



**NATIONAL INSTITUTE OF TECHNOLOGY
RAIPUR – 492 010, CHHATTISGARH**

**Open(Advertised) Tender for Purchase of Wireless and Sensor Network
Laboratory Test Bed(Two Bid System)**

Department: Information Technology

Enquiry No: NITRR/S&P/IT/OT/2022/1999

Date: 20/12/2022

Important Dates

To

Event	Date	Time
Last Date of submission of quotation	11/01/2023	06:00PM
Technical bid Opening date	13/01/2023	04:00PM
Price (financial) bid Opening	To be Informed to technically successful bidder by mail and phone.	

Dear Sir,

We intend to purchase the commodities specified in this document and invite quotations in accordance with the terms and conditions detailed in the bid document. If you are interested, kindly submit your offer with prices and complete terms within the time mentioned above through our e-tender portal www.tenderwizard.com/NITR .Tender will be accepted online only & no other mode will be accepted.

Yours sincerely,

Registrar
National Institute of Technology,
Raipur

Enclosed:

- (1) Bid Document - Instruction to bidder - containing detail terms and conditions.
- (2) Acceptance of terms & conditions of tender-Annexure 1
- (3) List of Equipment's/machines/commodity etc.- Annexure 2
- (4) Technical Specification – Annexure 3
- (5) Technical Compliance Format- Annexure 4
- (6) Price Bid Format in INR – Annexure 5
- (7) Price Bid Format in of imported items in currency other than INR -Annexure 6
- (8) Deviation statement form - Annexure 7
- (9) Bidder information & check list- Annexure 8

BID DOCUMENT**INSTRUCTION TO BIDDER**

1. Please go through the enclosed "bid document" carefully for other bidding instructions.
2. **IMPORTANT NOTE:** Being a Two-Part Tender (techno-commercial and price bid), fax quotations will not be accepted. Please ensure your offers are received on or before tender due date and time. Bidder/ Tenderer are requested to download the tender documents from our website (www.nitr.ac.in) & e-tendering portal i.e. www.tenderwizard.com/NITR and submit tender fee of amount ₹ 1180/- (inclusive of GST) through online mode in our e-tendering portal i.e. www.tenderwizard.com/NITR. **Kindly note that if any bidder wants to quote for more than one item in the tender then he has to pay tender fee only once at first and for later he will be exempted to pay tender fee for another items (have to select exempted option on payment page). If any vendor paid more than one tender fee in case of multiple items then the excess payment will not be reversed, so please be careful while submitting the bid.**
 - **Quotations received without tender fee will not be considered.**
 - No request for extension of the due tender date will be considered.
 - In the event any date indicated above is declared as holiday, the next working day at Institute shall be considered as the due date for receiving & opening of tenders.
 - The bids shall be opened on date and time as mentioned above. The bidders may send their authorized representatives to attend the bid opening, if they so desire.
 - Bids received after the deadline of receipt indicated above, shall not be taken in to consideration.
3. The bid should remain valid for a period of **180 days** from the date of opening. In case your offer has a different validity period that should be clearly mentioned in the quotation. Validity period may also be extended without change in bid prices, if required on mutually agreed basis only.
4.
 - (a) **In the tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. In the event of simultaneous bidding by both Principal/OEM and Indian agent; the bid submitted by the Indian agent will not be considered.**
 - (b) **If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for same item/product. In the event, an agent submits the bids on behalf of more than one Principal/OEM for the same item in same tender, then all such bids will not be considered.**

