



COLLEGE OF ENGINEERING & TECHNOLOGY
(A constituent College of Biju Patnaik University of Technology, Odisha)
Techno Campus, PO: Ghatikia
Bhubaneswar- 751003, INDIA

Tender Call Notice No. 1688 / CET

Dated:-26/05/2017

Tender Notice for “Supply, Installation, Commissioning, Execution & Testing of Networking including expansion of existing Wi-Fi connectivity” inside the campus of College of Engineering & Technology (CET), Techno Campus, PO: Ghatikia, Bhubaneswar – 751003.

CET invites sealed offers in two-bid form for “Supply, Installation, Commissioning, Execution & Testing of Networking including expansion of existing Wi-Fi Connectivity” inside the campus of College of Engineering & Technology (CET), Techno Campus, PO: Ghatikia, Bhubaneswar – 751003.

Interested parties may collect the Tender Document from CET-Bhubaneswar, as per following schedule. The tender document can also be downloaded from www.cet.edu.in.

1. Issue of Tender Document: **27/05/2017 onwards (During 10AM to 4PM on all working days)**
2. Last date of submission of queries: **On or before 5PM on 02/06/2017**
3. Date of publication of corrigendum (if any): **On or before 5PM on 20/06/2017**
4. Last date of Submission of Bids: **On or before 2PM on 05/07/2017**
5. Technical Bid opening date: **At 4PM on 05/07/2017**
6. Financial Bid opening date: ***Will be intimated over phone and email to technically qualified bidders after technical evaluation.***
7. Tender fee (Non-Refundable): Rs. 4000.00 (Rupees Four thousand only) in the form of a DD favoring The Principal, CET, Techno Campus payable at Bhubaneswar. In case documents are downloaded from the website, DD of Rs. 4000.00 favoring The Principal, CET payable at Bhubaneswar must be enclosed with the technical bid.
8. Earnest Money Deposit: Bidders shall submit their quotes along with an EMD of Rs. 2,50,000/ (Rupees Two Lakhs Fifty Thousand only). EMD should be in the form of DD/BG favoring The Principal, CET, Techno Campus, Ghatikia, Bhubaneswar - 751003 payable at Bhubaneswar. Validity of such a BG must minimum be for 3-months from the date of issue.
9. Queries will only be accepted from Bidders who have purchased the tender document. Queries must be strictly submitted only in (.XLS/ .XLSX/ .ODF) format. Also, kindly attach the Xerox copy of the receipt against the purchase of the tender document.

SECTION - I: INVITAION FOR BIDS (IFB)

Sub: Supply, Installation, Commissioning, Execution, and Testing of Networking including expansion of existing Wi-Fi connectivity at CET, Bhubaneswar.

1. Scope of works and Technical Specifications:

Detailed scope of work and technical specifications are as per enclosed **Annexure-I**.

2. Eligibility Criteria:

The eligibility criteria for pre-qualification of bidders are as under:

- a) The Tenderer(s) in case other than OEM must submit the exclusive tender specific authorization from the Principal/OEM, failing which their offer will be summarily rejected. The authorization certificate so furnished should clearly incorporate the firm name and address from where after sales services shall be rendered.
- b) All switching and wireless products must be from the same OEM.
- c) OEM for switching and wireless products must be present in Gartner's report in Leaders or Visionaries quadrant for LAN and WLAN products for last 2 years consecutively.
- d) The bidder should be an organization/company in operation with both business office and service/support office for the last five years as on 31st March 2017 in Odisha preferably in Bhubaneswar, to ensure satisfactory after sales service/support.
- e) The tender(s) should have executed installations of the similar nature work out of which 1 no. (One) must be of 300 ports (Switch Ports) or at least 2 Nos. of 150 ports (Switch Ports) or more. (Similar nature of work means: Execution of Network Infrastructure works shall be treated as similar work). Proofs of the same like PO copies, installation & completion reports, performance certificates, with address & contact details of the reference installation list should be submitted with the bid. In absence of supporting documents, the bid is liable to be rejected.
- f) The tender(s) should have executed minimum 1 no (One) Wi-Fi installations work with minimum 60 wireless access points along with a wireless controller and wireless NMS during last 5 years. Proofs of the same like PO copies, installation & completion reports, performance certificates, with address & contact details of the reference installation list should be submitted with the bid. In absence of supporting documents, the bid is liable to be rejected.
- g) The bidder should be a registered firm with Sales Tax Authority. The bidder should furnish the registration certificate, TIN No. certificate, VAT registration certificate, PAN No. detail, TIN No. details along with the tender paper and necessary clearance certificates up to March 2017. Enclose copies supporting documents. In absence of such certificates, the Bid is liable to be rejected.
- h) The bidder's firm must be a financially sound have turnover of more than 1 Crore per year for last three financial years and established firm fulfilling all statutory & regulatory requirements of its functioning in India & Odisha. Proof of the registration & other compliances and turn over, audit reports, balance sheets etc for company's financial soundness as required may be furnished for last three financial years from 2014-15, 2015-16, and 2016-17 (must be certified by CA failing which the bid is liable to be rejected).
- i) The bidder or (principal/ OEM in case bidder is authorized channel partner etc) must have an experience of minimum 05 years or more for Sales, Installation & Service support for Supply, Installation / Laying, Commissioning, Execution & Testing of Networking projects.
- j) The bidder should not be black listed in any of the Gov. Organization. Undertaking in this regard must be submitted.

