

Dr. Rajendra Prasad Central Agricultural University

Pusa (Samastipur) 848125

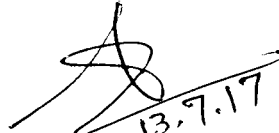
No. 261 /CAE/ARIS/Pusa

Dated 13/7/2017

Notice Inviting Quotation

For Installation of Wi-Fi Bridge

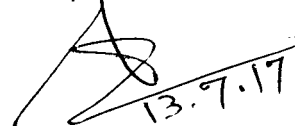
Dr. Rajendra Prasad Central Agricultural University, intends to extend its LAN through wireless bridge to some of its offices at Pusa Campus and upgrade some of the old Wi-Fi devices. The interested firms are hereby invited to participate in the bidding process through this notice. The details of the work, items required and terms and conditions can be downloaded from the website www.pusavarsity.org.in. The tender document complete in all respect in the prescribed format shall reach the **Dean, College of Agricultural Engineering, Dr. RPCAU, Pusa** latest by 4.00 pm on 14/08/2017.


13.7.17
Dean (Agril Engg)

Memo No. 261 /CAE/ARIS/Pusa

Dated 13/7/2017


Copy forwarded to Business Manager, The Hindustan Times, Fraser Road, Patna for publishing of this notice **on davn rates** in **Patna** edition in the size 8x6 cm at appropriate place on the earliest date. The bills alongwith tearsheet of the newspapers may be sent to the undersigned for payment.



13.7.17
Dean (Agril Engg)

Memo No. 261 /CAE/ARIS/Pusa

dated 13/7/2017

Copy forwarded to O/I ARIS cell, Dr. RPCAU, Pusa for publishing on university web site.


13.7.17
Dean (Agril. Engg.)

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DETAILS OF WORK

A. Service Deliverables:

The following are the service deliverables required from the selected agency.

1. Setting up of Wi-Fi LAN in the Girls Hostel (New), Farmer's Convention Centre (FCC), Univ. Guest House and Ikh Bhawan of Pusa Campus. Replacement of outdoor access point and its antenna in SRI Building, NHM Building (DR Office) and MBA Building with the new devices, their configuration and connecting it to the LAN at ARIS Cell (HQ) of Pusa campus.
2. Provide post warranty maintenance of Wi-Fi LAN.

B. General Information :

1. The interested firms are required to submit their proposal in two bid system i.e. **Technical Bid** and the **Financial Bid**. The Bidder is required to fill up all these two parts and place them in two separate sealed envelopes, which should be super scribed as "Technical Bid for Wireless Bridge" and "Financial bid for Wireless Bridge" with NIT reference number, as the case may be.
2. The Offer should be made in English and no conditional offers will be accepted
3. The Price, terms and conditions of the offer should be valid up to minimum of 180 days.
4. Submitted bid documents with overwriting or erasing will be liable for rejection.
5. The materials should be supplied as per quotation and same shall be verified by the authorized officer before installation.
6. Bidders are required to establish Wi-Fi network at the specified location on turnkey basis and quote accordingly.
7. The bidders are expected to examine all instructions, forms, terms, project requirements and other details in the tender documents. Failure to furnish complete information as mentioned in the tender documents or submission of a proposal not substantially responsive to the tender documents in every respect will be at the bidder's risk and may result in rejection of the bid.

C. Terms and Conditions:




1. The bidder must show his/ her competency and experience in execution of the work of similar nature by means of the list of clients supported by the adequate proof.
2. The Bidder should be an organization/Company in operation for the last three years from the publication of this notice.
3. The firm should be an **ISO-9001:2000 certified** Original Equipment Manufacturer /Authorized Distributor /Authorized Partner whose responsibility is to supply and installation of the equipment, giving warranty on the equipments and deliver the desired services.
4. The Bidder must have prior experience in commissioning such projects relevant to this notice i.e under taken the work of Wi-Fi LAN connectivity to Government / PSUs or Corporate firms in India.
5. Rates quoted should be F.O.R. Dr. RPCAU, Pusa, Samastipur, Bihar inclusive of all taxes and charges. The rates must include packaging, forwarding, transit and installation insurance & charges. The same should be insured against pilferage, theft, loss or breakage during transit by the supplier before dispatch is made. The responsibility in this respect will be of the supplying firm and not of the university.
6. Supply of the goods is acceptable on bill basis only.
7. Payment shall be made within 30 days from the date of receipt of goods in proper, satisfactory, working conditions and after successful installation and demonstration.