5. **Clarification of bidding documents:** If a prospective bidder requires any clarification in regard to the bidding documents, they may mail to storenpurchase@nitrr.ac.in (for Commercial terms) and hod.it@nitrr.ac.in, spandey.it@nitrr.ac.in (for Technical queries) at least 15 days before the deadline for receipt of bids.
6. **Submission of bids: Bidders have to submit their bid through E-tendering mode only at website www.tenderwizard.com/NITR.**
7. Financial Bid (Microsoft Excel File) is to be downloaded from website www.tenderwizard.com/NITR and then is to be filled, saved and uploaded (through digital signature) on the same website and not to be submitted in hard copy at all.
8. The Financial Bid (after filling the rates) should neither be scanned & uploaded, nor, the hard copy of the same should be submitted to NIT Raipur office.
9. **The complete Tender document can be viewed and downloaded only from the website(www.tenderwizard.com/NITR) & www.nitrr.ac.in during the tender sale period. The intending bidders should submit the tender documents sale price & tender processing fee, through e-payment, at the time of making online request.**
10. Complete tender papers, duly accompanied with receipts of e-payment of tender cost, EMD shall be received online as per date and time mentioned. Tender shall be opened through E-tendering systems, in presence of bidders or their authorized representatives.
11. Complete tender documents must be submitted on or before **as per schedule mentioned through E-Tendering mode only at website i.e. www.tenderwizard.com/NITR.**
12. Tenderers are advised to complete all submission related work well before last date for submission of tender online. Any request for modification in the time/date of submission of tender due to tenderer's failure to submit his offer, will not be accepted. Tenderer must try to submit their bid prior to last date to avoid any failure.
13. **To participate in the E-tender, it is mandatory for the bidders to have user ID & password, which has to be obtained by submitting an annual registration charges of Rs. 2000/- +GST @ 18% to ITI, through e-payment. Also it is mandatory for all bidders to have class 3 digital signature certificates from any of the CCA (Controller of Certifying Authority, India) or if any support required on DSC, Please contact back to us. (Helpdesk No. 011-49424365, 8800991863)**
14. The bid along with necessary documents should be uploaded only on the www.tenderwizard.com/NITR portal as per guidelines mentioned in the portal. Tender have to be submitted only online at <https://www.tenderwizard.com/NITR>. All documents in support of eligibility criteria etc. are also to be scanned and uploaded along with the tender documents. Tender sent by any other mode will not be accepted.
15. **Amendment of Bidding Documents**

- o Corrigendum, if issued any for the tender, shall form part of the Tender Document. Corrigendum will be posted on NIT RAIPUR website (www.nitr.ac.in) & www.tenderwizard.com/NITR. Bidders/Tenderers are requested to visit NIT RAIPUR website regularly and note the corrigendum / amendments to the tender without fail and submit the offer accordingly. NIT RAIPUR will not be responsible for ignorance of corrigendum.
 - o At any time prior to the deadline for submission of bids, the Institute may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder/Tenderer, modify the bidding documents by amendment. The same would also be hosted on the website of the Institute and all prospective bidders/tenderer are expected to surf the website before submitting their bids to take cognizance of the amendments. Bidder/Tenderer who has submitted bids before publishing the amendment may revise their bid incorporating the amendments before the last date of tender.
 - o In order to allow prospective Bidder/Tenderer's reasonable time in which to take the amendment into account in preparing their bids, the Institute, at its discretion, may extend the deadline for the submission of bids and host the changes on the website of the Institute.
16. **Custom duty:** The NIT Raipur have registration in Department of Scientific & Industrial Research (DSIR).

17. Bid Security (BS)/(Earnest Money/ EMD)

- I. The Bidder/Tenderer shall furnish, as part of its bid, a bid security (BS). **The EMD/Bid security should be submitted online only through e-tendering portal i.e. www.tenderwizard.com/NITR.** The EMD amount will be as follows: -

S.N.	Name of Equipment	EMD Amount
1	Wireless and Sensor Network Laboratory Test Bed	₹ 45000/- (Rupees Forty Five Thousand Only)

- II. In the case of foreign bidders/tenderers, the BS shall be submitted either by the principal or by the Indian agent and in the case of indigenous bidders/tenderers; the BS shall be submitted by the manufacturer or their specifically authorized dealer/Bidder/Tenderer.
- III. *Any bid without EMD or bid not secured in accordance with above will be rejected by the Institute as non-responsive.*
- IV. The bid security of unsuccessful Bidder/Tenderer will be discharged /returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity or placement of order whichever is later.
- V. The successful Bidder/Tenderer's bid security will be discharged upon the Bidder/Tenderer furnishing the performance security.
- VI. The firms registered with DGS&D & NSIC, if any, are exempted from payment of BS provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies.**
- VII. The bid security may be forfeited:**

- (a) If a Bidder/Tenderer withdraws or amends or impairs or derogates its bid during the period of bid validity specified by the Bidder/Tenderer on the Bid Form; or

18. Sealing and Marking of Bids:

In a two bid system All Bidders/Tenderers are requested to follow carefully the following instructions before preparing their offer.

Part I: Technical & Commercial Bid

Part – (a) Technical

- (i) This part should contain detailed specifications of the items quoted by you along with technical literature and leaflets.
- ii. A compliance statement showing the compliance of the item quoted by you with that of item tendered by us should be prepared and enclosed to this.
- iii. Any other information called for in the tender related technical and commercial specifications can also come in this part.
- iv. Prices should NOT be indicated in this cover.