3. Bid Submission:

- a. Part-I (Technical bid) shall include:
 - i. Technical bid with full details including description of make and model of materials so as to enable technical assessment of the proposal.
 - ii. Manufacturer's tender specific authorization certificate
 - iii. Company profile (as per PROFORMA I & II) along with all supporting documents.
 - iv. Non-Refundable Tender fee of Rs. 4000/ (Rupees Four thousand only) in the form of DD favoring The Principal, College of Engineering & Technology, Bhubaneswar payable at Bhubaneswar. (In case the tender document is downloaded from the college website). Quotations without requisite tender Fee shall be rejected.
 - v. Refundable Earnest Money Deposit (EMD): For details please refer Page No. 1 of this tender document. Offers without Earnest Money Deposit will be rejected.
 - vi. The warranty services are required at CET, Ghatikia, Bhubaneswar. The bidder must provide the plan / arrangement, for installation and warranty services to be provided at CET Campus. A declaration on manufacturer's warranty as desired/specified in the technical specification should be provided by the OEM in original.
 - vii. The detailed technical specifications with Make & Model, Compliance Statement must be as per the technical specifications (as per Annexure-I) which needs to be supported by relevant product brochure etc. Without proper Compliance Statement the bid is liable to be rejected.
 - viii. Acceptance to the terms and conditions laid down in the tender document. Any deviation in the general terms and condition will lead to the rejection of the bid.
 - ix. If the technical offer contains any price information the offer will be summarily rejected.
- b. Part II (Price Bid): should contain Only Price Details in the prescribed format as per Annexure-II with proper seal and signature of authorized person. Prices should be given in INR in both figures and words.

Both sealed covers Part-I “ **Technical Bid**” and Part-II “Price Bid” should be placed in a third cover along with others requisite supporting documents if any and sealed. The sealed cover containing tender documents as per procedure indicated above should be submitted through Registered Post/Speed Post to the Principal, College of Engineering & Technology, Techno-campus, Mahalaxmivihar, Ghatikia, , Bhubaneswar-7510029 **within the due date and time as stipulated in Tender Call Notice. The sealed envelope must show the name of the tenderer and his address and should be super scribed on the top of the envelope as “*Tender for Supply, Installation, Commissioning, Execution, and Testing of Networking including expansion of existing Wi-Fi connectivity*” at CET, Bhubaneswar. No hand delivery shall be accepted. The authority is not held responsible for any postal delay.**

4. Opening of Technical and Price Bid:

Only the technical bids will be opened on the date mentioned at page 1 of this tender document. Interested bidders may attend the technical bid opening as per the schedule. Price Bids of only the short-listed/technically qualified bidders will be opened in presence of the bidder or their authorized representative at the time & date, to be informed later only through phone and email.

The outer cover super scribing in which these sealed covers (i.e. Part I & II) are to be placed should be addressed and reach to the:

**The Principal,
College of Engineering & Technology
Techno Campus, Ghatikia,
Bhubaneswar-3
Odisha, India.**

SECTION - II: INSTRUCTION TO BIDDERS (ITB)

1. **Bid Validity:** Bids shall be valid for minimum 120 Days from the date of opening of technical bid. A bid valid for a shorter period shall not be considered. CET-Bhubaneswar may ask bidders to extend the period of validity.
2. **Delivery & Installation:** The complete delivery and installation as per our present requirement must be completed at CET, Techno Campus, Ghatikia within 8 weeks from the date of P.O to meet the time lines. However, separate order may be placed for additional quantities on the same rates on "As and When Required" basis within the Bid Validity period as above. CET-Bhubaneswar reserves the right to increase or decrease the Bill of Material as per the requirement without any change in the rates quoted.
3. **Product specifications and Compliance Statement:** The bidder should quote the products strictly as per the tender specifications and only of desired/ preferred brands. Complete technical details along with brand, specification, technical literature etc. highlighting the specifications must be supplied along with the technical bid. A Compliance statement in the form of "Complied" or "Not Complied" shall be given against each item as per prescribed format given in Annexure I. The compliance statements should be supported by authentic documents. Each page of the bid and cuttings / corrections shall be duly signed and stamped by the authorized signatory. Failure to comply with this requirement may result in the bid being rejected.
4. In case of any discrepancy between rates mentioned in figures and words, the latter shall prevail. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.
5. Materials must be properly packed against any damage and insured up to the destination. The material should be directly supplied to CET, Bhubaneswar. All the expenses involved in shipping the equipment to CET, Bhubaneswar shall be borne by the Bidder. All aspects of safe delivery shall be the exclusive responsibility of the Bidder. CET-Bhubaneswar will have the right to reject the materials supplied, if they fail to comply with the tender specifications during installation/inspection.
6. Earnest Money is liable to be forfeited and bid is liable to be rejected, if the bidder withdraw or amends, impairs or derogates from the tender in any respect within the validity period of the tender.