8. The technical bid should include the Earnest Money in the form of Demand Draft of a Nationalized Bank (**for Rs 20,000/-**) drawn in favour of Dean, Faculty of Agricultural Engineering, payable at PNB, RAU, Pusa branch (branch code 4512). The tender received without proper EMD shall be summarily rejected.
9. In terms of GFR 2005, tenderers may face legal action, if they amend tender, impair or derogates from the tender in any respect within the period of validity of this tender.
10. The supplier will have to attach a certificate to the effect that the material to be supplied will be of the same specification conforming to standard of the items specified.
11. The taxes which are not quoted in tender by the supplier will not be paid by the university under any case.
12. The terms and conditions given by the supplier will not be binding on us. Conditional tenders shall be rejected at the sole discretion of the competent authority of the university.
13. The date / period of delivery of stores must be clearly mentioned.
14. The firm should give a certificate that his / her company or sister company is not black listed by any Govt. Department or any Institute in the country.
15. Any dispute arising in process of the tender, the matter shall be referred to the sole arbitrator who in such case will be the Vice-Chancellor of DRPCAU, Pusa whose verdict shall be final and binding on both the parties.
16. The tender so submitted shall be governed by the GFR 2005.
17. The tenderer may be called for technical discussion by the purchase committee duly constituted or nominated by the competent authority of this university.
18. The acceptance of tender will rest with the university who does not bind itself to accept the lowest tender and reserves itself the authority to reject or partially accept t, any or all the tenders received without assigning any reason.
19. The university reserves the right to place order for the scheduled quantity and or part thereof.
20. Tenders are likely to be rejected in case it does not confirm to the specifications, terms and conditions etc as laid down.
21. The tender must reach to the office of the dean, College of Agricultural Engineering, Dr. RPCAU, Pusa, Samastipur, Bihar- 848125 on or before on or before the specified date and time through **Registered post / Speed post** only.
22. All the papers submitted must bear the signature and seal of the authorised person.


 13.7.17
 DEAN (Agril Engg)

Technical Bid

A. General Details of the Organisation:

| Sr. No. | Particulars | Remarks/ Documents to be attached |
|---------|--|--|
| 1 | Name of the Agency as mentioned in the Registration Certificate | |
| 2 | Address of Head office | |
| | Telephone: | |
| | E-mail: | |
| | Fax number(if any): | |
| | Name(s) of the contact person(s): | |
| 3 | Corresponding Office address (if different from the above address): | |
| | Telephone number : | |
| | Name(s) of the contact person(s) along with mobile number and e_mail id. | |
| 4 | Year of establishment of the Organisation (enclose certificate of registration) | |
| 5 | Years of work experience in providing relevant services | |
| 6 | Turnover of the agency for the last three years (attach proof) | 2016-17: 2015-16: 2014-15: |
| 6 | Income Tax - PAN No. (attach proof) | |
| 7 | Tax Payer Identification Number (TIN) (attach proof) | |
| 11 | The firm is a proprietary/ partnership/Limited Co./Society (Please attach documentary evidence) | |
| 13 | Details of clients for whom similar projects are under taken, along with value of orders executed. (attach documentary evidence) | |
| 14 | Details of EMD: | |
| | DD No. & Date of Issue | |
| | Amount : | INR 20,000.00 |
| | Drawn on Bank | |
| | (Attach the original copy of DD in favour of Dean, Faculty of Agril Engg., Pusa). | Please enclose the original DD along with the technical documents. |