Part – (b) Commercial terms: (WITHOUT PRICE)

- i. The commercial terms applicable for the items quoted by you should be indicated in this part.
- (ii) If any compliance statement is called for the commercial terms/contractual terms and conditions, the same is to be attached in this part.
- (iii) ***Prices should NOT be indicated in this part.***
- iv. The Commercial terms such as delivery terms, delivery period, payment terms, Warranty, validity of the offer, installation & commissioning, duties and taxes etc., shall come into this.
- v. The Tenderer/ bidder need to upload the following certificates along with the Tender Documents to confirm their eligibility in this part :
 - Proof of establishment of Firms/shop/business/ manufacturing unit etc. or Goods and Service Tax Registration Certificate(REG-06 Format with all pages), whichever applicable.(Clear visible scanned copy)
 - The bidder should Photocopy of PAN card issued in the name of the bidder's firm. (Clear visible colored scanned copy)
 - Tender Specific authorization from Original Equipment Manufacturer (OEM). Tender reference no. must be mentioned in the certificate. Kindly note that the authorization certificate should be directly from the OEM. In case of foreign principal, the Indian Agent may authorize, however in such case the agent must have right to do so & the foreign principal must authorize the Indian agent for the same.
 - Product catalogue or Information bulletin corresponding to the quoted product.

Note:

- Technical Specifications and terms & conditions as above should be very clearly reflected item-wise with reference to the items called for in the tender.
- Authorization certificate from the OEM can be verified from the OEM as and

when required during the tender evaluation process. In case, if the authorization certificate can not be verified from the OEM then the bid of the firm will be rejected.

- **The bidders must have to upload acceptance of tender terms & conditions duly sealed & signed in e-tendering portal(As per Annexure-I).**
- Please note that the PRICE SHOULD NOT BE indicated in this part.

Part II: Price Bid

The prices applicable for the items, item-wise in response to the tender shall come into this part in the prescribed format only. ***Bid will be rejected if rates are not quoted in the prescribed format.***

- i. Tenderer shall indicate very clearly item-wise prices with reference to their technical offer.

19. The bidders should quote their offer / rates in clear terms without ambiguity.

20. The rates should be quoted both in figures and words and legibly written without any over-writings. In case of any correction, the same must be attested by the bidder with full signature. However, no over-writing is permissible. Manufacturer's price-list, where applicable, should be submitted along with the bid.

21. In case of any discrepancy between the rates in figures and that in words, the rate in words will be accepted as correct.

22. Each bidder shall submit only one bid. A bidder, who submits more than one bid, shall be disqualified and considered non-responsive.

23. The bidder has to sign in full at all pages of the bidding document.

24. Bid Prices

(i) The Bidder /Tenderer shall indicate **unit prices in the prescribed format only.**

(ii) Prices indicated on the price-schedule form shall be entered separately in the following manner:

(a) For Goods being offered from India/ abroad in INR

(b) The price of the goods quoted should be FOR NIT RAIPUR inclusive of all taxes(GST, Custom etc), charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination as specified in the price schedule form, installation, commissioning, training charges etc , if any. **(Annexure V)**

(b) For Goods being offered from abroad in currency other than INR

i. The price of the goods, quoted on FCA (named place delivery abroad) or FOB (named port of shipment), as specified in the price schedule form. The price should be FOR NIT RAIPUR inclusive of all taxes, charges for insurance and transportation of the goods, agency commission, installation, commissioning, training charges etc if any. **(Annexure VI]**

- ii. The terms FOB, FCA, CIF, CIP etc. shall be governed by the rules prescribed in the current edition of the Incoterms published by the International Chambers of Commerce, Paris.
- iii. Prices quoted by the Bidder/Tenderer shall be fixed during the Bidder/Tenderer's performance of the Contract and not subject to variation on any account.
- iv. If at any stage of the price quoted GST applicable, it should be clearly mentioned.

25. Conditional discount, if any, offered by the bidder shall not be considered at the time of evaluation.

26. Responsiveness of Bids

- (i) Prior to the detailed evaluation, the Institute will determine the substantial responsiveness of each bid to the bidding documents. For purposes of this clause, a substantive responsive bid is one, which conforms to all terms and condition of the bidding documents without material deviations, reservations or omissions. A material deviation, reservation or omission is one that:
 - (a) affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
 - (b) limits in any substantial way, inconsistent with the Bidding Documents, the Institute's rights or the Bidder/Tenderer's obligations under the Contract; or if rectified, would unfairly affect the competitive position of other bidders/tenderers presenting substantially responsive bids.
- (ii) The Institutes' determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- (ii) If a bid is not substantially responsive, it will be rejected by the Institute and will not subsequently be made responsive by the Bidder/Tenderer by correction of the material deviation, reservation or omission.