7. The Earnest Money of all the unsuccessful bidders shall be returned as early as possible but within the Bid Validity period but not before 30 days from the date of Purchase Order. No interest will be payable by CET on the Earnest Money Deposit. The Earnest Money of successful bidder shall be returned after acceptance of the order and submission of Performance Bank Guarantee.
8. If any equipment or part thereof is lost or rendered defective during transit, the supplier shall immediately arrange for the supply of the equipment or part thereof, as the case may be, at no extra cost.
9. The rates should be quoted in Indian Rupees for delivery at the Site **BOTH IN FIGURES & WORDS**. All prices shall be fixed and shall not be subject to escalation of any description during the bid validity period.
10. **The price should be inclusive of all taxes strictly as per the format of Annexure-II. However the bidder need to submit details of tax components like basic price, VAT/Sales Tax, Service Tax, entry tax etc in a separate sheet [Annexure II(A)] which shall be enclosed in the price bid along with Annexure II. The offers which are not as per the format will be rejected.**
11. CET-Bhubaneswar reserves the right to accept/reject the offers or cancel the whole tender proceedings without assigning any reason whatsoever. Offers through email/fax, etc and open offers shall not be accepted. Late/Delayed offers shall not be accepted under any circumstances. Incomplete offers shall be rejected outright. In case the specified date for the submission of offers being declared as a holiday for CET-Bhubaneswar, the bid-closing deadline shall stand extended to the next working day up to the same time.
12. Any attempt of negotiation direct or indirect on the part of the tenderer with the authority to whom he has submitted the tender or authority who is competent finally to accept it after he has submitted his tender or any endeavor to secure any interest for an actual or prospective bidder or to influence by any means the acceptance of a particular tender will render the tender liable to be rejected.
13. The prospective bidders requiring any clarification about the contents detailed in the tender document may notify to CET-Bhubaneswar in writing at CET's address within the query submission timeline mentioned at page 1 of this tender document. Such queries need to be sent to CET only through email to principalcet@cet.edu.in.
14. The equipment must be supported by the bidder's technical support engineers. The support must be available 24 hours in a day, seven days a week and 365 days a year. Also provide toll free number / web / email so that it should be possible to contact the Principal Bidder's (OEM's) support Centre.
15. **Unsatisfactory Performance:** The Parties herein agree that CET-Bhubaneswar shall have the sole and discretionary right to assess the performance(s) of the Bidder components(s), either primary and or final, and CET-Bhubaneswar, without any liability what so ever, either direct or indirect, may reject the system(s) component(s) provided by the Bidder, in part or in its entirety, without any explanation to the Bidder, if found unsatisfactory and not up to level of the acceptance of CET-Bhubaneswar.
16. **Disclaimer:** This Tender is not an offer by CET-Bhubaneswar, but an invitation for bidder's response. No contractual obligation whatsoever shall arise from the RFP process.
17. **Solving Disputes:** The Institution & the Tenderer shall make all efforts to resolve amicably by direct informal negotiation on any disagreement or dispute arising between them under or in connection with this contract. All disputes arising out of the contract shall be referred to courts under the jurisdiction of the Bhubaneswar court only.

The above terms and conditions except those otherwise agreed upon shall form a part of the Purchase Order.

18. **Force Majeure:** Notwithstanding the provisions of GCC clauses 22, 23 and 24, the supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.
19. For purposes of the clause, "Force Majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
20. If a Force Majeure situation arises, the supplier shall promptly notify the purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
21. **Termination for insolvency:** If the supplier becomes bankrupt or otherwise insolvent, the purchaser may terminate the contract by giving written notice to the supplier, without any compensation to the supplier, provided, such termination will not prejudice or affect any right of action or remedy which has accrued and / or will accrue thereafter to the purchaser.
22. **Declaration:**

"I/We UNDERSTAND THAT THE DETAILS OF THE SERVICES AS PROVIDED ABOVE ARE SUBJECT TO CHANGE. I/WE AGREE THAT IN CASE OF ANY CHANGE IN THE QUANTITIES REQUIRED FOR ANY OF SERVICES, I/ WE WOULD BE SUPPLYING THE SAME AT THE RATES AS SPECIFIED IN COMMERCIAL BID. I /WE AGREE TO ADHERE TO THE RATES GIVEN ABOVE EVEN IF THE QUANTITIES UNDERGO A CHANGE".