B. Organisational Competency: A Brief note pertaining to the Profile and background of the Agency / Firm explaining its previous experience, expertise in general, previous achievements, technical expertise that makes your Agency / Firm most competent to participate in the bidding process. Besides this, the details of similar kind of work experience of the agency is to be furnished in the format Below:

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C. Details of the work executed

| S. No. | Year | Name of Project | Name of Client/ Organisation | Value of the Order In INR | Documentary Evidence |
|--------|------|-----------------|---------------------------------|------------------------------|-------------------------|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |

D. Bill of Material

| S.N. | Items Description | Qty. |
|------|--|------|
| 1 | Network Switch 24X10/100/1000 with PoE based | 7 |
| 2 | Indoor Access Point with PoE based | 20 |
| 3 | WLAN Lic. | 20 |
| 4 | Wireless outdoor Bridge Access Point Type - A | 2 |
| 5 | Wireless outdoor Bridge Access Point Type - B | 6 |
| 6 | Ethernet Surge Protector | 7 |
| 7 | Network Racks | 6 |
| 8 | CAT-6 Cables | 2 |
| 9 | Jack Panel | 6 |
| 10 | Patch Cord 1.0 M | 20 |
| 11 | Patch Cord 1.5 M | 100 |
| 12 | Patch Cord 2.0 M | 50 |
| 13 | Online UPS 1KVA with 120 min backup | 4 |
| 14 | Mast for mounting of Wireless outdoor bridge Access Points | 4 |
| 15 | Installation and commissioning | - |

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E. Technical Specifications

1. PoE based Network Switch 24X10/100/1000

| S.No. | Specifications | Compliance Yes/No |
|-------|--|-------------------|
| i. | Make: _____ Model/ Part No. _____ | — |
| ii. | The Switch should have 24 port PoE 10/100/1000, Full Managed, Layer 2 Stackable 24x RJ45 10/100/1000 POE+ auto-sensing ports and 4x SFP+ ports supporting 40 gbps Stacking bandwidth , IEEE802.3at. | |
| iii. | The Switch Should support Sx, LX, 1000 Base T, 10G SR, 10G LR interface. | |
| iv. | The Switch Should have 1gb CPU memory, 256 MB Flash. | |
| v. | The Switch should support 125Gbps Switching Capacity, 100 Mbps Switching Throughput, 15K MAC address, | |
| vi. | the switch should support routing protocol Static routing support, RIP V1, RIPV2 | |
| vii. | The Switch should support IPV4 & IPv6 should be supported from day one. | |
| viii. | Should support Port, Voice Vlan, Private Vlan, GVRP & DHCP , DHCP relay. | |
| ix. | The Switch must have redundancy protocols STP, RSTP, MSTP..etc. | |
| x. | Certifications: FCC Class A, ROHS Compliances. | |
| xi. | Should support CLI, WEB based, and SNMP v1/v2/v3 based managements, Sflow or equivalent technologies, vlans and Port naming to each interfaces, Open Flow, LLDP, Dual configuration and system files, management function like Ping, Telnet. | |
| xii. | The Switch should support Authentication Secure Shell (SSH), RADIUS, TACACS+. | |
| xiii. | Should support 802.1x and Guest vlans , Port Mirroring | |
| xiv. | Should support MAC based port security | |
| xv. | Should support Packet filtering at L2/L4 with flow based classification based on source MAC address, destination MAC address, source IP (IPv4/IPv6) address, destination IP (IPv4/IPv6) address, port, protocol, and VLAN. | |
| xvi. | Warranty: should support warranty for 3 years & with OEM manufacturer's authorization certificate required. | |