27. Evaluation and comparison of bids

- (i) The Purchaser shall evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially responsive.
- (ii) To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria defined below. No other criteria or methodology shall be permitted.
- (iii) The bids shall be evaluated on the following basis which shall be arrived as under:

For goods being offered from India.

Goods price will be calculated FOR NIT Raipur. Lowest bid (L1) will be deciding by the price of the goods quoted should be FOR NIT RAIPUR inclusive of all taxes(GST & Custom Duty, etc), charges for inland transportation, installation, commissioning, training charges, insurance and other local services required if any for delivering the goods at the desired destination as specified in the price schedule Price Bid format

For goods being offered from Abroad

- (i) In case of goods being offered from abroad, Lowest bid (L1) will be decided based on total cost at NIT Raipur, that include basic price of goods, freight and Insurance up to Indian Airport/port (CIF/CIP value up to Indian airport/port), custom duty and other taxes as applicable etc., Inland transportation and insurance up to NIT Raipur, packaging, forwarding, agent commission for custom clearance and installation, commissioning and training charges if any.
- (ii) **Conversion to Single Currency:** To facilitate evaluation and comparison, Bids quoted in foreign currency will be converted into Indian Rupees at the selling exchange rate established by Reserve Bank of India on its website, on the date of price bid opening.
- (iii) In case charges for packing, forwarding, transportation inside India, custom clearance charges or other incidental charges are quoted extra in addition to the quoted rates, the amount thereof must be specified. Packing, forwarding, freight, entry tax etc., when quotes separately are reimbursable at actuals after production of original receipts/invoices. If external agencies are employed, their receipts must be enclosed with the invoice.
- (iv) *If vender wishes, he/they may alternatively, quote price of imported items in Indian rupees. In this case item may be treated as offered from India. Payment will be released accordingly.*

Note: *Where there is no mention of packing, forwarding, freight, transportation, insurance charges, taxes etc. such offers shall be REJECTED as incomplete.*

28. Clearance and delivery

On arrival of shipment/consignment, the supplier is required to arrange custom clearance and transportation of the consignment up to NIT RAIPUR premises. The Tenderer/ bidder will do all types of clearance work and **formalities to deliver/provide the equipment at the site of installation. The expenses incurred will be reimbursed on actual basis not exceeding the quoted amount.** Institute will provide all types of documentary support including Customs Duty exemption certificate. The custom duty, demurrage (in case of delay in release of custom duty to the custom department by NIT Raipur) and government taxes/levies (if any) will be paid extra by the buyer after as per term of payment. Please note that the State of Chhattisgarh may charge entry tax on all goods entering the State. This may be included in your quotation as a separate item. Entry Tax will be reimbursed on production of proof of payment. **Principals will themselves have to procure any requisite permission from the Govt. of country of origin of equipment.**

29. Agency Commission/other charges

Agency commission, if any, should be clearly mentioned by the Bidder/tenderer and will be paid in Indian Currency. Please note that actual reimbursement will not exceed the quoted amount in any circumstances.

30. The Institute reserves right to conduct pre-dispatch inspection of goods and the vender must facilitate it at NIT Raipur's cost for pre-dispatch inspection.

31. **Warranty Period:** The warranty period should be minimum **1 year** with spares or as mentioned in technical specifications (whichever is higher) from the date of installation with satisfactory performance as per specifications. For standard items which carry warranty of more than one year, standard warranty shall be applicable.

32. **Terms of Payment:** The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:

(i) **Payment for Goods and Services offered from India:**

Payment for Goods and Services supplied from within India shall normally be made in Indian Rupees, as follows: 100% payment will be made in account payee cheque or Draft/ online Transfer using RTGS to the Supplier normally within thirty (30) days after the successful installation and commissioning of equipment's subject to submission of performance security, if any.

(ii) **Payment for Goods and services offered from abroad:**

Payment of foreign currency portion shall normally be made in the currency of contract in the following manner:

a) **On Shipment:** Ninety (90) percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit (L/C) opened in favor of the Supplier in a bank in its country, upon submission of following documents specified as below:

Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/ courier and copies thereof by FAX.