SECTION - III: SPECIAL CONDITIONS OF CONTRACT (SCC)

1. **Price Basis:** Price quoted should be in the prescribed format as per Annexure-II. The quoted price will be considered firm and no price escalation will be permitted during the bid validity period.
2. **Billing:** Billing is to be done in the name of The Principal, CET, Techno Campus, Ghatikia Bhubaneswar-751003. The payment would be on the basis of the actual bill of material supplied and duly certified by authorized representative of CET. The payment shall be made on actual measurement basis.
3. **Performance Bank Guarantee (PBG):** The successful bidder will be required to furnish the Performance Bank Guarantee from a nationalized bank towards 10% amount of the Purchase Order value. This Bank Guarantee shall remain valid for 3 years, which shall be commencing after the completion of entire job. If the products are with more than 3 years warranty the Bidder should enter with an agreement with CET after expiry of 3 years. Such an agreement should be notarized by a notary Public of Bhubaneswar only; else the bank guarantee shall be extended for another 3 years. The warranty of products supplied by the bidder must be available in the respective OEM website, else warranty certificate must be provided by the OEM in their letter head in original.
4. **Payment:** 70% of invoice value after successful Supply by the Party and inspection of the same materials by CET authority, 30% after completion of the job as per the purchase/work order and only after submission of PBG. The inspection time of all the supplied material be completed by CET within Seven working days.

5. **Penalty for Delayed Services:** Since timely completion is the essence of the contract, **the penalty will be levied @ 1 % of the contract value per week**, in case of delay/non-completion of work within the stipulated time period. Maximum penalty should be 1% of the P.O value.

6. **Warranty (Active Components only)**

- a. Active hardware items shall carry standard **7-years onsite comprehensive warranty** from the date of completion of installation. Products with lifetime warranties from manufacturers will be given preference at the sole discretion of CET-Bhubaneswar.
- b. Onsite support should be provided within maximum 24 working hours. The bidder must undertake to provide the installation and warranty service at CET, Techno Campus, Ghatikia, Bhubaneswar.
- c. The repairing/rectification, if any, of the items under warranty must be done at site only. Bidders must provide standby/spare items of similar configuration to CET, if at all, the faulty item under warranty are required to be taken outside of CET site for repair/restoration. An undertaking from the bidder in this regard must be provided.
- d. The bidder should submit along with the technical bid, the detailed plan for providing installation and warranty services at site. Prompt and efficient after sales service must be provided within the warranty period.
- e. All passive components shall carry warranty for 20 years.

ANNEXURE – II (PRICE BID)
(All price figures are to be in INR only)

Sl.	Item	Quantity (A)	Make & Model	Unit Rate (B)	Sub Total (C = A x B)
1.	Add-on AP License (for existing WLAN Controller)	115 (Nos.)			
2.	Indoor Wireless Access Point (Compatible for existing WLAN controller)	110 (Nos.)			
3.	Outdoor Wireless Access Point (Compatible for existing WLAN controller)	04 (Nos.)			
4.	Managed Gigabit POE Switch	18 (Nos.)			
5.	1G SM Fiber Transceiver, (Compatible with existing switches)	06 (Nos.)			
6.	Outdoor OFC, 6 Core, SMF	1000 (Mtrs.)			
7.	Indoor OFC, 6 Core, SMF	1000 (Mtrs.)			
8.	LIU, R/Mnt, Fully loaded, SMF, SC, 12 Fiber	08 (Nos.)			
9.	OFC Dpx Ptch Cord, 3Mtrs, LC-SC	08 (Nos.)			
10.	UTP Patch Cord, 2Mtrs (Factory crimped)	280 (Nos.)			
11.	UTP Patch Cord, 1Mtr (Factory crimped)	120 (Nos.)			
12.	CAT6 Simplex I/O with Faceplate & Backbox	400 (Set.)			
13.	CAT6 UTP Cable (305Mtrs Box)	45 (Nos.)			
14.	Cable Management solution for Server Room	1 (L/S)			
15.	9U WallMnt Rack, with PD & Cable Manager	12 (Nos.)			
16.	Pipe for OFC Laying(Indoor)	1000 (Mtrs.)			
17.	HDPE Pipe for OFC Laying(Outdoor)	1000 (Mtrs.)			
18.	Fiber Re-work including supply of materials, fiber splicing and required labor charges for all existing fibers from old server room to new server room and commissioning of high density fiber patch panels in new server room.				
a	OFC Splicing	148 (Nos.)			
b	48 Port Fiberpatch panel fully loaded	06 (Nos.)			
c	24 Core fiber	240 (Mtrs.)			
d	OFC Dpx Ptch Cord, 3Mtrs, LC- LC	09 (Nos.)			
e	OFC Dpx Ptch Cord, 10Mtrs, LC-LC	12 (Nos.)			
19.	Fiber Laying Charges(Indoor)	1000 (Mtrs.)			
20.	Fiber Laying Charges(Indoor)	1000 (Mtrs.)			
21.	UTP Cabling charges including casing/capping	12500 (Mtrs.)			
	TOTAL PRICE (In figures):				
	TOTAL PRICE (In words):				

- Total Price quoted should be inclusive of all taxes. However, the tax components must be mentioned separately as in ANNEXURE – II (A).

