



No. CUK/comp-lab/F-01-jan/2023/

08 Feb. 2023

**TENDER NOTICE FOR IMPLEMENTATION OF CAMPUS WIDE WI-FI NETWORK (OPEX MODE) AT
CENTRAL UNIVERSITY OF KARNATAKA
(THROUGH E-PROCUREMENT MODE)**

Online electronic bids are hereby invited for and on behalf of Central University of Karnataka for implementation of Campus wide Wi-Fi Network (OPEX Mode) work at Central University of Karnataka as briefly described hereunder:

1.	Name of the work	Implementation of Campus wide Wi-Fi Network (OPEX Mode)
2.	Bid Submission Mode	Online through e-procurement mode on Central Public Procurement Portal. Two Packet System: Packet 1- Techno Commercial Bid. Packet 2- Financial Bid
3.	Earnest Money Deposit Rs. 573480 (Five Lakh Seventy Three Thousand Four Hundred Eighty)	Payable through Demand Draft drawn on any Nationalized Bank in favour of “ Central University of Karnataka ” payable at Kalaburagi. The DDs should be sent to “The Registrar, Central University of Karnataka, Kadaganchi-585367, Kalaburagi District” in sealed envelope by superscripting as “ EMD for Implementation of Campus wide Wi-Fi Network (OPEX Mode) work ”. The DDs shall reach on or before the date and time of bid opening. OR Through online payment Account Number: 5109101000001 Bank: Canara Bank, IFSC: CNRB0005109 Bank Address: Canara Bank, Central University of Karnataka, Kadaganchi – 585367, Kalaburagi district, Karnataka INDIA And should enclose the necessary document proof of remittance through online.
4.	Date and time of availability of bid document in the portal	09-02-2023, 11:30 hrs
5.	Last date and time for submission of bids through the portal	01-03-2023 11:30 hrs
6.	Date and time of opening bids	02-03-2023, 11:30 hrs,

Instructions to Bidders:

1. Bids are to be submitted online through e-procurement portal of the Central Public Procurement Portal (CPP Portal)
2. Bids submitted offline will not be considered.
3. Bidders are instructed to read and understand the eligibility criteria and terms and conditions.
4. EMD is payable through Demand Draft drawn on any Nationalized Bank in favour of **“Central University of Karnataka”** payable at Kalaburagi. The DDs should be sent to “The Registrar, Central University of Karnataka, Kadaganchi-585367, Kalaburagi District” in sealed envelope by superscripting as **“EMD for Implementation of Campus wide Wi-Fi Network (OPEX Mode) work” tender**. The DDs shall reach on or before the date and time of bid opening.

OR

Through online payment

Account Number: 5109101000001

Bank: Canara Bank, IFSC: CNRB0005109

Bank Address: Canara Bank, Central University of Karnataka, Kadaganchi – 585367, Kalaburagi district, Karnataka INDIA.

And should enclose the necessary document proof of remittance through online.

5. EMD of the unsuccessful bidders will be returned/refunded after opening the financial bids and EMD of the successful bidder will be refunded on submission of the performance bank guarantee (PBG) and PBG will be returned after the warranty period is over.
6. Bidders are advised to submit the tender strictly based on the terms and conditions and specifications contained in the Tender Document. Conditional bids will be summarily rejected.

Eligibility of the Bidders:

1. The bidders shall be a registered firm.
2. Bids can be submitted by original equipment manufacturers (OEM) or authorized dealers/service providers.
3. The bidder shall not be blacklisted by any Govt./Semi Govt./Private institution.
4. The bidder shall be free from the encumbrance and there shall not be any vigilance case/CBI case/Court case pending against the bidder. A declaration to this effect is required to be provided by the bidder.
5. The firm should be registered with the Income Tax, GST and other required statutory registrations.
6. The firm should have an experience of at least 3 years in providing Opex based Wi-Fi Services and document proof in support of work order/purchase order from reputed government institution is required to be enclosed.