- i. Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.;
- ii. Packing list;
- iii. Certificate of country of origin;
- iv. Manufacturer's guarantee and Inspection certificate/test report;
- v. Inspection certificate issued by the Purchaser's Inspector, if any.
- vi. Insurance Certificate, if required under the contract;
- vii. Name of the Vessel/Carrier;
- viii. Bill of Lading/Airway Bill;
- ix. Port of Loading;
Date of Shipment;
- x. Port of Discharge & expected date of arrival of goods and
- xi. H S code of classification of goods.
- xii. Any other document(s) as and when required in terms of the contract.

Note:

1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)

2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.

- b) **On Acceptance:** Ten (10) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods and successful installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security, if any.
- The L/C will be confirmed at the supplier's cost, if requested specifically by the supplier. If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. All bank charges in India to the account of the opener and all bank charges outside India to the account of the beneficiary. Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The L/C for 100% value of the contract shall be established after deducting the agency commission payable, if any to the Indian agent from the CIF/CIP value.

33. **Performance Security (PS):** The successful bidder has to furnish "**Performance Security of 3% of the ordered value in Indian Rupee**", in the form of Account Payee Demand Draft, / Fixes deposit and/or unconditional Bank guarantee encashable on demand from the Director, NIT, Raipur, from a nationalized Bank with validity period of sixty (60) days beyond the date of completion of all contractual obligations of supplier including guarantee/ warranty obligations. The Performance Security is to be furnished in favor of the Director, National Institute of Technology, Raipur, within ten days of intimation, failing which his bid security will be forfeited.

The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations.

- 34. **Delivery period:** Delivery should be made within **150 days** from the date of order of placement of goods offered from India or opening of the LC in case of goods offered from abroad. However delivery period will be vary as per item and urgency of requirement of the institute.
- 35. **The Insurance** shall be for an amount equal to 110% of the CIF or CIP value of the contract from within "warehouse to warehouse/installation site (NIT Raipur)" on "all risk basis" including strikes, riots and Chemistry commotion.
- 36. **Delayed delivery:** Maximum one month extension in delivery period may be given on the receipt of written request of the successful vendor; however liquidated damage at the rate of 0.5% of the price per week or part thereof of delay will be recovered from the firm of the value of undelivered goods. Request for extension in delivery period should be made before the last date of supply as mentioned in Purchase Order.

Non delivery beyond extended period: If the Tenderer fails to execute the order within the delivery period as mentioned above the order will be cancelled and EMD will be forfeited by the institute.

37. **Installation time:** The Company must install the equipment within a period of two months from the date of delivery of the equipment at NIT Raipur failing which order will be cancelled and EMD will be forfeited. However, necessary requirement for installation of goods/equipment will be provided by institute.

38. **Copy Right:** The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

39. **Insurance:**

- a. Should the purchaser elect to buy on CIF/CIP basis, the Goods supplied under the Contract shall be fully insured in Indian Rupees against any loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.
- b. Where delivery of the goods is required by the purchaser on CIF or CIP basis the supplier shall arrange and pay for Cargo Insurance, naming the purchaser as beneficiary, initiate & pursue claims till settlement, on the event of any loss or damage.
- c. With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent, if any, shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after customs clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.

40. **Right to use Defective Goods:** If after delivery, acceptance, installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

41. **Site preparation and installation:** The Purchaser is solely responsible for the construction of the equipment sites in compliance with the technical and environmental specifications defined by the Supplier. The Purchase will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the

installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after notification of Award / Purchase Order / Agreement.

37. Force Majeure:

- (i) Notwithstanding the Clauses relating to extension of time, penalty and Termination for Default 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.
- (ii) For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- (iii) If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- (iv) If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of force majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.

38. Defective Equipment:

- (iii) If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, unmerchantable or not in accordance with the description /specification or otherwise faulty, the institute will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment have already been made to him.
- (iv) All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges.

39. Any disputes arising out of this enquiry shall be dealt in the Raipur jurisdiction.
40. Bidder has to sign all the pages of this tender and enclose it with the bid.

