by the Bidder;
  - (b) the Schedule of Requirements;
  - (c) the Technical Specifications with compliance response;
  - (d) the General Conditions of Contract;
  - (e) The Purchaser's Notification of Award.
3. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

Brief particulars of the goods and services which shall be supplied/provided by the Supplier are as under:

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SL. NO.	BRIEF DESCRIPTION OF GOODS & SERVICES	QUANTITY TO BE SUPPLIED	UNIT PRICE	Total PRICE	DELIVERY TERMS
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**TOTAL VALUE:**

**DELIVERY SCHEDULE:**

**Supply of products :** Within 6-8 weeks weeks from the date of issue of contract award letter

**Installation and Commissioning:** Within 12weeks from the date of issue of the contract award letter.

**IN WITNESS** whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by the  
said ..... (For the Purchaser)  
in the presence of:.....

Signed, Sealed and Delivered by the  
said ..... (For the Supplier)  
in the presence of:.....

**Annexure VII**

**MAINTANANCE CAPABILITY STATEMENT (CS)**

1. Name & Address of the Bidder Phone:

2. Classifications
- (1) Manufacturer
  - (2) Authorized Agent
  - (3) Dealer
  - (4) Others (please specify)

3. Organization:
- (a) Location
  - (b) Description, Type & size of building
  - (c) No of Employees

4. AMC Orders Received during last 2 years (Enclose list of Clients, and Attach AMC award and completion letter from the Purchaser (Min Two, one must be Govt. Central/State))

Sl.NO	Name of the Organization	Contract Award Date	Completion Date	Value of the Contract
1				
2				

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5. Nearest service centers available (Specify Address):

Location \_\_\_\_\_ Contact Person: \_\_\_\_\_

Phone No. \_\_\_\_\_

Year of Establishment \_\_\_\_\_

6. Names of two recent purchasers (contact persons) to whom similar WIFI equipment was supplied in the past and to whom reference may be made by the Purchaser regarding the bidder's technical competency, Maintenance capability and service delivery ability.

1) Name & Addr. \_\_\_\_\_ Mobile:

2) Name & Addr \_\_\_\_\_ Mobile:

## Annexure VIII

### **Manufacturer's Authorization Certificate**

*(To be submitted along with technical Bid)*

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid.]*

Date: *[insert date (as day, month and year) of Bid Submission]*

To: (Purchaser, Address of Purchaser)

#### WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the General conditions of the contract, with respect to the Goods offered by the above firm. We also assure that the manufacturer can be able to provide service support for the above goods for the period of next 10 years.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ *[insert date of signing]*

## Annexure IX

### CHECKLIST FOR THE BIDDER

Please ensure whether the following documents are submitted with their Bid proposal

(Please tick)

1	Whether all the copies of Qualification documents specified in <b>Annexure I</b> enclosed (Audit statements, Registration, TIN, PAN, Copies of past work orders etc)	
2	Whether bids are prepared as per the schedule of requirements specified in Annexure II	
3	Whether Technical Compliance sheet specified in Annexure III enclosed in Technical Bid cover	
4	Whether detailed Technical Bid prepared and enclosed in <i>a separate sealed cover marked as “TECHNICAL BID for the supply and installation of Controller based WiFi Networking in MS University Campus”</i> Along with full Specification sheets/product descriptions of the manufacturer. and the Manufacturer Authorization form as per Annexure VIII duly signed by the manufacturer.	
5	Whether Commercial bid prepared in duplicate, duly signed and sealed as <b>per Annexure IV and Annexure V</b> enclosed in <i>a separate sealed cover marked as “COMMERCIAL BID for the supply and installation of Controller based WiFi Networking in MS University Campus ”</i>	
6	Whether <b>Maintenance Capability Statement</b> prepared as per Annexure VII and enclosed with pre qualification documents..	
7	Whether Application cost Rs 500/ and EMD amount Rs 25000/- Enclosed as two separate DD/BPO in favour of Registrar, M.S University and payable at Tirunelveli enclosed in separate sealed covers with proper markings.	
8	Whether Duly filled and signed in Checklist enclosed as per Annexure IX	

**Signature of the Authorized Person with company seal**

**Place& Date**

Name : \_\_\_\_\_

Business Address: \_\_\_\_\_