\NATIONAL CENTRE FOR EARTH SCIENCE STUDIES
(An Institution under the Ministry of Earth Sciences, Govt. of India)
P.B. No. 7250, Akkulam, Thiruvananthapuram-695 011, Kerala.
PURCHASE DIVISION

Our Ref : PUR-PROC/380/2019-PUR-NCESS **Dt. 24.12.2019**
(To be quoted in all correspondence)

Phone :(0471) 2511531
FAX: (0471)2442280
E-mail: ncesspurchase@gmail.com
purchase.ncess@gov.in
website : www.ncess.gov.in

***Sub*: e-Procurement Tender**

Dear Sirs,

Please send your offer along with descriptive catalogue/ pamphlet for the following items not later than ***29.01.2020 on 06.00 PM (Tender Opening at 11.00 A.M on 31.01.2020).*** The terms and conditions governing the tender are given at the bottom.

Sl. No	*DESCRIPTION*	*QUANTITY REQUIRED*
1	**GPS- Radiosonde System**	**1 Set**

GPS-radiosonde system to measure the vertical profile of temperature, humidity and wind in the atmosphere from mean sea level to 20 km altitude.

Items required

a) GPS-radiosonde ground receiving system including receiver, antenna, calibration setup and data acquisition system: 1 set.
b) GPS Radiosondes: 60 nos.
c) Unwinder: 60 nos.

1.Data Acquisition system

a) Ground receiver and accessories for receiving the radiosonde signals (operating at 220-230 V AC/50 Hz).
b) GPS receiver: 12 channels or better.
c) Portable antenna having horizontal/radial transmission range > 200 km.

2. GPS radiosonde

a) Transmission frequency range: 400-406 MHz. Transmitter type: FM
b) Meteorological sensors: Humidity and temperature;
c) GPS: Position accuracy ~10 m; altitude accuracy ~15m
d) Radiosonde should be lightweight: 140g or less.

3. Sensor Specifications of GPS-Radiosonde

Relative Humidity (RH) sensor :

a) Relative Humidity (RH) range: 0 to 100%
b) RH accuracy (up to 10km height): 7 % or better
c) RH resolution : 0.1 % or better
d) Response time: 2s or better

Temperature sensor:

e) Temperature range: -90° to +50°C or better
f) Temperature accuracy (up to 10km height): +/- 0.5 °C or better
g) Temperature resolution: 0.1^{o}C or better
h) Response time: 2 s or better.

Measured Pressure/Calculated Pressure:

i) Range: Surface pressure to 5 hPa or better

Wind direction :

j) Range:0 to 360 degrees
k) Resolution: 0.5 degrees or better

Wind speed :

l) Horizontal wind range: 0 to 150 m/s or beyond Resolution: 0.5 m/s or better

General requirements

a) The radiosonde manufacturing company should have a proven track record in providing quality radiosonde data and proof of publications in relevant peer-reviewed international atmospheric science journals.
b) Should be able to operate two or more radiosondes at the same time.
c) The quote should contain model number and brochure/manual of sensors/software.
d) Require complete software/hardware/accessories/tools for the operation, calibration, testing and maintenance.
e) Need on-site installation and demonstration.
f) Should support future radiosonde requirements and services.

Warranty & terms and conditions

a) Minimum one-year warranty for ground receiving systems.
b) Items need to be replaced by the party in case of malfunction during test flight.
c) GPS-radiosondes to be replaced in case of malfunction within one year of purchase.

