

# TENDER DOCUMENT



## CONDUCTING NEAR-BOTTOM AUV-ROV SURVEYS AND EXPLORATORY WORKS TO DELINEATE LOCATIONS OF SEAFLOOR MASSIVE SULPHIDE DEPOSITS

**NATIONAL CENTRE FOR POLAR & OCEAN RESEARCH**

*(Ministry of Earth Sciences, Govt. of India)*

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Tender No. NCPOR/DSEM/HSS/22

Dated: 24<sup>th</sup> Mar 2022

### **Notice Inviting Global Tender**

Director, NCPOR invites sealed tenders for **“Conducting Near-Bottom AUV-ROV surveys and exploratory works to delineate locations of Seafloor Massive Sulphide deposits”**. The interested parties can download the detailed tender document from [www.ncpor.res.in](http://www.ncpor.res.in); and Central Public Procurement (CPP) Portal <https://eprocure.gov.in/cppp/> website and to be submitted before the last date 02<sup>nd</sup> May, 2022.

SD/-

For & on behalf of Director, NCPOR.

## **NOTICE INVITING GLOBAL TENDER**

Director, NCPOR invites sealed tenders for “Conducting Near-Bottom AUV-ROV surveys and exploratory works to delineate locations of Seafloor Massive Sulphide deposits” in the Indian Ocean under “Two Bid System” (**Cover I: Techno commercial bid and Cover II: Price Bid in separate covers within a sealed cover super-scribed with “OFFER FOR CONDUCTING NEAR-BOTTOM AUV-ROV SURVEYS AND EXPLORATORY WORKS TO DELINEATE LOCATIONS OF SEAFLOOR MASSIVE SULPHIDE DEPOSITS”**) commencing from 24<sup>th</sup> of Mar, 2022 as per terms and conditions prescribed as under.

The details of the tender are given below:

1.	Tender No.	NCPOR/DSEM/ HSS/22
2.	Description of work	<p>“Conducting near-bottom AUV-ROV surveys and exploratory works to delineate locations of Seafloor Massive Sulphide deposits”.</p> <p>Exploration for seafloor massive sulphide deposits in the Indian Exploration area using near-seabed survey techniques. The exploration efforts should result in developing anomaly maps based on various geological, geophysical and geochemical attributes which, in turn, should lead to identifying/ delineating mineralization zones/ sulphide ore bodies.</p> <p>A vessel for conducting near-seabed surveys is sought along with multiple AUVs &amp; Work-Class ROV etc. The vessel should be sea-worthy in all respects, suitably equipped with all the necessary scientific facilities/utilities and with sufficiently experienced crew for undertaking the exploratory works (including all maintenance and operations) and surveys as specified in this tender document, including data processing, integration, interpretation and final report preparation.</p>
3.	Work commencement period	October/November, 2022
4.	Port of Embarkation and Disembarkation	Alongside berth at Port Louis (Mauritius)
5.	Area of operation	Southern segment of the Central Indian Ridge and Eastern segment of the South-West Indian Ridge near the Rodrigues Triple Junction in the Indian Ocean region. <u>For details see page #6</u>
6.	Pre-bid Meeting	08 <sup>th</sup> .Apr.2022; 1100 hrs IST

7.	Last date /time & place for submitting bid	02 <sup>nd</sup> May, 2022 at 1100 hours IST at NCPOR, Headland Sada, Vasco-Da-Gama, Goa- 403 804 INDIA.	
8.	Date and time of opening of bids	a) Technical Bid	04 <sup>th</sup> May, 2022 at 1100 hours IST at NCPOR
		b) Financial bid (for Technically qualified bidders only)	Result shall be informed to the 'successful bidder' i.e. Contractor and posted on NCPOR & CPP website.
9.	Bid Bond/EMD from Scheduled Bank in India or Foreign Bank having branch in India	INR 3,75,00,000/- (DD/FD/ Bank Guarantee (BG) as per GFR 170 pg. 49 etc.) OR US \$ 4,90,000 or EURO 4,50,000 in form of Bank Guarantee or Transfer to NCPOR account.  The Original DD/BG towards EMD should be enclosed along with the techno-commercial bid and submitted to NCPOR within the bid submission date. Bids received without EMD will be rejected.	
10.	Bid validity	120 days from the last date of submission of the bid	
11.	Bid Bond validity	165 days from the last date of submission of the bid	
12.	Delivery cum Performance Bank Guarantee (PBG) by the successful bidder only from Scheduled Bank in India or Foreign Bank having branch in India	a. Amount- 10% of contract value. The contract value to be taken as charges towards the scope of work including the vessel/facilities and all related costs. b. PBG Validity – 160 (100+15+45) days from date of acceptance of the vessel with requisite facilities, as per tender terms.	
13.	Correspondence Address	<b>Group Director (DSE&amp;M)</b> <b>National Centre for Polar &amp; Ocean Research (NCPOR),</b> <b>Ministry of Earth Sciences, Govt. of India, Headland Sada, Vasco-Da-Gama,</b> <b>Goa – 403 804 (India).</b> <b>Email: john@ncpor.res.in</b> <b>Phone: +91-832-2525570; Fax : +91-832-2520877</b>	

The tender will be governed as per the 'Terms and conditions of the Tender and Instructions for bid submission' enclosed in this tender document.