Registrar
NIT-Raipur

List of Annexures

1. Acceptance of tender terms & conditions-Annexure-1
2. List of Equipments – Annexure 2
3. Technical Specification of equipments/goods – Annexure 3
4. Technical Compliance of the bidder with reference to the 'Specification of Equipments :Annexure 4
5. Price Schedule for goods being offered from India – Annexure 5
6. Price Schedule for goods being offered from Abroad. – Annexure 6
7. Deviation statement form - Annexure 7
8. Bidder information & check list – Annexure 8

Annexure 1**Acceptance of terms & conditions of tender(Must be on Letter Head)**

Date:

To,
The Registrar,
National Institute of Technology,
Raipur-492010(Chhattisgarh)
Subject: Acceptance of Terms & conditions of Tender.

Tender ref. No.: NITRR/S&P/IT/OT/2022/1999**Dated:20/12/2022**

Dear Sir,

1. I/We have downloaded/obtained the tender document(s) for the above mentioned Tender enquiry no. from the website www.tenderwizard.com/NITR or www.nitr.ac.in.
2. I/We hereby certify that I/we have read entire terms & conditions of the tender documents from Page 01 to 26(including all documents like annexure, schedules etc.) which form part of the tender document and I/we shall be abide by the terms & conditions/clauses contained therein.
3. The corrigendum(s) issued from time to time by NIT Raipur to have also been taken into consideration, while submitting this acceptance letter.
4. I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s)/corrigendum(s) in totality/entirely.
5. In case any provisions of this tender are found violated, NIT Raipur shall be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely and we shall not have any claim/right against NIT Raipur in satisfaction of this condition.
6. I/We confirm that we or our proprietor/Director/Partner have not been blacklisted or debarred or declared ineligible for corrupt/fraudulent practices either indefinitely or for a particular period of time by any Government or other agency. I/we further declare that no criminal case is registered on pending against the firm/company or its owner/partners/directors anywhere in India. Also there are no contractual restrictions or legal disqualifications or other obligations which prohibit the applicant from entering into tender process.

(Seal & Signature of the bidder)

Annexure 2

List Of Equipments To Be Procured Under Tender

S.N.	Name of Equipment	Qty
1.	Wireless and Sensor Network Laboratory Test Bed	01

Annexure 3**Technical Specification of equipments/goods****Technical Specification for Wireless Sensor Network Laboratory Test Bed**

S.No.	Test Bed	Qty.
1.	802.15.4 (PAN) based WSN TESTBED WSN Device with on-board Sensors • OLED display 1.3" • LED indications: Power, Rx/Tx • Keys: Program, Reset, User key • Rechargeable battery power for 10 Hrs of operation • Serial interface for Programming Processor: • 32-bit RISC CPU, up to 32MIPs • Data EEPROM with guaranteed 100k write operations • On Chip program memory 256 K • On Chip Data memory 32K RAM • 2 Nos of 10-bit ADC, 1 comparator • 5 x PWM (4 x timer, 1 x timer/counter) • 2 UARTs • SPI Master & Slave port with 3 selects • 2-wire serial interface • Watchdog timer • Radio 2.4 GHz IEEE 802.15.4 compatible. • Up to 30m range (PCB Antenna, Default) • Up to 500 m range (Ext antenna, On Order) • TX power 0 dBm, or +2.5dBm with external antenna • Receiver sensitivity -95dBm • TX current 15.3mA • RX current 17mA • 2.0-3.6V operation Sensors • Integrated Temperature, Pressure and Humidity Sensor • PWM, Relay, ADC & two programmable DIO	Master = 1 Nodes = 10 WAP = 1
2.	802.11(Wi-Fi) based WSN TESTBED WSN Device with on-board Sensors: • OLED display 1.3" • LED indications: Power, Rx/Tx • Keys: Program, Reset, User key • Rechargeable battery power for 10 Hrs of operation • Serial interface for Programming Processor: • Xtensa® single-/dual-core 32-bit LX6 microprocessor(s) • 448 KB ROM • Data EEPROM with guaranteed 100k write operations	Master = 1 Nodes = 20 WAP = 1