Place:
Name of the Bidder:
Signature:
Seal:

Date:

ANNEXURE – II(A) (DETAILED BREAKUP OF PRICE BID)

(All price figures are to be in INR only)

Sl.	Item	Quantity (A)	Make & Model	Unit Rate (B)	Sales Tax and/or Service Tax (C)	Total Unit Price (D=B+C)	Sub Total (E = A x D)
1.							
2.							
3.							
	TOTAL PRICE (In figures):						
	TOTAL PRICE (In words):						

Place:

Date:

Name of the Bidder:

Signature:

Seal:

PROFORMA-I (PRE-QUALIFICATION/ELIGIBILITY)

PARTICULARS OF THE BIDDERS TO BE FURNISHED IN TECHNICAL BID FOR THE PURPOSE OF PRE-QUALIFICATION:

1.	Name of Organization/Firm/Company	
2.	Address & Telephone Number (Furnish address proof)	
3.	Year of establishment	
4.	Status of the Firm (Company/Firm/Proprietary) <i>Supporting document to be enclosed.</i>	
5.	Whether registered with the registrar of companies/registrar of firms. If so attach the copy of certificate.	
6.	Name & Mobile Number of Directors/Partners/Proprietor	
7.	Whether registered with sales tax. If so, mention number & date. Furnish also copies of sales tax registration certificate Mention the VAT/ CST enclose the relevant copies with required clearance certificates upto March, 2017.	
8.	Permanent Account Number (PAN) Furnish copy of PAN	
9.	State Annual turnover of the company. Furnish copies of audited balance sheet & profit & loss account for the last three years Certified Auditor.	
10.	Specify the maximum value of single work executed in the year in the country/State.	
11.	Status and details of disputes/Litigation/Arbitration, if any.	

Place:

Date:

Name, Signature & Seal of Bidder:

PROFORMA-II (WORK EXPERIENCE)

*PARTICULAR IN RESPECT OF 3 MAJOR WORKS EXECUTED IN LAST 3 YEARS
(TO BE FURNISHED IN TECHNICAL BID)*

Sl.	Name of work and project with address	Short Description of work executed	Name and address of owner	Value of work executed	Nos. of Ports (Switch Ports) / Nos. of Aps	Stipulated time of completion	Actual time of completion

NB: Copies of Work Order / P.O., Completion certificate, Performance certificate must be attached.

Place:

Date:

Name, Signature & Seal of Bidder:

PROFORMA-III (FORMAT OF PERFORMANCE BANK GUARANTEE)

(To be stamped in accordance with Stamp Act)

Ref:

Bank Guarantee No.

Date:

To

The Principal,
College of Engineering & Technology,
Techno Campus, Ghatikia
Bhubaneswar-3, Odisha.

Sub: Performance Bank Guarantee for your purchase order/work order No. ____ Date ____

Dear Sir,

Dated this, the.....Day of.....

WHEREAS

.....
..... (Name of the Supplier with Address) hereinafter called "Supplier" has undertaken, in pursuance of RFP No., (hereinafter referred to as "Tender") and purchase order/work order as mentioned above for supply and installation/laying, commissioning, execution & testing of Networking and Wi-Fi connectivity in CET, Ghatikia, Bhubaneswar.

AND WHEREAS it has been stipulated in the above purchase order/work order that the supplier shall furnish a performance Bank Guarantee ("the Guarantee") from a scheduled bank of the sum Rs. _____/- (Rupees _____ only) being 10% of the total value of the order specified therein as security for supply of the items.

WHEREAS

We

.....
..... ("the Bank" Bank Name with complete address, which expression shall be deemed to include it, successors and permitted assigns) have agreed to give CET Bhubaneswar the Guarantee:

Dated this, the..... Day of.....

THEREFORE the Bank hereby agrees affirms as follows

1. The Bank hereby irrevocably and unconditionally guarantees the payment of all sums due and payable by the supplier to CET, Bhubaneswar, adhering and withstanding all the terms therein RFP No.....and purchase order/work order No. _____ Date _____ an account of full/partial/non-supply/non-Installation/delayed/defective supply & Installation of Networking and Wi-Fi connectivity in CET, Bhubaneswar Provided however, that the maximum liability of the Bank towards CET, Bhubaneswar

under this Guarantee shall not under any circumstances exceed the amount Rs._____-/-
(Rupees _____ only) as indicated in Tender No.....
and purchase order/work order No..... Date.....

