

Global tender no. NCPOR/P&S/DOM-01 /GT-01

For Supply of TV-Guided Grab (TVG) Sampler & Sea-Floor Observation System (SFOS) for 6000m operations with USBL Positioning for exploratory works.

PRE-BID MEETING; Dtd: 12.May.2022

Sl.	Query/ Clarification / Request	Reply
1	We request due date submission date be extended until 20 th June 2022	3 Weeks from the publication of the corrigendum. No further request for extension of bid submission date shall be entertained.
2	In specs of TV grab it is not clearly stated the principle of Grab operation. Please confirm NCPOR will prefer electrical, powered from batteries or need hydraulic system	Ref. page 106, pt. A. Electro-Hydraulic system powered with batteries, to operate for required sampling area, volume, force etc., as per tender terms.
3	Being global tender and if we provide the complete turnkey solution we believe there is no mandate for Make In India requirement – please confirm	No mandate for Make In India requirement.
4	What should be the shape of Sea floor observation system	Typically, similar to a deep-tow system with a nose tow configuration.
5	What is the maximum expected temperature in the location NCPOR surevy (Hydro thermal location)	Temperatures in near vicinity of the vents have been reported around 4°C to 10°C.
6	It is specified to integrate sensors of opportunity (Upto 5 additional sensors). Please provide us the maximum size and weight that we should consider.	Ref. pg. 107, pt. B(a(ii)); This requirement is for any sensors of opportunity in future. List of sensors at annexure-01.
7	Kindly provide the additional balancing weights that is required.	Ref. pg. 107, pt. B(a(iii)); Additional weights are required to balance the system in case of any changes (addition/removal) to the payload sensors.
8	We request NCPOR to provide detailed specification of winch, cable and slip ring	Ref. pg. 108, pt. C & D; To be worked out by the supplier, as per the solution offered.
9	We believe the Gyro mentioned in the tender should be Fiber optic based solid state gyro – please confirm	Ref. pg. 107; Gyro having accuracy as mentioned in the tender is acceptable.
10	What is the frequency of the obstacal avoidance sonar a. We are not clear about the audio with video recording on the OAS	Ref. pg. 108; Any suitable frequency offering range upto 100m is acceptable. Audio recording is not related to OAS, to be an independent sensor.
11	What should be the load carrying capacity of the cable	Ref. pg. 108, Pt. D; To be worked out by the supplier, as per the solution offered & overload safety.

12	Being high value tender we request NCPOR to consider providing advance payment a. On completion of initial design and acceptance, NCPOR shall consider 30% b. On completion of production and testing at our facility 60% shall be made prior to shipment c. Balance 10% on delivery and completion of SAT in India	No. As per tender terms.
13	We understand that the system is for the ocean bed mapping on remotely operated towed vehicle, towed from a mother vessel using a winch and 8000m umbilical - this is ideal for wider coverage. However, for long term measurement at such depths, Landers would probably a good fit, also suggest "Landers" may be considered, which as a stand-alone underwater system can sit on the sea bed at 6000 mts integrated with required sensors. Please confirm if this option will be acceptable.	Not acceptable, at this stage a TVG & SFOS (similar to deep-tow) type system is required.
14	Would NCPOR be looking at hyperspectral imaging system, please confirm. Technical specifications also mentions provision for 5 additional sensors; please provide more details - type, make / model / specifications of such additional sensors - this will facilitate in appropriate design and interface. Specific dimensions, if any for the towed system.	No, Hyperspectral imaging system is not planned at this stage. List of sensors at annexure-01. No.
15	Would like to address payment terms, and delivery etc. Also clarify NCPORs intent on Make in India requirement as reflected in the tender; as these are complex underwater systems.	Not Applicable. No mandate for Make in India requirement being a global tender.

Sl.	Tender Page no.	Tender Clause Reference no.	Subject	Comments / Questions	Reply
16	9 & 98-100	Appendix to NIT: TIS & Special Terms and conditions	Performance Security	Under the Special Terms and conditions of the Tender Document, PBG quoted is 10% of the order value. However, as per the TIS, PBG applicable will be 3% of order value? Please confirm if there is a typo here.	3%
17	26	6.2	Firm/Variable Price	The AITB states 'yes' – Is this applicable for clause 6.2.1 or 6.2.2 as in Firm Price or Variable Price? Is the price fixed?	Firm price.

