



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA – 769 008, ODISHA**

Advertised Tender Enquiry

Department: Earth & Atmospheric Sciences

Tender Notice No: NITR/PW-SR/ER/2019/143

Date: 11/09/2019

Important Dates

**To,
CPP Portal
(E-procurement)**

Event	Date	Time
Pre-bid Conference	NA	NA
Last Date of submission of Bid	14/10/2019	03:00 PM
Date of opening of Techno-commercial Bid	15/10/2019	03:00 PM

Dear Sir,

We intend to purchase the commodities specified below and invite quotations in accordance with the terms and conditions detailed in the bid document. If you are interested, kindly send your offer with prices and complete terms within the time mentioned above.

For any clarification:

Attention:-
Dr. Bhaskar Kundu
Head, Department of Earth & Atmospheric Sciences
National Institute Of Technology
Rourkela – 769008, Odisha
Phone: 0661 – 2462936
E-mail: kundub@nitrkl.ac.in

Yours sincerely,

Name: Dr. Bhaskar Kundu
PIC [Structural Geology Laboratory]

Encl:

- 1) Schedule of requirement, specifications, dates etc.**
- 2) Bid document containing detail terms and conditions.**

1. Schedule of requirements

Sl. No.	Description of Goods/Service	Quantity
1	A) Purchase of GNSS receiver	5(Five)
	B) Maintenance free Battery	5(Five)
	C) Solar Photovoltaic module with crystalline cells MNRE/NON MNRE norms 12V-125Wp module with CCU	5(Five)

2. Specifications and allied Technical Details

For detailed specification see Annexure 1

3. Format of Quotation

It is a two-part bid with separate techno-commercial and price bids.

4. The Bid should be submitted through <https://eprocure.gov.in/eprocure/app>

5. Quotations should be valid for a period of **120 days** from the date of opening of techno-commercial bid.

6. Some important dates:

i.	Pre-bid Conference:	Date: NA	Time: NA
ii.	Last date for submission of bid :	Date: 14/10/2019	Time: 03:00 PM
iii.	Opening date of techno-commercial bid:	Date: 15/10/2019	Time: 03:00 PM

7. **Warranty:** Warranty must be **1 year** onsite which should be clearly mentioned along with the quotation.

8. **Technical Evaluation Criteria:** As per the detail equipment technical specifications given in Annexure –I. If required, the bidder may be asked to provide clarification regarding the technical aspects.

Other qualification Criteria:

- At least three user names and contacts from NIT/IIT/reputed Indian institute /Govt. R & D organizations must be provided where the above equipment and accessories (Annexure –I) have been supplied in last five years. Scan copies of the minimum three purchase orders of the above equipment and accessories (Annexure-I) must be enclosed along with the technical bid.
- There must be a local maintenance centre with the availability of the spares in India.
- Scanned copies of the technical brochure of the above equipment and accessories (Annexure-I) given in the quotation must be included in the technical bid.
- Web reference must be provided along with the technical bid.
- Make and model no. should be mentioned in the technical bid.
- Customized equipment and accessories (Annexure-I) will not be accepted.

9. The comparison will be made for award of contract on the overall price basis

10. (a). If the price quoted in foreign value, the prize should be CIF/CIP up to Kolkata airport.
(b) **GST: GST should be charge according to applicable rates (if applicable).**
11. **Bid Security (EMD) and Tender Cost: - EMD (Earnest Money Deposit)** in shape of DD (Demand Draft) for **INR 96,000/- (Rupees Ninety six thousand only)** and Tender cost (Non-refundable) in the form of DD for **INR 1,000/- (Rupees one thousand only)** in favour of "**Director, NIT Rourkela**" payable at Rourkela from any Scheduled Commercial Bank except Co-operative and Gramin Bank. And DD for the EMD (Earnest Money Deposit) should remain valid for a period of 45 days beyond the bid validity period from the date of the opening of the tender. The EMD (Earnest Money Deposit) of unsuccessful bidders should be return to them at the earliest and latest on or before the 30th days after the award of the contract. EMD (Earnest Money Deposit) and the tender cost should reach physically through **speed post/ registrar post / courier**, containing in an envelope & superscripted with subject ,tender reference number addressing to **Registrar, NIT Rourkela -769008,Odisha**; Attention: HOD(ER) on or before **15/10/2019 at 03:00 PM.**
12. **Performance Security: INR 2,40,000/- (Rupees Two lakh forty thousand only)** in shape of Demand Draft (DD)/Bank Guarantee in favour of Director, NIT Rourkela and payable at Rourkela. And Performance security should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the suppliers including warranty obligation. And EMD (Earnest Money Deposit) amount of successful bidder will be return after the receipt of performance security in case of award of contract to successful bidder.
13. Please go through the enclosed "bid document" carefully for other bidding instructions.
14. Please send you quotation through <https://eprocure.gov.in/eprocure/app>
15. For technical details, you may contact