2. Indoor Access Point With WLAN Controller Lic.

| S. No. | Descriptions | Compliance Yes/No |
|--------|--|-------------------|
| i. | Make: _____ Model/ Part No. _____ | — |
| ii. | Access point should have PoE based 10/100/1000 Base T Ethernet with supported 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac in day one. | |
| iii. | Access Point Should support WLAN Controller EWC V2110, Make Extreme and additional 20 lic required. | |
| iv. | Access point Should support 2 radios or more, 3x3 MIMO, 300 Mbps throughput or more. | |
| v. | Support for demanding voice/video/data applications to enhance mobile worker productivity and convenience. | |
| vi. | Role-based grouping of users, devices, and applications to deliver priority, QoS, and security in accordance with business needs. | |
| vii. | Seamless roaming across an entire multi-subnet campus without the need for cumbersome client software. | |
| viii. | Integrated management, security, and QoS features | |
| ix. | Centralized visibility and control and automated management. | |

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| S. No. | Descriptions | Compliance Yes/No |
|--------|--|-------------------|
| x. | Authentication and authorization functions including role-based access control (using 802.1X, MAC, and captive portal) and authentication at the AP. | |
| xi. | Wireless Intrusion Prevention (WIPS) | |
| xii. | Integration of security policies (NAC, IPS) across the wired/wireless networks enables quick diagnosing and resolution of security threats. | |
| xiii. | Integration of Policy Manager across the wired/wireless networks dynamically oversees user access at the wireless network point of entry. | |
| xiv. | Warranty: Warranty Support Three years onsite. | |

3. Wireless outdoor Bridge Access Point Type - A

| S. No. | Specifications | Compliance Yes/No |
|--------|---|-------------------|
| i. | Make: _____ Model/ Part No. _____ | — |
| ii. | The Wireless outdoor Bridge Access Point should have Cluster Based, PoE Based, 1Gig Ethernet port, Processor Atheros MIPS 74Kc 720 MHz, Memory 128 MB DDR2 SDRAM, 16 MB NOR FLASH, 2 RF Connections. | |
| iii. | The Wireless outdoor Bridge Access Point should have supported Point-to-multipoint supported with 10/20/30/40 MHz Channel Size. | |
| iv. | The Wireless outdoor Bridge Access Point should support Outdoor UV Stabilized Plastic, \pm 24KV Air ESD Protection, up to 80° C Operating temperature, RoHS Compliance, Wireless Approvals - FCC, IC, CE. | |
| v. | The AP support Security-WPA2 AES, Services- Web Server, SNMP, SSH Server, Telnet , Ping Watchdog, DHCP, NAT, Bridging, Routing Antenna Alignment Tool, Discovery Utility, Site Survey, Ping, Traceroute, Speed Test. Statistical Reporting-Up Time, Packet Errors, Data Rates, Wireless Distance, Ethernet Link Rate & support for Remote Reset Support, Software Enabled/Disabled, VLAN Support, 256QAM. | |
| vi. | The Antenna should support 19dbi Gain, 123° (6 dB) HPOL beam width & VPOL beam width, 20 lbf @ 100 mph Wind Loading, Dual-Linear Polarization, 28 dB Min. Cross-pol Isolation, EN 302 326 DN2 ETSI Specification & kit have Universal Pole Mount Bracket and Weatherproof RF Jumpers Included..etc. | |
| vii. | Warranty: should support warranty for 3 years with OEM manufacturer's authorization certificate required. | |

4. Wireless outdoor Bridge Access Point Type - B

| S. No. | Specifications | Compliance Yes/No |
|--------|---|-------------------|
| i. | Make: _____ Model/ Part No. _____ | — |
| ii. | The Wireless outdoor Bridge Access Point should have PoE Based, 1Gig Ethernet port, Processor Atheros MIPS 74Kc 560 MHz, Memory 64 MB DDR2 SDRAM, 1.5:1 Max. VSWR. | |
| iii. | The Wireless outdoor Bridge Access Point should have supported Point-to-multipoint supported with 10/20/30/40 MHz Channel Size. | |
| iv. | The Wireless outdoor Bridge Access Point should support Outdoor UV Stabilized Plastic, \pm 24KV Air ESD Protection, up to 80° C Operating temperature, RoHS Compliance, Wireless Approvals - FCC, IC, CE, Wind Loading - 45.2 N @ 120 km/h, Wind Survivability-120 km/h | |