INSTRUCTIONS TO THE TENDERERS AND TERMS AND CONDITIONS

1. **The quotation should be submitted by e-procurement in PDF format by 'logging on' in the website eprocure.gov.in/eprocure/app.** The total file size of the documents submitted should not exceed 20 MB.
2. **In place of a Bid security, the bidders must sign a Bid securing declaration along with the bid saying that "We accept that if we withdraw or modify our Bids during the period of validity, or if we are awarded the contract and we fail to sign the contract, or to submit a performance security before the deadline defined in the request for bids document, we will be suspended for the period of time decided by NCESS from being eligible to submit Bids for contracts with NCESS". The bids without this declaration or Udyog Aadhar Memorandum /NSIC will be rejected.**
3. The material should be delivered at NCESS or installed at the specified location and so the quotation should include all the charges for the delivery at NCESS/installation.
4. It should be clear whether the quoted amount is inclusive of tax or not. If the tax is extra, the current tax rates should be specifically mentioned. (The tax at the time of supply should be calculated considering the DSIR registration and its certificates will be provided in our formats).
5. **In INR orders, the Customs Duty Exemption Certificate will be given to the supplier upon request. But the entire responsibility of customs clearance and delivery at NCESS will rest with the supplier. High sea sale is not accepted and should not be quoted.**
6. **The bid should contain the Bid securing declaration, Authorization from manufacturer, Details of Service Centre, Technical details with make, model and specification of each component, Technical Compliance statement, List of Customers, Brochures etc., wherever applicable.**
7. **The offer should be valid for 120 days from the due date of opening of tender.**
8. The Purchaser reserves right to accept any tender in part or full without assigning any reasons. The enquiry is not a commitment and the purchaser reserves the right to reject or cancel any or all offers.
9. Catalogue/Brochure/Manual should be submitted along with the offer wherever necessary.
10. Warranty / Guarantee Clause needs to be mentioned necessarily wherever applicable.
11. All foreign bank charges will be to the account of beneficiary.
12. **The purchase will be made on credit basis and the payment will be made after supply and acceptance, by bank transfer.**
13. In the case of imports, both FCA and CIF/CIP Trivandrum airport prices may be quoted. 90% payment will be made against proof of dispatch documents by LC or wire transfer and balance 10% will be released against acceptance of goods and the receipt of bank guarantee.
14. In the event of placement of order, supplier / Indian agent shall provide a Performance Bank guarantee for 10% of the order value valid for warranty period + 60 days.
15. Any further changes in the details, like the date of opening or specification, will be posted on our web site only.

Yours faithfully,

Sd/-

Deputy Manager (Purchase)

1. **Technical Compliance Statement.**

Required Specification	Specification Offered with make and model	Whether complied
GPS- Radiosonde system 1 Set GPS-radiosonde system to measure the vertical profile of temperature, humidity and wind in the atmosphere from mean sea level to 20 km altitude. **Items required** a. GPS-radiosonde ground receiving system including receiver, antenna, calibration setup and data acquisition system: 1 set. b. GPS Radiosondes: 60 nos. c. Unwinder: 60 nos. **1.Data Acquisition system** a. Ground receiver and accessories for receiving the radiosonde signals (operating at 220-230 V AC/50 Hz). b. GPS receiver: 12 channels or better. c. Portable antenna having horizontal/radial transmission range > 200 km. **2. GPS radiosonde** a. Transmission frequency range: 400-406 MHz. Transmitter type: FM b. Meteorological sensors: Humidity and temperature; c. GPS: Position accuracy ~10 m; altitude accuracy ~15m d. Radiosonde should be lightweight: 140g or less. **3. Sensor Specifications of GPS-Radiosonde** **Relative Humidity (RH) sensor :** a. Relative Humidity (RH) range: 0 to 100% b. RH accuracy (up to 10km height): 7 % or better c. RH resolution : 0.1 % or better d. Response time: 2s or better **Temperature sensor:** e. Temperature range: -90° to +50°C or better f. Temperature accuracy (up to 10km height): +/- 0.5 °C or better		

g. Temperature resolution: 0.1^{o}C or better h. Response time: 2 s or better. **Measured Pressure/Calculated Pressure:** i. Range: Surface pressure to 5 hPa or better **Wind direction :** j. Range:0 to 360 degrees k. Resolution: 0.5 degrees or better **Wind speed :** l. Horizontal wind range: 0 to 150 m/s or beyond Resolution: 0.5 m/s or better **General requirements** a. The radiosonde manufacturing company should have a proven track record in providing quality radiosonde data and proof of publications in relevant peer-reviewed international atmospheric science journals. b. Should be able to operate two or more radiosondes at the same time. c. The quote should contain model number and brochure/manual of sensors/software. d. Require complete software/hardware/accessories/tools for the operation, calibration, testing and maintenance. e. Need on-site installation and demonstration. f. Should support future radiosonde requirements and services. **Warranty & terms and conditions** a. Minimum one-year warranty for ground receiving systems. b. Items need to be replaced by the party in case of malfunction during test flight. c. GPS-radiosondes to be replaced in case of malfunction within one year of purchase.		