Dr. Bhaskar Kundu
Department of EARTH & ATMOSPHERIC SCIENCES
National Institute of Technology, Rourkela – 769 008
Phone: - 0661 – 2462936
E-mail: kundub@nitrkl.ac.in



NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA – 769 008, ODISHA

BID DOCUMENT

1. Instructions to the bidders

- 1.1 Bids are invited on behalf of the Director, National Institute of Technology (NIT), Rourkela – 769008, Odisha, from the intending bidders for supply of the goods/stores/equipments for the Institute as detailed in the enquiry letter.
- 1.2 The bidders should quote their offer/rates in **BOQ** in clear terms without ambiguity.
- 1.3 In case of any discrepancy between the rates in figures and that in words, the rate in words will be accepted as correct.
- 1.4 The last date for receipt of the bid is marked in the enquiry.
- 1.5 The Bid should be uploaded in <https://eprocure.gov.in/eprocure/app> Please follow the guideline of the site.
- 1.6 If a prospective bidder requires any clarification in regard to the bidding documents, he may make a request the concerned officer or faculty member at least 15 days before the deadline for receipt of bids.
- 1.7 Bids received after the deadline of receipt indicated in Para 1.4 above shall not be taken into consideration.
- 1.8 Each bidder shall submit only one bid. A bidder, who submits more than one bid, shall be disqualified and considered nonresponsive.
- 1.9 (In respect of high value plant, machinery etc. of a complex and technical nature). The bids may be submitted in two parts, viz., technical bid and financial bid.
- 1.10 The bidder has to sign in full at all pages of the scanned part of the bidding document. No over-writing in those pages are acceptable.

2. Conditions of the bid

- 2.1 The rates quoted should preferably be net, inclusive of all taxes and duties, packing, forwarding, freight, Insurance and all other incidental charges. In case these charges are quoted extra in addition to the quoted rates, the amount thereof or Ad Valorem rate must be specified. Packing, forwarding, freight etc., when quotes separately are reimbursable at actuals. If external agencies are employed, their receipts must be enclosed with the invoice.
- 2.2 Duties and Taxes are to be quoted separately. Ad Valorem rates thereof should be clearly indicated with reference to the relevant Acts and Rules.

It may be noted that the Institute is availing custom duty exemption in terms of notification no 51/96- Customs dt. 23.07.1996, Notification No. 47/2017-Integrated Tax (Rate) dt.14.11.2017 and Notification No-45/2017- Central tax (Rate) dt. 14.11.2017 [vid Registration No: TU/V/RG-CDE (227)/2016, dated: 13.11.2018].

- 2.3 The goods are required to be delivered at the indenting Department of NIT, Rourkela, and must be reached within **90 days** from the date of placement of the supply of order under the risk and arrangement of the bidder and offers with delivery beyond the above period shall be treated as unresponsive. In case the delivery time is higher, the same must be mentioned clearly in the quotation.
- 2.4 The bid should remain valid for a period of **120 days** from the date of opening. In case your offer has a different validity period that should be clearly mentioned in the quotation.
- 2.5 Conditional discount, if any, offered by the bidder shall not be considered at the time of evaluation.
- 2.6 The goods offered should strictly conform to the specification and technical details mentioned in **Annexure 1**.
- 2.7 The Institute may like to conduct pre-dispatch inspection of goods, where applicable.
- 2.8 Period of guarantee/warranty, where applicable, should be specified in the bid.
- 2.9 If the successful bidder, on receipt of the supply order, fails to execute the order within the stipulated period, in full or part, it will be open to the Director, NIT Rourkela to recover liquidated damage from the firm at the rate of 1 percent of the value of undelivered goods per month or part thereof, subject to a maximum of 5 percent of the value of undelivered goods. Alternatively, it will also be opened to the Director, to arrange procurement of the required goods from any other source at the risk and expenses of the bidder.
- 2.10 The successful bidder may be required to execute a contract, where applicable.
- 2.11 The bidder has to furnish up to date Income Tax Clearance Certificate along with the bid.
- 2.12 Payment (*100 percent*) will be made by Account Payee Cheque/Bank Draft, within 30 days from the date of receipt of the goods in good condition or receipt of the bill, commissioning of the equipment, where applicable, whichever is later/latest.
- 2.13 In case of Advance payment, the payment will be made on either in Foreign Demand Draft or Wire Transfer only. The proforma invoice copy need to be sent for advance payment.
- 2.14 In the event of any dispute arising out of the bid or from the resultant contract, the decision of the Director, NIT, Rourkela shall be final.
- 2.15 The bid document/resultant contract will be interpreted under Indian Laws.