	• External flash program memory 2 MB • On Chip Data memory 520K RAM + 16 KB RTC RAM • 34 × programmable GPIOs • 12-bit SAR ADC up to 18 channels • 2 × 8-bit DAC • 10 × touch sensors • 4 × SPI • 2 × I2S, 2 × I2C, 3 × UART • TWAI®, compatible with ISO 11898-1 (CAN Specification 2.0) • RMT (TX/RX) • Motor PWM / LED PWM up to 16 channels • Radio 2.4 GHz 802.11 compatible • Up to 20.5 dBm of transmitting power, adjustable transmitting power • Receiver sensitivity -90 dBm • TX/RX current 95~100 mA @ 0 dBm • 3.3V operation Sensors • Integrated Temperature, Pressure and Humidity Sensor • PWM, Relay, DAC, ADC & two programmable DIO	
3.	SOFTWARE DEFINED VIRTUAL INSTRUMENTATION PLATFORM FOR TEST & MEASUREMENTS 1.The hardware should have minimum of 10 Powerful commonly used Instruments Arbitrary Waveform Generator Data Logger Frequency Response Analyzer Logic Analyzer / Pattern Generator Oscilloscope / Voltmeter PID Controller Spectrum Analyzer Waveform Generator Digital Filter Box FIR Filter Builder 2.Programmable Power Supplies +5 V to -5 V @ 150 mA 0 to 16 V @ 150 mA Dual 0.6 to 5 V @ 1 A 3.Analog Inputs Two 12 bit, 125 MSa/s input channels 30 MHz analog bandwidth AC or DC coupling with 1 MΩ impedance Input range up to ± 25 V	

	4. Analog Outputs Two 12 bit, 125 MSa/s output channels 20 MHz analog bandwidth ± 5 V maximum output range 5. Digital I/O 16-channel DIO at 125 MSa/s Support 3.3 V (5 V tolerant) logic level Programming Environment 6. PC Interface - USB-C, Wi-Fi, Ethernet 7. Accessories - oscilloscope probes, DIO cabling, power adapter, cables for USB-C, Ethernet & power supply 8. Programmable using Math script Live Scripting 9. API support to be provided for Python and MATLAB 10. Future support to add Lock-in amplifier and cloud-based compilation on demand.	
4.	3GHZ RF GENERATOR AND DETECTOR Frequency: 100 MHz to 4 GHz, Frequency resolution: 1MHz Frequency Generation Modes: Single tone, frequency sweep, frequency hopping, Power max: +3dBm, Power min: 30dBm, Operating mode: Single, CW, hopping, Dual Detector: Dynamic range: -50 dBm to 10 dBm Display: Touch screen, 128 x 64 graphic display Software: User friendly GUI to display the stored results and plot the same	

GUI Application Software

WSN Control Commands to establish Network

- Radio/transmission setting: Power, LQI threshold, message transmission Retries
802.15.4 specific- CA (Collision Avoidance), BE (Backoff Exponent)
802.11 (LR) specific- WiFi channel
- Experiment settings: Packet interval, Packet size, Acknowledge type, Experiment Duration,
- Change device address and Role
- Reset network
- Ping
- Network device list

- Startexperiment
- Stopexperiment
- Read and process result

WSN Sensor Control Command

- Setpwm,
- Configure DIO
- Set/GetDIOval,
- Read sensor and ADC values

Configurable Parameters

Radio Parameters

- Power: 0 dBm to 19.5 dBm in steps of 11.5 dBm Specific to WiFi (LR) setup
0 dBm to -32 dBm specific to 802.15.4 setup
- Radio Channel
- LQI Threshold, connectivity range: 0-255
- Number of packet transfer retry: 1- 5

Experimental Parameters

- Packet interval time: 0-999999 mS
- Experiment duration: 1-9999 seconds
- Data size in packet: 0-99 Bytes
- Packet type: Sequential, Random
- ACK for packet: No ACK, Hardware ACK
- Start of experiment: Start on reset, Start after command

Network Configuration Setting

Facility to emulate and define Network Configuration. The user should be able to set the list of devices in the MD and NPD to allow or to block these devices during network formation. This facility should allow the user to create user defined network topology as well create multi-hop network within the laboratory space.

WSN Network Parameters and Processing Display

Facility to display Device list with details like Device, Parent, Hops, DevLQI,

Facility to display Device Parameters like Device, packet Interval, duration, expected Data packets, packet size, Retry, Ack Type, LQI Th, CA Value, BE Value, FC

Facility to display processed Results like device, data/control transmitted packets, Communication Load %, Dev Efficiency %, Expected NW Efficiency%, NW Efficiency %

Scope of Experimentation

- Wireless nature and radio parameters
 - Study of LQI-RSSI, BE, CA, Distance and Power parameters

