GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
INDIAN INSTITUTE OF REMOTE SENSING  
IIRS  
DEHRADUN  
PURCHASE & STORES  
INVITATION TO TENDER

Ph No: 0135 - 2524317, 4318  
Fax: 0135 - 2748041  
Email: pns@iirs.gov.in  
Date: 20/10/2017

Our Ref No : GIER  
Tender Due: 14:00 Hrs IST on 27/11/2017  
Opening : 15:30 Hrs IST on 27/11/2017

Dear Sirs,

Please submit your sealed quotation, in the Tender Form enclosed here along with the descriptive catalogues / pamphlets / literature, superscribed with Our Ref. No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: )

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description of Items with Specifications</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Echosounder (Dual frequency) with integrated floating device, remotely operated with GNSS receiver RTK Compatible to conduct bathymetric survey in ponds, lakes, rivers and streams; Post Processing Software; GNSS Antenna with cable and L Band correction; Field computing Device. Specification as per Annexure</td>
<td>NO.</td>
<td>1</td>
</tr>
</tbody>
</table>

DELIVERY AT: IIRS, DEHRADUN

MODE OF DESPATCH: DOOR DLVRY

DUTY EXEMPTIONS

SPECIAL INSTRUCTIONS: TWO PART

SPECIFIC TERMS

[Signature]

ASHA CHANDRAN L
PURS. & STORES OFFICER
For and on behalf of the President of India
The Purchaser
SPECIFICATIONS FOR REMOTE HYDROGRAPHIC SURVEY BOAT WITH DUAL FREQUENCY ECHOSOUNDER

- **Echosounder**: portable dual frequency echosounder. The system should provide both low-frequency (~30 kHz) and high frequency (~200 kHz) transducers in one unit enabling penetration through soft sediments to detect hard bottom classification as well as detection of the surface layer; beam width: 8° ping rate: should be around 6 Hz; data output rate: 2 Hz; depth accuracy around: 1 cm / 0.1% of depth; output formats: NMEA, ASCII, Quality; range: 0.3 m–200 m; transducer cable: 5 m at least; power: 12v leads; compatibility: with all GPS; power consumption: should be around 150 ma to 200 ma.

- **Integrated floating device System**: Top speed: 5 knots; Hull Length: 1200 mm (approx.); Hull width: 750 mm (approx.); Battery Endurance: at least 8 hrs.; Payload: up to 12 kg.; Power: should be at least 2 x 12 v 8ah battery; ECU: 2 x 160 AMP water cooled; Motor: 2 x Brushless water cooled; Hull Material: UV Resistant ABS; Frame: Aluminum Powder Coated; Steering: Alternating Prop Power; Weight: around 15 kg; Hardware: Stainless Steel; R/C: 2.4 GHz long range; Remote Control Range: 2 km; Propeller: Brass – 3” dia – 4 blade around; Hatches: 6 x water tight abs plastic; easily transportable; remote control system with integrated data telemetry facility. Communication & Base Station: Proper configuration and interface with latest hardware and radio system with remote control having remote range at least 2000 meter, shore-side fixed communication link.

- **GPS**: multi constellation GNSS support; Dual antenna inputs for precise heading calculation; Position Antenna based on 220 Channels;
  - GPS: Simultaneous L1 C/A, L2E, L2C, L5
  - GLONASS: Simultaneous L1 C/A, L2 C/A, L2 P, L3 CDMA13
  - SBAS: Simultaneous L1 C/A, L5
  - BeiDou: B1, B2
  - Galileo: Simultaneous L1 BOC, E5A, E5B, E5AltBOC2
  - QZSS: L1 C/A, L1 IASF, L2C, L5

Vector Antenna based on second 220 Channel Maxwell 6 chip:
- GPS: Simultaneous L1 C/A, L2E, L2C
- GLONASS: Simultaneous L1 C/A, L2 C/A, L2 P
  - BeiDou: B1

High precision multiple correlator for GNSS pseudorange measurements

- 1 USB port
- 1 CAN port
- 1 LAN Ethernet port:
- Supports links to 10BaseT/100BaseT networks
- All functions are performed through a single IP address simultaneously—including web GUI access and raw data streaming
- Network Protocols supported
> HTTP (web GUI)
> NTP Server
> NMEA, GSOF, CMR etc over TCP/IP or UDP
> NTripCaster, NTripServer, NTripClient
> mDNS/uPnP Service discovery
> Dynamic DNS
> eMail alerts
> Network link to Google Earth
> Support for external modems via PPP
  • 3 x RS232 ports
  – Baud rates up to 460,800
  • 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 & 50 Hz positioning outputs (depends on installed option)
  • Up to 50 Hz raw measurement & position outputs
  • Reference outputs/inputs
    – CMR, CMR+, SCMRX, RTCM 2.1, 2.2, 2.3, 3.0, 3.112
  • Navigation outputs
    – ASCII: NMEA-0183 GSV, AVR, RMC, HDT, VGK, VHD, ROT, GGK, GGA, GSA, ZDA, VTG, GST, PJT, PKJ, BPQ, GLL, GRS, GBS and Binary: Trimble GSOF
  • Control Software: HTML web browser. Internet Explorer, Firefox, Safari, Opera, Google Chrome
  • 1 Pulse Per Second Output

- **Software package:** Hydrographic survey software should include real time survey data visualization, sensor fusion and data logging & Processing

- **Warranty:** Minimum 1 year warrantee on all parts.