2. In pursuance of this Guarantee, the Bank shall, immediately upon the receipt of written notice from CET, Bhubaneswar reason to full/partial/non-supply/non-installation/delayed/defective supply & installation of Networking and Wi-Fi connectivity in CET, Bhubaneswar which shall not be called in question, in that behalf and without delay/demur or set off, pay to CET, Bhubaneswar any and all sums demanded by CET, Bhubaneswar under the said demand notice, subject to the maximum limits specified in clause 1 above.

A notice from CET, Bhubaneswar to the Bank shall be sent by Registered Post (Acknowledgement Due) at the following address:

.....
.....
.....
.....
.....(Bank name with complete address).

3. This Guarantee shall come into effect immediately upon execution and shall remain in force for a period of 3 years from date of its execution.
4. The liability of the Bank under the terms of this Guarantee shall not , in any manner whatsoever, be modified, discharge, or otherwise affected by:
 - a. Any change or amendment to the terms and conditions of the contract or the execution of any further Agreements.
 - b. Any breach or non-compliance by the Suppliers with any of the terms and conditions of any Agreements/credit arrangement, present or future, between the supplier and the Bank.
5. The Bank also agrees that CET, Bhubaneswar at its option shall be entitled to enforce this Guarantee against the Bank as principal Debtor, in the first instance without proceeding against supplier and not withstanding any security or other guarantee that CET, Bhubaneswar may have in relation to the supplier's liabilities.
6. The Bank shall not be released of its obligation under these presents by reason of any act of omission or commission on the part of CET, Bhubaneswar any other indulgence shown by CET, Bhubaneswar or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.
7. This Guarantee shall be governed by the laws of India and only the High Court of Odisha shall have exclusive jurisdiction in the adjudication of any dispute which may arise hereunder.

Dated this, the.....Day of.....

Witness

(Signature)

(Name)

(Official Address)

(Signature)

Bank Rubber Stamp

Designation with Bank

Dated:

Dated:

ANNEXURE-I

1. About Existing Setup and Scope of Work

- a. Existing Network: CET has an existing Wireless Local Area Network (WLAN) and OFC based LAN setup that was deployed in August 2013 using Hewlett-packard WLAN controllers and Access Points (AP) while the OFC based LAN was on HPE make network equipment's. Overall manageability of the LAN & WLAN were on Hewlett-Packard NMS software. All the existing blocks within the CET Ghatikia campus were provided with wireless coverage to access the Internet and local computing resources.
- b. The existing WLAN setup is ready for 802.11n and 802.11ac. However, the existing WLAN APs are based on 802.11n standard. Over the years, the number of mobile devices being used by each stakeholder, the variety of devices, operating systems, and applications, and the density of the mobile devices connecting to each AP has grown moderately. The existing WLAN setup needs to be expanded at some point while at some other point, wireless coverage needs to be made denser with respect to coverage, connectivity, and speed.
- c. The WLAN infrastructure is supported by a wired LAN that runs on 1000 Mbps Ethernet backbone on OFC. Overall manageability of both the LAN and WLAN network is achieved by NMS software.
- d. CET has considered to expand the WLAN network and accordingly, intends to meet this requirement through this tender. Equipment and services requirement has been enumerated in this tender document as Annexure-II.
- e. Following are the schedule of responsibilities for the perspective bidders:
 - i. Supply of materials as per Annexure-II.
 - ii. Installation, commissioning and testing of supplied materials in the existing LAN and WLAN network.
 - iii. Integration of supplied materials into the existing NMS for both LAN and WLAN network.
 - iv. After-sales service and support as per this tender document.
- f. All active networking equipment's including the WLAN AP and switches offered by bidders must be compatible with the existing setup. Bidders must ensure seamless migration and interoperability including both monitoring and manageability with the existing LAN and WLAN infrastructure.
- g. Bidders may visit the CET Ghatikia site on any working day for their understanding of the requirement only with prior intimation before submission of bid.
- h. Bidder's representatives are required to carry the proof of tender purchase as well as an authorization letter on their letter head and identity proof while coming for site visit.
- i. Queries will only be accepted from Bidders who have purchased the tender document.
- j. Queries must be strictly submitted only in (.XLS/ .XLSX/ .ODF) format. Also, kindly attach the scanned copy of the receipt towards the purchase of the tender document.