7. Average annual turnover during the past three years from 2019-20 to 2021-22 should be at least Rs.5 Cr
8. The bidder should enclose audited financial statements and income tax returns for the last three years 2019-20 to 2021-22.
9. List of clients to whom service was provided highlighting the Government organizations along with contact numbers and work order copies are also required to be furnished.
10. The bidder should submit the Work/Purchase Order and Installation Report of deployment of minimum 2 Nos of Wi-Fi projects on Opex model and in each project minimum 400 Nos of Access Points are deployed and operated for a minimum of 3 Years by the bidder at one campus location of State Govt/Central Govt/PSU department.
11. The Bidder should have experience of deployment & operation of minimum 2000 Nos of Wireless Access Points on Opex model in any State Govt/Central Govt/PSU department. Bidder to submit the experience certificate.

Each bidder shall upload the following signed documents:

Packet 1

1. Firm Registration Certificate
2. GST Registration Certificate, PAN Card and NSIC certificate, if applicable.
3. OEM/Authorized Dealership/Distributorship Certificate.
4. Audited Profit & Loss Statement for the last three financial years from 2019-20 to 2021-22.
5. ITRs for the last three years (from the Assessment Year 2019-20 to 2021-22)
6. Work orders/Purchase orders from reputed organizations to meet the eligibility requirements.
7. Brochure/leaflet of the Wi-Fi Services.

Packet II

- 1. Financial Bid (BoQ).**

Terms & Conditions for Bidders:

1. General Information

- a. Name of the university : **Central University of Karnataka**
- b. Number of approx. users : **3000**
- c. Total number of buildings where Wi-Fi coverage is to be provided : **(Enclosed Annexure-1)**
- d. Five year of service and maintenance with Power backup at required locations.
- e. Implementation of user-level Fair Usage Policy (FUP).
- f. University means Central University of Karnataka, Kalaburagi, Karnataka.
- g. Service Provider means the successful bidder.

2. General Conditions

- a. The Service Provider shall install the required active & passive equipments to provide Wi-Fi services in buildings mentioned in the Annexure -1
- b. The service provider shall deploy maintenance engineer at CUK campus for smooth running of the network. The maintenance engineer should be B.E. or Diploma and having minimum experience of 3 years or more in Wi-Fi/LAN/ICT projects. The maintenance engineer shall also perform any other additional technical work assigned by the University.
- c. The service provider shall provide annual costing for installation and maintenance for any additional building and points that may have to provide internet.
- d. The service provider should earmark a dedicated team for implementing the network under a Technical Support Manager and convey his/her contact details to the University, within 7 days from the date of issue of the order.
- e. The Service Provider will supply & install the Wi-Fi equipment's within 1 month of receiving of the Purchase Order (PO). There shall not be any interruption in the net during execution period.
- f. The monthly payment will be processed after signing the work completion certificate from the University Authorities. The monthly payment will be only on submission of Tax invoice every month and GST and IT will be deducted at source as applicable.

3. Service levels:

- a. **Coverage :** The Wi-Fi service shall be covered in all buildings/locations mentioned in Annexure –I There should be both indoor and outdoor coverage in areas where there are high footfalls. The Wi-Fi network should be suitably augmented for increase in the users, if any, to maintain the quality of service. The service provider shall take all precautions to make necessary arrangements for power backup and ensure seamless internet
- b. **Data usage:** There shall be data limit per user per month and the data limit shall be mandated by the University. Every user shall be allowed to login to any two devices.
- c. **FUP & Data Speed:** There shall be a Fair Usage Policy (FUP) for all users. The conditions of the FUP will be decided by the university but incorporated by the service provider.
- d. Each user shall be provided a facility to check with usage and speed of download/upload on the user id, through the app.
- e. **Installation and Maintenance:** The entire capital for providing the campus Wi-Fi service must be invested by the Service Provider. The maintenance of the system shall be the responsibility of the service provider. The network shall always be in secured mode.
- f. **Authorization, authentication, security, and monitoring/report generation:** Provision of authorization, authentication and maintenance of users provided by the University should be implemented. There shall be a provision to generate performance reports user-wise, monitor usage in case of FUP, enrolling users, etc.
- g. **Compliance to international standards:** The offered Wi-Fi equipment at the Core NW and at the campus shall be state of-the-art, carrier grade equipment conforming to relevant international, IEEE and ITU-T standards.
- h. **Portal:** The service provider shall create a portal and provide read-only access for viewing Wi-Fi usage statistics to authorized personnel at the University.
- i. **Network Management System (NMS):** There should be a centralized NMS to monitor the performance of the network on 24 X 7 basis.
- j. **Help Desk:** Service provider shall have a 24 X 7 Call Centre for dealing with user requests/complaints related to Wi-Fi Services.
- k. **Downtime:** The maximum unscheduled downtime of the system shall be one hour in a day in case of complete network down. In case of scheduled maintenance, the same shall be intimated in advance to the institution and downtime in such cases shall not