| S. No. | Specifications | Compliance Yes/No |
|--------|--|-------------------|
| v. | The AP support Security-WPA2 AES, Services- Web Server, SNMP, SSH Server, Telnet , Ping Watchdog, DHCP, NAT, Bridging, Routing Antenna Alignment Tool, Discovery Utility, Site Survey, Ping, Traceroute, Speed Test. Statistical Reporting-Up Time, Packet Errors, Data Rates, Wireless Distance, Ethernet Link Rate & support for Remote Reset Support, Software Enabled/Disabled, VLAN Support, 256QAM & Salt Fog Test-IEC 68-2-11 (ASTM B117) & kit should have Universal Pole Mount Bracket and Weatherproof RF Jumpers etc. | |
| vi. | Warranty- should support warranty for 3 years & OEM manufacturer's authorization certificate required. | |

5. Network Racks

| S.No. | Specifications | Compliance Yes/No |
|-------|--|-------------------|
| i. | Make: _____ Model/ Part No. _____ | — |
| ii. | The Network rack should have Width 600 mm, Depth 500 mm, Height 12U, 6 x PDU 5/16 Amp, with 90 CFM Fan. | |
| iii. | The rack should support Fast, efficient installation utilizing skeleton frame structure, Easy cabling with no obstructions, Quick release side Panels, Quick release, lockable front door, Cable access through special gland plates allowing installation over previously installed cables, Adjustable 19" mounting angles. | |
| iv. | The unrivalled access with removable front door, sides, top and bottom panels .After complete installation, rear of the mounted equipment is accessible due to 180 degrees rotation of the swing frame. | |

6. Passive Materials

| S.No. | Specifications | Compliance Yes/ No |
|-------|---|--------------------|
| i. | All Passive materials (Fiber & UTP) Should be same make. The OEM should be ISO 9001:2000 & QS: 9000 Certified. In the changing needs of the global resources if the company has environmental management systems in place like ISO 14001 accreditation the same shall be added advantage. | |
| ii. | CAT 6 UTP components should have independent lab verification like ETL certificates. The cabling should be certified to have application support warranty for next 25 years | |
| iii. | The complete cabling system offered shall be upgradeable to the intelligent system if required in future. The OEM should have own intelligent solution, should not have any tie-up with third party. OEM manufacturer's authorization certificate required. | |

7. UTP CAT-6 Cable

| S.No. | Specifications | Compliance Yes/ No |
|-------|--|--------------------|
| i. | Make: _____ Model/ Part No. _____ | — |
| ii. | Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-B.2-1 Additional Transmission Performance Specifications for 4-pair Category Cabling. | |
| iii. | Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP. | |
| iv. | Supports ultrahigh speed data networks such as Gigabit Ethernet (1000 Base-T and 1000 Base-TX) and beyond. | |

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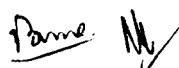
| S.No. | Specifications | Compliance Yes/ No |
|-------|--|--------------------|
| v. | The cable jacket shall be LSZH and UL Listed. | |
| vi. | Incorporates central spine maintaining pair separation during installation to ensure premium performance after installation. | |
| vii. | Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted. Conductor Solid Copper Conductor Diameter 0.56±0.005mm (23 AWG) Insulator Polyolefin Jacket FR PVC, Outer diameter 6.0±0.4mm, Max. Temperature 75°C | |
| viii. | Compliant ROHS/ELV | |