18	24	6.1.3 - ITB	Bid Price Components	Under Price Components in case of Capital Goods/ Machinery and Plant: a) Are we required to add Spares for two year's maintenance in Price Bid? b) Are we required to add AMC cost for 5 years after expiry of warranty period?	Yes. Yes.
19	28	6.3 – ITB	Goods and Services Tax (GST)	Is GST and IGST applicable on Imported goods? If yes, then will the bidder get a concessional rate?	Ref. pg. 27, pt. no. 6.3.2(5); Duty exemptions to eligible bidders for imported
20	2 & 18	NIT - Clause 3 & ITB - Clause 4.1	Eligibility Criteria	As this is a global tender, is it mandatory to meet the minimum prescribed local content for the product to be eligible to participate? And, as per ITB – clause 4.1.4, is the threshold for minimum local content 50%?	Not applicable.
21	18 & 19	4.1.5 - ITB	Purchase preference to Class-I local Suppliers	Are the Goods divisible with regards to this tender's scope? Please confirm	No.
22	97		Special Terms and conditions	Please confirm if the bidder can avail custom duty concession for imported goods? Will NCPOR provide exemption certificate?	Yes, NCPOR will provide exemption certificate to eligible bidder for exemptions for imported goods.
23	108	Section VII: C	Technical Specifications and Quality Assurance	As per technical specifications, requirement is for a 20T winch. Is this due to the weight of the cable, i.e. is NCPOR anticipating a steel cable? Will it be acceptable to use a Kevlar cable instead, which is neutrally buoyant, and use of this cable could drastically reduce the winch requirement? Please confirm	CABLE : Hybrid Fibre-Optic cable of 8,000m length, Approx. diameter 15-22mm. With spare line (i.e. fibre line) for communication, as per tender terms. Kevlar is not preferred as it is neutrally buoyant and becomes difficult to keep the tow body near to the seafloor.

LIST OF SENSORS OF OPPORTUNITY

NOTE:

1. Based on the power requirements of the additional sensors, the payload of additional sensors can be adjusted e.g. only the sensors that can be accommodated as per the availability of power will be used. It is not necessary that all the 5 sensors will be used all the time.
2. The number of additional sensors shall also be variable based on the mission objectives.
3. Some of the sensors listed below are configurable with CTD system as well.
4. A list of sensors is given below as an example of the sensors which may be utilised based on the mission requirements.
5. It may be noted that the requirement is to make provision (slot on the SFOS frame and plug-in capability) to be provided. Actual sensors will be added in future as per the application requirement.

Sl.	Description	Example
i.	Turbidity sensor	https://www.generaloceanics.com/chlorophyll-fluorometer-and-turbidity-sensor-6000m.html https://www.aanderaa.com/turbidity-sensor http://www.seapoint.com/stm.htm
ii.	Methane sensor	https://pro-oceanus.com/products/mini-series/mini-ch4
iii.	Dissolved Oxygen sensor	https://edaphic.com.au/oxygen/dissolved-oxygen-deep-sea-sensor/ https://www.seabird.com/sbe-43-dissolved-oxygen-sensor/product?id=60762467728 https://rbr-global.com/products/sensors/rbrcodatodo https://www.amt-gmbh.com/index.html
iv.	pH Sensor	https://www.amt-gmbh.com/index.html
v.	Combined backscatter-turbidity and chlorophyll-a sensor	https://www.seabird.com/eco-flntu/product?id=60762467722
vi.	Transmissometer	https://www.seabird.com/c-star-transmissometer/product?id=60762467717
vii.	Fluorescence sensor	https://www.seabird.com/eco-fluorometer/product?id=60429374754
viii.	PAR Sensor	https://www.seabird.com/photosynthetically-active-radiation-par-sensor/product?id=60762467732
ix.	Sound velocity sensor	https://www.valeport.co.uk/products/minisvs-sound-velocity-sensor/
x.	Redox sensor	https://www.sea-sun-tech.com/wp-content/uploads/2018/11/SST_Redox-AMT.pdf
xi.	Self Compensating Magnetometer	http://www.oceanfloorgeophysics.com/ofg-scm