



NATIONAL CENTRE FOR ANTARCTIC & OCEAN RESEARCH

Ministry of Earth Sciences

Government of India) Headland Sada, Vasco da Gama Goa - 403 804 - INDIA

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PROCUREMENT SECTION

FOREIGN ENQUIRY

Ref. No.: ARCTIC-138

Date: 18.03.2015

Due Date: 10.04.2015

Dear Sir,

You are requested to send your offer for the following items as per the terms and conditions mentioned below.

SL. NO.	DESCRIPTION	Quantity
1.	Acoustic Doppler Current Profiler-WH Sentinel 300 khz with buoy, frame and accessories including battery and cable. (Specifications as per Annexure-1)	01 set

Your offer should contain the following information:

- 1. Submit your quotation on F.O.B/C.I.F basis.
- 2. Delivery Period: The material is required immediately. Please confirm the exact date of delivery.
- 3. Validity of quotation:
- 4. Quantity/Trade discounts, if any.:
- 5. Guarantee/Warranty of the product:
- 6. Taxes applicable (VAT if any):
- 7. Enclose brochure/leaflet Specification:
- 8. **No advance payment** will be made. Payment by irrevocable letter of credit after supply and acceptance of the equipment by NCAOR. The payment will be authorized after submission of a Bank Guarantee for 10% value of the order towards warranty guarantee. The **performance Bank Guarantee** should be furnished within 15 days from the date of placement of order from a reputed bank (scheduled bank in India **or** foreign bank operating in India) valid till 60 days after the warranty period.
- 9. Overwriting and corrections should be attested properly. The quotation should be complete in all respects and should be duly signed. Incomplete and unsigned quotation will not be considered at all. Quotation should be submitted as per NCAOR terms and conditions.
- 10. All relevant technical literature pertain to items quoted **with full specifications** (Drawing, if any), information about the products quoted, including brochures if any should accompany the quotation.
- 11. A list of **reputed clients** to whom the firm has supplied similar items to be furnished alongwith the quotation.
- 12. Quotation should be **valid for a period of 90 days** and the period of delivery required should also be clearly indicated. If the supplier fails to deliver the goods within the time to be agreed upon, for delayed deliveries and for delays in installation (wherever applicable) NCAOR reserves the right to **levy liquidated damages** at the rate of 0.5% per week or part their of upto maximum of 5%.
- 13. Warranty shall commence from the date of installation and acceptance of the complete equipment supplied under the Purchase Order / Contract. The **warranty period** and the kind of **post-warranty support** should be indicated.
- 14. Please **specify the Make/Brand** and Name of the Manufacturer with address, country of origin and currency in which rates are quoted.

- 15. Both **FOB and CIF prices upto Indian port of entry** namely <u>Goa</u> should be indicated. However quotation should contain item-wise prices including total ex-works price and cost of packing forwarding, approx. cost of air-freight charges for delivery up to Goa, India.
- 16. A technical Committee constituted by the Director will assess the product supplied/installed for their quality and their conformity to the specifications provided by the firm in their quotations. Any item(s) identified by the Committee to be not as per the specifications or are found to be of inferior quality will be rejected, and the bills towards the supply will not be processed for payment till proper replacements are provided.
- 17. Suppliers should clearly define the mechanisms of **post-warranty** maintenance or support. Supplier should undertake to support the product for a minimum period of 5 years (post-warranty). Post Warranty, AMC charges for a period of 3 years (annual bases) should also be quoted separately in the quotation.
- 18. Two sets of operational, service/troubleshooting manuals and diagrams to be supplied.

Please enclose documentary proof such as latest purchase order copies etc., to substantiate the reasonability of price. Also confirm that the "the rates quoted by you are reasonable and lowest charged to any of your customer".

Director, NCAOR reserves the right to reject any quotation received without assigning any reasons.

Yours faithfully

Executive (Procurement)
For and on behalf of Director, NCAOR

TENDER ACCEPTANCE UNDERTAKING

То
The Director, NCAOR, Headland Sada, Vasco – Goa.
Having examined the tender document for SUPPLY OF ACOUSTIC DOPPLER CURRENT PROFILER (WH) , we the undersigned hereby offer to supply the equipment in conformity with all specifications and conditions set out in the tender document.
We enclosed all the relevant documents as per the tender.
We understand that you are not bound to accept the lowest or any tender received.
Date:
(Signature of Bidder)
Name :
Designation :
Seal

Specification of Acoustic Doppler Current Profiler-WH Sentinel 300 kHz with buoy and accessories including battery and cable.

Acoustic Doppler Current Profiler using broadband technology and Doppler shift principle to measure Current Velocities, Magnitude and Direction for the entire water column. Software Windows based data acquisition and export software and Velocity for post data Processing.

SPECIFICATION:

1) Frequency: 300 khz

2) **Technology**: Broad Band with capability for long range operation.

3) No. of Beams: 4 beams, convex

4) Beam angle: 20°

5) **Principle of operation**: Principle of Doppler Shift.