2. Annexure – I(B): Technical Specifications

a. Managed Gigabit POE Switch

Sl.	Specifications	Compliance (Yes/No)	Remarks
A.	Architecture		
1	The switch should have 24 x 10/100/1000 PoE+ ports and additional 4 ports shall at least support 1000 Base SFP (LX/SX)		
2	Should support 1000 Base- SX, LX, BX LH and 100Base-FX Mini-GBICs		
3	Should have 56 Gbps switching fabric		
4	Should have 41.7 Mpps Switching throughput		
5	Should support 802.3af/802.3at PoE on all copper ports with minimum PoE power budget of 170 watts per switch		
6	Should have MAC Address table size of 8,192 entries		
7	The Switch should be 19" Rack-Mountable		
8	Should support operation and static routing at full wire speed IPv4 & IPv6		
9	Should have 128 MB RAM and adequate flash to support continuous operation		
B.	Resiliency and high availability		
1	Should support IEEE 802.3ad Link Aggregation Control Protocol (LACP)		
2	Should support IEEE 802.1s MSTP with backward support for IEEE 802.1d STP & IEEE 802.1w RSTP		
C.	Layer 2 features		
1	Should support IEEE 802.1Q VLANs up to 256 ports VLANs		
2	Should support GVRP VLAN Registration Protocol allowing automatic learning and dynamic assignment of VLANs		
3	Should support Jumbo frames on 9 kilo bytes		
D.	Security		
1	Should support MAC and IP based ACLs and time based ACLs		
2	Should support IEEE 802.1X and RADIUS based authentication		
3	Should support Denial-of-service and/ or firewall protection for the network		
4	Should support management access security encrypted through SSL and SNMPv3		
5	Should support Web and MAC based authentication		
E.	Convergence and QoS		
1	Should support IGMP and MLD		
2	Should support IEEE 802.1AB Link Layer Discovery Protocol (LLDP)		
3	Should support rate limiting		
4	Should support IPv6 ACL and QoS. Minimum 8 queues.		
5	Should support IEEE 802.1p Traffic prioritization		

6	Should support IP multicast (data driven IGMP) to automatically prevent flooding of IP multicast traffic		
F.	Manageability		
1	Should support SNMP V1/V2c/SNMPV3		
2	Should support web interface for switch configuration		
3	Should support Port mirroring		
4	Should support RMON		
5	Should have CLI		
6	Should support Multiple configuration files		
7	Should support physical stacking		

b. Indoor Wireless Access Point

Sl.	Technical Specifications	Compliance (Yes/No)	Remarks
A.	Architecture		
1	The access point should have 1 x RJ-45 auto-sensing 10/100/1000 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T)		
2	Should be dual-radio supporting 802.11a/b/g/n/ac with support for two spatial streams and 2x2 MIMO, Integrated/External antenna		
3	The AP should have dedicated 802.11n and 802.11ac support without allowing legacy clients (802.11a/b/g) on the same radio to achieve maximum 802.11n and 802.11ac data rates. Shall deliver aggregate throughput in excess of 1Gbps across IEEE 802.11ac and IEEE 802.11n radios		
4	Real-time, fully integrated spectrum analyzer capabilities across 20-, 40-, and 80-MHz-wide channels to combat performance problems due to wireless interference		
5	Support both 20- and 40-MHz channel bonding for complete utilization of IEEE 802.11n on 2.4GHz		
6	Should be able to deploy them either for Local Client Access, Mesh connectivity and Wireless Packet detection mode		
7	The access point should be PoE compliant and operate on the existing power supplied by IEEE 802.3af power injectors		
8	Plenum rated with UL 2043 certification		
9	Integrated/External BLE from day-1		
10	Suitable wall/ceiling mounting kit should be included		
B.	Mobility Features		
1	Should support manageability through a wireless controller		
2	Should be Wi-Fi Alliance certified for interoperability with all IEEE 802.11a/b/g/n/ac client devices		
3	Should support up to 16 Service Sets with unique SSIDs with a unique MAC address		
4	Each SSID should be independently configurable for authentication, encryption, VLANs, and up to four QoS levels		

5	Should support TOS/DiffServ and 802.1p for end-to-end QoS across wired and wireless networks		
6	Should support QoS classification based on TCP/UDP port		
7	Should support direct source-to-destination traffic forwarding (distributed traffic forwarding) to maximize application delivery		
C.	Security features		
1	Should support IEEE 802.11g WPA and WPA2 Wireless Multimedia (WMM), WMM Power save EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, IEEE 802.11h		
2	Should support enforcement of client authorization based on user credentials (802.1X/EAP), hardware identifiers (MAC address, WEP key), and HTML login		
3	Should support hardware-assisted encryption using WPA2/AES (IEEE 802.11i), WPA/RC4 and/or WEP		
4	Should support simultaneous detection and prevention of wireless threats on 2.4 GHz and 5 GHz frequency bands		
5	Should support Layer-2 client isolation per Service Set		
6	Should support protocol filtering per Service Set to deny unwanted traffic		
7	Should support IP filtering per-user and per-Service Set to forward traffic to a pre-defined location		
8	Should support management communication via SSH/SSL, IPSec, and digital certificates		
9	Integrated/External Wireless IPS/IDS capabilities		
D.	Management features		
1	Should support both centrally controlled mode (configured and updated via wireless controller)		
2	Should support auto-selection of RF channel and transmit power		
3	Should support PCAP packet capture on WLAN or LAN interface		
4	Should support SNMP, CLI, and web-based management interfaces		
5	Operating temperature of up to 50°C		