exceed one day in 1 month. The downtime shall be calculated on monthly basis. In case of critical hardware fault the same should be replaced within two Days.

- l. The university reserves the right to terminate the contract any time during the tenure without stating the reasons or at the end of the contract period of five years.**
- m. The university can at its discretion extend the contract period at the same payment conditions for further period of one year.**

4. Commissioning of the Wi-Fi Services Network:

- a. After successful commissioning of the Wi-Fi service network, the Service Provider shall submit to the university a completion report with detailed Wi-Fi/LAN service network diagram, equipment location, equipment details like make, model etc.
- b. Partial commissioning of the Wi-Fi service network within the university is not acceptable.
- c. The date for start of the billing cycle is the date of acceptance of the Wi-Fi service network by the University.
- d. If the date of acceptance of the Wi-Fi network is during the middle of the month, then the first payment would be for the remaining days in the month. Subsequently the billing would be monthly from 1st of every month.
- e. The University would permit the Service Provider to install the Equipment necessary for providing the campus Wi-Fi service within the Campus.
- f. The electricity power required for operating the equipment within the campus, would be provided by the university without any charges to Service provider. UPS wherever required, would have to be installed by the Service Provider.
- g. University will provide rent free Space/Room for storing the Inventory during project phase and rent-free office space for the Technical Staff deployed for operations and storage of spare and other equipments.
- h. CUK is having 1Gbps Internet connectivity from NKN terminated at CUK data Centre and the same bandwidth will be used for the Wi-Fi services.

Scope of Work:

The Scope of Work (SoW) for this tender includes:

- a. Supply, Installation & Maintenance of Wi-Fi services in the buildings mentioned in the CUK Building list.

- b. Preparation and submission of technical solution document which include active & passive network equipment with make & model mentioned along with quantities.

Penalties:

In case of failure of the service provider for providing the service in the manner specified above, the institution can levy a penalty upto 5% of the monthly service charges payable for the coming month.

Termination of Contract:

In case of continuous failure to maintain the service levels, the University can terminate the contract after giving adequate opportunity, at the discretion of university, to the service provider, to explain the failure and rectify them within a maximum period of one month.

Detailed Technical Scope of Work:

- a. Indoor & Outdoor Wi-Fi network coverage should be provided in the buildings mentioned in the Annexure -1
- b. The Wi-Fi users should be authenticated through captive portal.
- c. All the CUK buildings are interconnected through fibre backbone and same backbone will be used for the connectivity, but service provider needs to identify the equipment required for termination of the backbone and install the required material to ensure connectivity. This will be done without any cost to the University.
- d. The service provider shall install its core equipments active and passive as per Annexure II.
- e. The Service Provider shall install the latest technology i.e Wi-Fi 6 or higher Wireless Access Points in the buildings.
- f. Rack space for installation of core equipments will be provided by University.
- g. UPS is required at each rack location of the building where layer2 PoE switches will be installed, which shall be provided and maintained by service provider at their own cost.
- h. University will provide one public IP address for routing of Internet traffic.
- i. Private to public IP Natting & Storage of NAT logs will be in the scope of the service provider.
- j. In order to allow a single authentication point to function, the service provider shall integrate the existing university provided Wi-Fi network with the newly proposed Wi-Fi network. This shall be done by the service without any cost to university.
- k. Maintenance engineer shall keep the records of user complaints related to Wi-Fi service.
- l. Service provider shall shift the location of the existing University Wi-Fi Access Points in case where coverage improvement is required. This shall be done by the service provider without any cost to university.