- **Training:** Will be required at study site for appropriate operation and maintenance.
ANNEXURE to Tender No. GIER 2017000188-01

NO. GIER 2017000188-01

Date: 20/10/2017

SPECIAL TERMS AND CONDITIONS FOR SUBMITTING TWO PART BID

1. This is a two part tender viz., Techno-Commercial Bid (consisting of Technical Specifications, Commercial terms & condition etc.) and Price Bid. Hence, quotation should be submitted in separate sealed covers super-scribing “Tender No. GIER 2017000188-01, Due on 27/11/2017 at 14.00 Hrs (Techno-Commercial Bid)” and “Tender No. GIER 2017000188-01, Due on 27/11/2017 at 14:00 Hrs (Price Bid)”

2. Both the sealed tenders (Techno commercial & Price bid) should be kept in one big cover super scribing Tender for Echosounder (Dual Frequency) with integrated floating device, remotely operated with GNSS receiver RTK Compatible against Enquiry No. GIER 2017000188-01, Due on 27/11/2017 at 14.00 Hrs and put in the Tender Box available in Purchase Division, IIRS or send by post or Courier within the due date and time prescribed.

3. The Techno-Commercial Bid should clearly indicate the technical details, scope of supply, payment terms, delivery terms, delivery period, taxes and duties, warranty, guarantee, security deposit, performance bank guarantee, etc. under separate heads. Please note that the price should NOT be indicated in the Techno-Commercial Bid

4. Tender forms can be purchased from Purchase & Store Section IIRS, Dehradun on all working days on payment of ₹ 573/- in the form of DD drawn in favor of Pay & Accounts Officer, IIRS Dehradun payable at Dehradun or can be downloaded from www.iirs.gov.in. When tender forms are downloaded, DD for ₹ 573/- drawn in favor of Pay & Accounts Officer, IIRS payable at Dehradun shall be attached with Technical Bid.

5. Only Techno-Commercial bid will be opened on the date of tender opening. The price Bids of those tenderers whose Techno-Commercial Bids are found to be meeting our specifications/ requirements will be opened. The bidders are allowed to attend the tender opening on the date and time of opening.

6. Late and Delayed Tenders will not be considered. Therefore, please ensure that your tender is posted well in time to reach us before the due date and time.

7. Fax/Email offers shall not be considered.

8. All the pages of your offer should be signed/initialed by competent authority and affixed with your company’s Seal.

9. **EMD of Rs. 1,20,000/-** to be submitted along with the Technical Bid in the form of Crossed Demand Draft drawn on any Nationalized / scheduled bank in favor of Pay & Accounts Officer, IIRS, payable at Dehradun. Quotation received without EMD will not be considered. The EMD of unsuccessful bidder will be returned after finalization of order.

[Signature]

[Purchase & Stores Officer]
Specific terms and conditions to the tender:-

1. Please submit the Technical Details / Catalogue / Make/ Model/Data Sheets.
2. The offer should be valid for a period of 90 days from the date of opening of Tender.
3. Please send the quotations ONLY in 'SEALED COVER' indicating our tender enquiry No. and due date by speed post so as to reach us on or before the due date & time. IIRS will not be responsible for any postal delays.
4. E-mail/ fax quotations 'WILL NOT BE ACCEPTED'.
5. Please quote the percentage of GST applicable.
6. Our standard delivery term is FOR, IIRS. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lump sum amount.
7. We are exempted from the payment of Customs Duty and necessary exemption certificate shall be issued upon request.
8. Payment Term: Payment will be made within 30 days from the date of receipt and acceptance of the item at our site for order value up to 2.00Lakhs. For order value above 2.0 Lakh, 90% payment will be made within 30 days and 10% against submission of Performance Bank Guarantee for the warranty period (wherever warranty is applicable). The Performance Bank Guarantee should be valid for a period of 2 months beyond the completion of the warranty period.
9. For foreign orders our Standard Payment Term is Sight Draft.
10. Liquidated Damages – The delivery period quoted should be realistic. The delivery period so quoted and mentioned in the order is the essence of the order/contract. In case of delay in delivery of material as per the delivery schedule, Liquidated Damage @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value shall be levied. However, installation and commissioning is also involved, the supply will be deemed to have been completed only when the entire Stores is supplied, installed and accepted.
11. Security Deposit: - Wherever the offer value is Rs. 5.00 Lakhs or above, the successful tenderer should submit Security Deposit @ 10% of the order value by way of Bank Guarantee / FD Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of all contractual obligations.
12. In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre / Udyog Adhar / NSIC Registration Certification along with your offer.
13. If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.
14. Wherever samples are required to be submitted along with the quotation, offer without sample will not be considered.

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Purchase & Stores Officer