6) Mode of Operation: User selectable Broadband and Long Range mode

7) Maximum Profiling Range: 154 m in Long Range mode

8) Number of depth cells: 1 to 255 depth cells

9) Depth Rating: 500m

10) **Velocity Accuracy**: ±0.5% of the water velocity relative to the ADCP±0.5cm/s

11) Velocity resolution: 0.1 cm/s

12) **Velocity range**: ± 5 m/s (default), maximum up to ± 20 m/s

13) **Ping rate**: up to 10Hz

14) Internal Memory: 512 MB upgradeable to 2GB (PCMCIA)

15) **Internal Battery**: One 28-D cell alkaline battery packs 42VDC capacity 450 watt hrs. Twelve months assuming 60 minute interval measurements.

(Customized pack for one year operation, Battery should be directly delivered to Longyarbyen, Norway)

16) **Standard sensors**: Temperature, Tilt & Compass

a) **Temperature: Range**: -5° to 45°

C Precision: ± 0.4°C Resolution: 0.01°

b) Tilt:

Range: $\pm 15^{\circ}$ Accuracy: $\pm 0.5^{\circ}$ Precision: $\pm 0.5^{\circ}$ Resolution: 0.01°

c) Compass:

d) Accuracy: ±2°
Precision: ±0.5°
Resolution: 0.01°
Maximum tilt: +15°

- 17) **Communication**: Serial port selectable by switch for RS-232 or RS-422, ASCII or Binary output.
- 18) Baud rate: 1200 to 115400 baud.

19) **Pressure Sensor**: 500m rated

20) **DC Input**: 20-60V DC. Powered by internal battery pack, external battery pack or external power supply.

21) Operating temperature: -5°C to 45°C Storage Temperature: -30°C to 75°C

22) Weight in air: 13.0 Kg Weight in water: 4.5 kg.

Additional Requirements:

- 1) External battery Pack to be installed within the ADCP buoy
- 2) Integrated Pressure sensor rated for 500m
- 3) ADCP and battery casing to be rated for 500 m depth
- 4) Velocity Post processing software
- 5) AC/DC power converter, 48 VDC output
- 6) ADCP Buoy to be rated for 1000 m

TECHNICAL COMPLIANCE STATEMENT FOR ACOUSTIC DOPPLER CURRENT PROFILER-WH SENTINEL 300 KHZ WITH BUOY AND ACCESSORIES INCLUDING BATTERY AND CABLE

Sr. No.	Description		EXTRA FEATURES
	TECHNICAL COMPLIANCE FOR "ACOUSTIC DOPPLER CURRENT		
	PROFILER-WH SENTINEL 300 KHZ WITH BUOY AND ACCESSORIES INCLUDING BATTERY AND CABLE		
	Acoustic Doppler Current Profiler using broadband technology and		
	Doppler shift principle to measure Current Velocities, Magnitude and		
	Direction for the entire water column. Software Windows based data		
	acquisition and export software and Velocity for post data Processing		
1	Frequency: 300Khz		
2	Technology : Broad Band with capability for long range operation		
3	No. of Beams: 4 beams, convex		
4	Beam angle: 20°		
5	Principle of operation: Principle of Doppler Shift.		
6	Mode of Operation: User selectable Broadband and Long Range mode		
7	Maximum Profiling Range: 154 m in Long Range mode		
8	Number of depth cells: 1 to 255 depth cells		
9	Depth Rating: 500m		
10	Velocity Accuracy : <u>+</u> 0.5% of the water velocity relative to the ADCP <u>+</u> 0.5%cm/s		
11	Velocity resolution: 0.1 cm/s		
12	Velocity range : ±5m/s (default), maximum up to ±20m/s		
13	Ping rate: up to 10Hz		
14	Internal Memory: 512MB upgradeable to 2GB (PCMCIA)		
15	Internal Battery : One 28-D cell alkaline battery packs 42VDC capacity 450 watt hrs. Twelve months assuming 60 minute interval measurements.		
	(Customized pack for one year operation, Battery should be directly		
	delivered to Longyarbyen, Norway)		
16	Standard sensors: Temperature, Tilt & Compass		
	a) Temperature: Range : -5° to 45°		
	C Precision: $\pm 0.4^{\circ}$ C		
	Resolution: 0.01 ⁰		
	b) Tilt:		
	Range: $\pm 15^{\circ}$ Accuracy: $\pm 0.5^{\circ}$		
	Precision : ±0.5°		
	Resolution: 0.01 ⁰		
	c) Compass:		
	d) Accuracy: $\pm 2^0$		
	Precision: ±0.5°		
	Resolution: 0.01 ⁰		
177	Maximum tilt: ±150		
17	Communication : Serial port selectable by switch for RS-232 or RS-422, ASCII or Binary output.		
18	Baud rate: 1200 to 115400 baud		
19	Pressure Sensor: 500m rated		
20	DC Input : 20-60V DC. Powered by internal battery pack, external battery		
	pack or external power supply		
21	Operating temperature: -5°C to 45°C		
	Storage Temperature: -30°C to 75°C		
22	Weight in air:13.0 Kg		
23	Weight in water: 4.5 kg		
23	Additional Requirements: 1) External battery Pack to be installed within the ADCP buoy		
	2) Integrated Pressure sensor rated for 500m		
	3) ADCP and battery casing to be rated for 500 m depth		
	4) Velocity Post processing software		
	5) AC/DC power converter, 48 VDC output		
	6) ADCP Buoy to be rated for 1000 m		