- Study of impact of wireless strength and flow of wireless signal with respect to various obstacles positional placement and estimation of attenuation
- b. Basic wireless communication
 - Study of impact of BE and CA with respect to communication time and packet delivery efficiency
 - Study of LQI-RSSI with respect to communication efficiency
 - Understanding no-ack, radio-ack, software ack on communication load
- c. Wireless network and evaluation network parameters
 - Bandwidth and packet communication efficiency
 - Network performance with respect to RSSI, BE, CA, no-ack, radio-ack and software ack, retries, packet size, packet interval and study impact on the network performance
 - Detection of communication bottleneck and network behaviour
 - Impact of Number of hops on network performance
 - Study of Star and tree-mesh topology of the wireless network.
- d. Applications of Wireless and sensor network
 - Analogue signal, temperature, pressure, humidity measurement
 - Actuating LED, relay, PWM based control

Deliverables:

- 1- Wireless and Sensor Network Testbed
- 2- Software Defined Virtual Instrumentation
- 3- User manual with sample experiments
- 4- Software with required drivers (Pen Drive)

Warranty And Training & support

Warranty: 2 Years onsite

Training: 3 days offline Installation and training will be provided.

Support: In case of difficulty to handle functional operations in equipment then two days per week online support and for major issue provide onsite support (on demand) without any additional charges.

Annexure 4

Technical Compliance of the bidder with reference to the
'Specification of Equipments'

Name and model no of offered goods/equipment:

Item	Technical specification from NIT Raipur	Features available in equipments Yes or No	Any deviation from Specification, if any	Corresponding part number /datasheet/page no in broacher in support of specification	Comment of Technical Committee , NIT Raipur

Signature of Bidder

Annexure-5

Price Schedule form: Price Schedule for Goods Being Offered from India/Abroad in INR
(Separate form to be used for each item offered)

Name of the Bidder/Tenderer:

Name & Model No of offered good:

Tender No.:

S. No.	Details	Price per Unit in INR
1	Ex-works, Ex-warehouse, Ex-show room off the shelf price	
2	GST payable, if contract is awarded(%)	C.G.S.T.(%)
		S.G.S.T. (%)
		I.G.S.T. (%)
3	Packing & forwarding up to station of dispatch, if any	
4	Charges for inland transportation, insurance to ultimate destination i.e. NIT, Raipur, if any	
5	Installation, Commissioning and training Charges, If any	
6.	Any other charges (Please specify)	
Total Price (Sum of S. No 1 to 6) FOR NIT RAIPUR		

Total Bid price in Indian currency _____

In words: _____

Name _____

Business Address _____

Note:

- (a) The cost of optional items shall be indicated separately.
- (b) Price should be quoted in prescribed format only as per above.
- (c) The item will be used for research purpose.

Seal & Signature of Bidder

Annexure-6

Price Schedule Form: Price schedule for goods being offered from abroad in currency other than INR

(Separate form to be used for each item offered)

Name of the Bidder/Tenderer:

Name & Model No of offered good:

Tender No.:

S. No.		Price per unit in ()
1	Country of origin	
2	FOB (named port of shipment) Or FCA (named place of delivery)	
3	Freight and Insurance up to Indian Airport/port	
4	Total Price at Indian Airport /port (2+3)	
5	**Custom charges (please mentioned %)	
6	Custom clearance and other charges if any (with breakup)	
7	Inland Charges for Insurance & transportation to NIT Raipur	
8	Installation, commissioning and training Charges, if any	
9	If any other charges (Please Specify)	
	Total Price (FOR NIT Raipur) (Sum of S. No 1 to 9)	

**** NIT Raipur have DSIR Registration Certificate.**

Note: Kindly mention GST if applicable at any stage under S.No. 9 of the above table.

Total Bid price in foreign currency: -----words: _____

(a) Indian agents name & address _____

(b) The cost of optional items shall be indicated separately-----

Annexure-7**DEVIATION STATEMENT FORM**

The following are the particulars of deviations from the requirements of the tender specifications:

CLAUSE	DEVIATION	REMARKS (INCLUDING JUSTIFICATION)

Signature of Bidder

Annexure-8(Please put this annexure at the top of the tender document)

Bidder's information & Check list

- 1. Name of the Firm:**
- 2. Type of the firm:** (*Proprietorship, Pvt Ltd, Public Ltd, Partnership etc.*)
- 3. Address of the firm:**

4. Contact detail:

Phone No.:	Mob No. :
Fax No.	E mail:

5. Name of the authorised signatory:

6. Bank details of the firm:

Account No.:	IFSC Code:
Name of the Bank:	Branch:

Check List(Please enclose the copy of the following & tick as per applicability)

- 1. Tender Specific Authorisation certificate of dealership:**
- 2. PAN card in Firm's name:**
- 3. GST Registration Certificate:**
- 4. Catalogue of quoted product:**

Signature of Bidder