c. Outdoor Wireless Access Point

Sl.	Technical Specifications	Compliance (Yes/No)	Remarks
A.	Architecture		
1	The access point should have 1 x RJ-45 auto-sensing 10/100/1000 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T)		
2	Should be dual-radio supporting 802.11a/b/g/n/ac with support for two spatial streams and 2x2 MIMO, Integrated/External antenna		
3	The AP should have dedicated 802.11n and 802.11ac support without allowing legacy clients (802.11a/b/g) on the same radio to achieve maximum 802.11n and 802.11ac data rates. Shall deliver aggregate throughput in excess of 1Gbps across IEEE 802.11ac and IEEE 802.11n radios		

4	Real-time, fully integrated spectrum analyzer capabilities across 20-, 40-, and 80-MHz-wide channels to combat performance problems due to wireless interference		
5	Support both 20- and 40-MHz channel bonding for complete utilization of IEEE 802.11n on 2.4GHz		
6	Should be able to deploy them either for Local Client Access, Mesh connectivity and Wireless Packet detection mode		
7	The access point should be PoE compliant and operate on the existing power supplied by IEEE 802.3af power injectors		
8	Minimum IP66 rated outdoor construction suitable for deployment under full solar exposure and non-weather protected locations		
9	Integrated/External BLE from day-1		
10	Suitable Pole/wall mounting kit for outdoor deployment should be included		
B. Mobility Features			
1	Should support manageability through a wireless controller		
2	Should be Wi-Fi Alliance certified for interoperability with all IEEE 802.11a/b/g/n/ac client devices		
3	Should support up to 16 Service Sets with unique SSIDs with a unique MAC address		
4	Each SSID should be independently configurable for authentication, encryption, VLANs, and up to four QoS levels		
5	Should support TOS/DiffServ and 802.1p for end-to-end QoS across wired and wireless networks		
6	Should support QoS classification based on TCP/UDP port		
7	Should support direct source-to-destination traffic forwarding (distributed traffic forwarding) to maximize application delivery		
C. Security features			
1	Should support IEEE 802.11g WPA and WPA2 Wireless Multimedia (WMM), WMM Power save EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, IEEE 802.11h		
2	Should support enforcement of client authorization based on user credentials (802.1X/EAP), hardware identifiers (MAC address, WEP key), and HTML login		
3	Should support hardware-assisted encryption using WPA2/AES (IEEE 802.11i), WPA/RC4 and/or WEP		
4	Should support simultaneous detection and prevention of wireless threats on 2.4 GHz and 5 GHz frequency bands		
5	Should support Layer-2 client isolation per Service Set		
6	Should support protocol filtering per Service Set to deny unwanted traffic		
7	Should support IP filtering per-user and per-Service Set to forward traffic to a pre-defined location		
8	Should support management communication via SSH/SSL, IPSec, and digital certificates		
9	Integrated/External Wireless IPS/IDS capabilities		
D. Management features			

1	Should support both centrally controlled mode (configured and updated via wireless controller)		
2	Should support auto-selection of RF channel and transmit power		
3	Should support PCAP packet capture on WLAN or LAN interface		
4	Should support SNMP, CLI, and web-based management interfaces		
5	Operating temperature of up to 55°C		

d. Add-on AP License for existing WLAN Controller

e. 9U Rack

Sl.	Technical Specifications	Compliance (Yes/No)	Remarks
A.	Architecture		
1	Width : 600mm Depths : 600mm		
2	Bolted Construction.		
3	Cable entry at Top and Bottom.		
4	Front glass door, with lock.		
5	19 "mounting angles at front are recessible.		
6	PDU 6x5Amp, 5 Amp Rated.		
7	Cooling Fan , 230 VAC / 50 Hz.		
8	Cable Manager, 19", with PVC Loops.		
9	Mounting Hardware PKT.		

f. SM Fiber Transceiver

(Should be compatible with existing HPE make switches)

g. Cable Management solution for Server Room

(Bidders need to visit the site and understand the requirement for the complete solution)

h. Fiber Re-work (minimum 68 fibers) including supply of materials, fiber splicing and required labor charges for all existing fibers from old server room to new server room and commissioning of high density fiber patch panels in new server room (96 fibers)

(Bidders need to visit the site and understand the requirement for the complete solution).