COMMERCIAL COMPLIANCE STATEMENT FOR ACOUSTIC DOPPLER CURRENT PROFILER-WH SENTINEL 300 KHZ WITH BUOY AND ACCESSORIES INCLUDING BATTERY AND CABLE

Sr.	COMMERCIAL COMPLIANCE FOR "ACOUSTIC DOPPLER	COMPLIED/	EXTRA	
No.	CURRENT PROFILER-WH SENTINEL 300 KHZ WITH BUOY AND	NOT	FEATURES	
	ACCESSORIES INCLUDING BATTERY AND CABLE	COMPLIED		
1	A list of reputed clients to whom the firm has supplied similar items to be furnished along-with the quotation.			
2	In the Bid, the Bidder should furnish the Name and address of			
	the Purchasers placed orders on similar equipment with order No,			
	date, Description and quantity, Date of Supply alongwith Contact person Telephone No, Fax No, and e mail address of Purchaser.			
3	The Bidder should enclose copies of Purchase Orders.			
4	Quotation should be valid for a period of 90 days from the date of tender opening.			
5	The material is required immediately. Please confirm the exact date of delivery.			
6	The warranty period and the kind of post-warranty support			
	should be indicated. Warranty shall commence from the date of			
	installation and acceptance of the complete equipment supplied			
7	under the Purchase Order / Contract.			
7	Please specify country of origin and currency in which rates are quoted.			
8	The order acknowledgement should be from the principals and if			
	the Indian Agent is empowered to quote and to furnish order acknowledgement, a copy of agreement entered by you with the			
	Indian Agent to be furnished.			
9	Compliance Statement: Equipments point-by-point			
	comparison/compliance statement with technical specification ,			
	should be enclosed along with your tender as well as any other extra features of the equipment be shown separately therein and			
	also compliance statement for all commercial terms.			
10	To avail duty concessions i.e. Excise Duty as per Govt.			
	notification 10/97 & Custom Duty as per Govt. notification			
	51/96, NCAOR will provide exemption certificates. Hence, the			
11	rates should be split into basic cost and Excise Duty if any. Bid should contain all details and specifications of the equipment			
11	offered, delivery schedule, warranty, payment term, installation,			
	training, post-warranty, user-list, service support and details of			
12	the price(s) of the item(s) quoted in the bid.			
12	In case of imported stores both FOB and CIF prices upto Indian port of entry namely Goa should be indicated. However tender			
	should contain item-wise prices including total ex-works price,			
	overall weight & dimensions of the equipment and cost of packing			
	forwarding, approx. cost of air-freight charges for delivery up to			
13	Goa, India. A technical Committee constituted by the Director will assess the			
10	product supplied/installed for their quality and their conformity to			
	the specifications provided by the firm in their quotations. Any			
	item(s) identified by the Committee to be not as per the			
	specifications or are found to be of inferior quality will be rejected, and the bills towards the supply will not be processed for payment			
	till proper replacements are provided.			
14	No advance payment will be made. Payment by irrevocable			
	letter of credit and on submission of Performance Bank Guarantee for 10%value of Order value towards warranty			
	guarantee for 10% value of Order value towards warranty			
15	Suppliers should clearly define the mechanisms of post-warranty			
	maintenance or support. Supplier should undertake to support			
1.6	the product for a minimum period of 5 years (post-warranty).			
16 17	Tender acceptance undertaking as per our enquiry submitted Two sets of operational, service/troubleshooting manuals and			
' '	diagrams to be supplied with ACOUSTIC DOPPLER CURRENT			
	PROFILER-WH SENTINEL 300 KHZ WITH BUOY AND ACCESSORIES INCLUDING BATTERY AND CABLE			
18	The submission of tender shall be deemed to be an admission on			
	the part of the tenderer, had fully acquainted with the			
	specifications, drawings etc. and no claim other than what stated			
	in the tender shall be paid in the event of award of Purchase Order.			
	Oruci.			

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within the stipulated time would be treated as:					
	• The	tenderer has understood all requirements as			
	desc	ribed in our Tender document.			
		ptance to provide/establish all the facilities tioned in our tender without any price escalation, if			
		tenderer finds it necessary to add any hardware or vare or any other materials during implementation.			
		eing to execute order to the satisfaction of NCAOR or uthorized representatives within the stipulated time.			

Signature with seal