University Scope of Work

S.N.	Work Details
1	Core Equipment's Installation Space at CUK Data Centre
2	Wi-Fi Equipment Storage Space during implementation Phase
3	Seating space for O&M Engineer
4	Permission for installation work
5	Internet Bandwidth with one public IP at Cuk Data Centre
6	UTM Firewall for Wi-Fi traffic security.

Wi-Fi Service Provider Scope

1. To provide complete indoor and outdoor Wi-Fi coverage in the buildings mentioned in the List.
2. All active & passive components supply, and maintenance will be in the scope of Wi-Fi service provider and Wi-Fi service provider can use the passive material wherever available in the buildings but maintenance of that passive cabling and inter building fibre will be the responsibility of the Wi-Fi service provider.
3. Service Provider shall install all gear and equipment along with air-conditioning, UPS and other equipment to make the system functional.

Annexure -1

Building wise list of minimum Access Points required for Indoor & Outdoor coverage:

S.N.	Building Name	Approx. Qty - AP
1	Admin Building	15
2	Central Library	8
3	Girls Hostel H5	32
4	Boys Hostel H1	32
5	Guest House	18
6	Boys Hostel Prefab Block A	4
7	Boys Hostel Prefab Block B	4
8	Prefab Girls Hostel Block 1	4
9	Prefab Girls Hostel Block 3	4
10	Boys Hostel Prefab Block C	4
11	Prefab Girls Hostel Block 2	4
12	VC Residence	2
13	Registrar Residence	2
14	PRO VC Residence	2
15	FO Residence	2
16	COE Residence	2
17	Health Centre	2
18	Boys Hostel OBC	12
19	Boys Hostel SC/ST	12
20	Girls Hostel OBC	12
21	Girls Hostel SC/ST	12
22	Prefab Academic Block	1
23	Academic - D1 to D23	108
24	Deans Office (bw D4&D5) 5 Office	2
25	Auditorium 1 (Nearby D3)	2
26	Auditorium 2 (Nearby D14)	2
27	Lecture Hall 1 & 2	2
28	Multipurpose Hall (Including Offices)	8
29	Food Court	2
30	Prefab Computer Centre	2
31	KKRDB Hostel Boys	16
Total Qty		334

Annexure -II

Minimum Requirement of Active Equipment's:

The below is the detail of active equipment's required for implementation of Wi-Fi in CUK campus:

S.N.	Items	UoM	Approx Qty	Preferred Make	Remarks
1	Layer 3 Switch	Nos	1	Cisco/HPE/Extreme/	
2	Access Gateway	Nos	1	Industry Standard	
3	Authorization, Authentication and Accounting (AAA) functionality with Captive Portal	Nos	1	Industry Standard	Hardware AAA
4	Wireless Controller with AP Licenses	Nos	1	Cisco/Ruckus/Aruba	Hardware Wireless Controller
5	Wireless Access Point	Nos	334	Cisco/Ruckus/Aruba	
6	Layer 2 PoE Switch	Nos	105	Industry Standard	

Minimum Requirement of Passive Equipment's

The below is the detail of passive equipment's required for implementation of Wi-Fi in CUK campus:

S.N.	Items	UoM	Approx Qty
1	Passive Cabling Cat6	Mtr	The qty will be as per site requirement
2	UPS 1 KVA	Nos	
3	Rack 9U	Nos	
4	Ethernet Patch Chord 1 Mtr	Nos	
5	Optical Patch Chord LC-LC type 3 Mtr	Nos	
6	IO + Faceplate + Gang box	Nos	
7	PVC Conduit	Mtr	
8	Ethernet Patch Panel 24 Port	Nos	

BoQ:

Sl.No.	Item	Amount	GST	Total Without GST	Total With GST
01	Monthly Charges for 3000 users				

REGISTRAR