(A) TECHNICAL SPECIFICATION FOR GNSS

Specification Required

1. Multi-frequency GNSS receiver having internal/embedded/removable memory of at least 32 GB. It should also have user selectable sampling rate in the range of 0.05 second to 30 seconds. The receiver should be capable of recording data in at least two sampling intervals simultaneously in OEM format, so that the higher frequency data can also be retained within the receiver for a specified number of days (say, 3-7days)
2. The GNSS receiver should have the facility to accommodate met-package for future integration
3. Receiver must have minimum 500 channels and should be capable of tracking all the signals of GPS, GLONASS and GALILEO.
4. Receiver should be equipped with in-built display panel and/or control unit to configure the system parameters in the field.
5. Power Consumption: not exceeding 5 Watt (Receiver, Antenna, devices: nominal) with external Battery voltage in the range of 11-28 volts D.C.
6. Power Ports: External power ports must be equipped with automatic switching facility between A.C. and DC, physical over-voltage protection and polarity protection (for DC). The power ports should not be connected internally. The receiver should support Power on Ethernet (POE) through suitable switch.
7. The receiver should have the facility to configure/monitor through remote connection via In-built GSM or radio module. It should also have facility to use it as RTK reference station and be able to transmit RTK corrections through GSM modem or Radio
 - a. It must be IP67 compliant without any external casting.
 - b. Power consumption: 5W Max (Total system including receiver). It must be powered by AC and DC simultaneously.
 - c. It should not affect the functioning of receiver's accessories, communication, power (Met sensor, ext. storage, PoE, web interface and data downloading)
8. **Data Ports:**
 - a. It should be at least one USB, mini USB Port for extended USB storage, one 09 full 9-wire RS-232 serial port.
 - b. One RJ45 port which must support data downloading using web interface and must be capable of proving external power to the receiver.
 - c. The receiver must be capable to log GNSS data as well met-sensor data within Receiver. It must have facility for upgradation to log raw data in Rinex, Compact Rinex format & transmit both data as a package to a suitable central server by suitable OEM Reference station software via VSA T/ GSM_GPRS modem/FTP PUSH etc.
 - d. One TNC connector to connect GNSS antenna.

9. Operating temperature range: -40 deg. C to +65 deg. C.
10. Should be waterproof (IP67), shockproof, dustproof, humidity-proof (100%) and condensation-proof.
11. All necessary OEM power, data cables, internal battery, storage card, Y cable for simultaneous supply from AC and DC, are required.
12. Automatic power-on and data logging after power failure, with same configuration (should not restore to factory defaults).
13. Should be capable of tracking all available to satellite to 0 degree elevation. Vendors will be required to satisfy the following tests (for GPS data) for verification purpose:
 - (a) Quality Control Statistics (10-90 degree)
 - i. Receiver must have (observation recorded/ observations expected)>99%
 - ii. MP1 (Multi-path on L1) and MP2 values< 0.8 m
 - iii. Not more than 1 cycle slip per 20,000 observation on an average; i.e. (total observations/total slips)>20,000.
 - (b) Functionality in short baseline processing:
 - i) L1, L2, L3 precision < 0.5 mm in N, E, 10 mm in vertical.
14. The quoted items should have been supplied to any Government organization/ Research/ Educational institutions in the last 3 years and should be functional as on date of bid submission. Documentary evidence to this effect has to be submitted along with the bid for evaluation.
15. Must support a minimum of 12 independent and concurrent logging sessions.

GNSS Antenna:

Specification Required

1. Antenna should be separate from the receiver, and should be supplied with radome.
2. The antenna must be a "GNSS choke ring antenna with Dorne Margolin element (DM)" and should be capable of tracking GPS, GLONASS and GALILEO.
3. Repeatability of Antenna phase center variation with elevation angle (10 – 90 degree) should not be greater than 1mm horizontal and 2mm vertical (ref: NGS Report)
4. Multi-path reduction capability mechanism such that MP1 and MP2 values are less than 0.8 m for 10-90 degrees elevation angle (ref: TEQC software).
5. Geodetic grade, high gain (more than 20 dB) on all bands.
6. Operating temp range: - 40 deg. C to + 65 deg. C.
7. Should be waterproof, shock proof, dust proof, 100% humidity proof and condensation proof with IP67 ratings.

GNSS Accessories

1. 30m Antenna Cable
2. Adjustable Tilt Monument Mount
3. Lithium-Ion battery 14.8V/5.8Ah/85.8Wh
4. Dual Power Y-Cable
5. Cable with protection fuse to connect 12V power source to GNSS receiver.

(B) Accessories:

- i) 12 V-100Ah Maintenance free Battery from a Branded company.
- ii) Solar Photovoltaic module with crystalline cells MNRE/NON MNR norms 12V-125Wp module with CCU.

* * * * *