8. UTP CAT-6 24 Port Fully Loaded Jack Panel

| S. No. | Specifications | Compliance Yes/ No |
|--------|--|--------------------|
| i. | Make: _____ Model/ Part No. _____ | — |
| ii. | 19" 24-port, loaded with Jack , A key product used in both Category 6 link and channel gigabit Ethernet applications. The IDC section consists of V-shaped contacts that flex not fatigue when terminated. Each port features spring-loaded shutter and can be colour coded to match jack outlets. Offering both front and rear labelling options, the patch panel is constructed of cold-rolled steel for additional strength and durability. | |
| iii. | 24 Ports | |
| iv. | Plastic Housing Jack Connector - Polycarbonate, UL94V-0 rated or equivalent | |
| v. | Contact Plating - 50µ" Gold/100µ" Nickel | |
| vi. | RJ45 Front Connector interface | |
| vii. | Circuit Identification Scheme - Icons on each of 24-ports | |
| viii. | Port Identification - 9mm or 12mm Labels on each of 24-ports (to be included in supply) | |
| ix. | Height 1 U or (1.75 inches) | |
| x. | ROHS/ELV Compliant | |

9. UPS 1KVA Online

| S. No. | Specifications | Compliance Yes/No |
|--------|---|-------------------|
| i. | Make: _____ Model/ Part No. _____ | — |
| ii. | UPS should be 1 KVA online With 120 minutes battery backup. | |
| iii. | UPS should have OEM service centre in Samastipur / Muzaffarpur districts. | |
| iv. | The UPS should support True Online Double Conversion UPS with inbuilt Isolation Transformer. | |
| v. | USP should support inputs Single Phase, 160V-300V AC Voltage Range, 110V - 300V AC @ 50% Load, 0.99 Power Factor, <10% Current THD, 36V DC Volt, 60 Minutes on Full Load Battery Backup, 1512 VAH Battery, Constant Current & Constant Voltage. | |
| vi. | USP should support 220VAC / 230VAC / 240VAC /± 1% Nominal Output voltage, 50Hz ± 0.1Hz Frequency, 47.5 to 52.5 Hz Frequency synchronisation, <2% Linear Load Voltage THD, <5% Non Linear Load THD. | |
| vii. | UPS should support 92% AC/AC (Overall efficiency), 3 min 105 - 110% Overload capacity, 30 sec 111 - 130% Overload capacity, 0 ~ 40°C Continuous Communication, Input Breaker +Terminal, UPS Should have Convert Mode, Bypass parameters Configurable, LED + LCD Display, IP 20 Ingress Protection, EN 62040 - 1 Safety, EN 62040 - 2 EMI / EMC, IEC 62040 - 3 Performance, UPS Should have Certified with ISO and BS OHSAS 18001 -2007. | |
| viii. | Warranty: should support warranty for 3 years for UPS & Battery & with OEM manufacturer's authorization certificate required. | |

Financial Bid

Name of the Firm/ Agency with
correspondence address:

| S.N. | Items Description | Qty. | Make | Model No. | Unit Price | Amount |
|-----------------------|--|------|------|-----------|------------|--------|
| 1 | Network Switch 24X10/100/1000 with PoE based | 7 | | | | |
| 2 | Indoor Access Point with PoE based | 20 | | | | |
| 3 | WLAN Lic. | 20 | | | | |
| 4 | Wireless outdoor Bridge Access Point Type - A | 2 | | | | |
| 5 | Wireless outdoor Bridge Access Point Type - B | 6 | | | | |
| 6 | Ethernet Surge Protector | 7 | | | | |
| 7 | Network Racks | 6 | | | | |
| 8 | CAT-6 Cables | 2 | | | | |
| 9 | Jack Panel | 6 | | | | |
| 10 | Patch Cord 1.0 M | 20 | | | | |
| 11 | Patch Cord 1.5 M | 100 | | | | |
| 12 | Patch Cord 2.0 M | 50 | | | | |
| 13 | UPS 1KVA | 4 | | | | |
| 14 | Mast: for Wireless outdoor bridge Access Point min. 20 Ft. Or as per requirement including the cost of installation/ foundation etc. | 4 | | | | |
| 15 | Installation and commissioning including provision of electrical wiring & fittings as per requirement | - | NA | NA | | |
| Total Amount : | | | | | | |

Amount in words: Rupees

Note : All taxes are included.

Authorised signatory with seal

07-7-17

Boone