NOTE: If any of the dates indicated in this tender (e.g. Last date of Submission, Bid Opening date etc.) happens to fall or be declared as a public holiday, then the next working day shall be considered. Times indicated in this document are Indian Standard Time (IST).

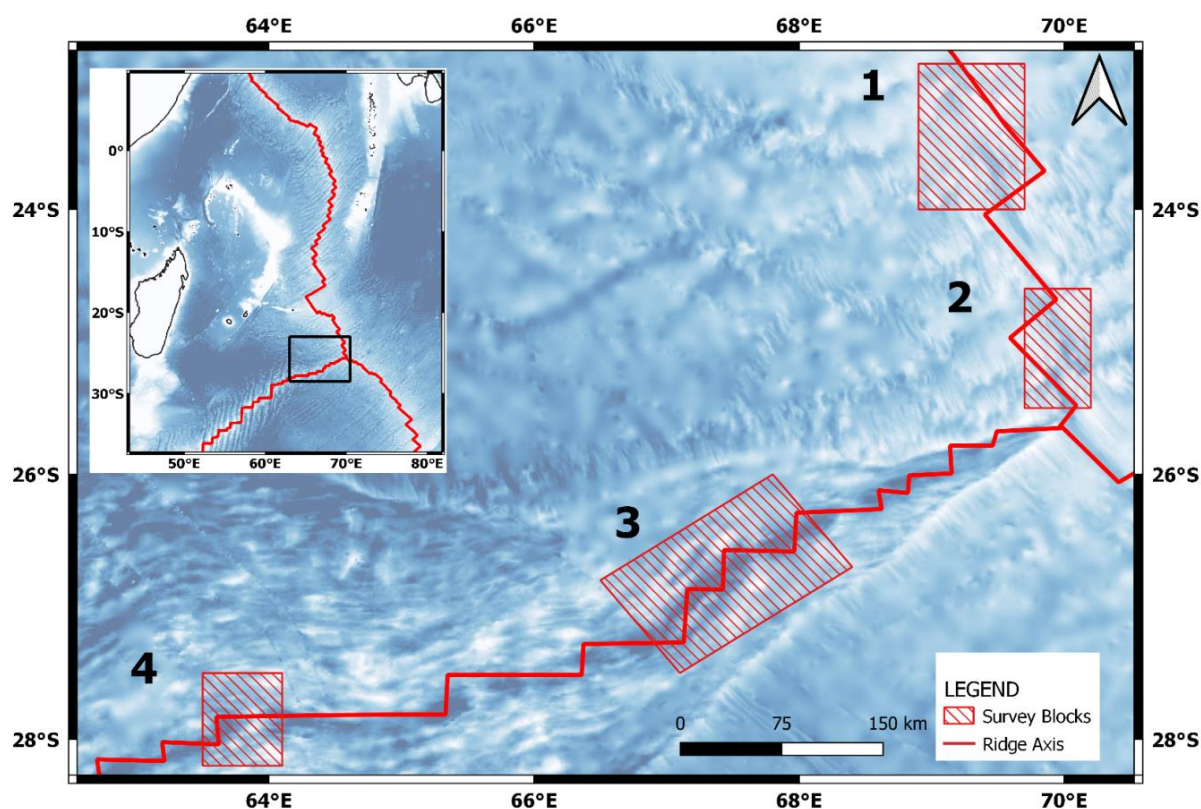
Bidders are advised to submit the bid complete in all respects as per the requirement of the tender document, clearly specifying their acceptance to all the clauses of bid evaluation criteria, terms & conditions etc. and compliance to the technical specifications, mandatory requirements etc.

**Group Director (DSE&M)**  
**National Centre for Polar & Ocean Research**

## AREA OF OPERATIONS/ ACTIVITIES

The blocks of operations are indicated as below:

Block-1: 68.9° E, 22.9° S; 69.7° E, 22.9° S; 69.7° E, 24.0° S; 68.9° E, 24.0° S	Block-2: 69.7°E, 24.6°S; 70.2°E, 24.6°S; 70.2°E, 25.5°S; 69.7°E, 25.5°S
Block-3: 66.5°E, 26.8°S; 67.8°E, 26.0°S; 68.4°E, 26.7°S; 67.1°E, 27.5°S	Block-4: 63.5°E, 28.2°S; 63.5°E, 27.5°S; 64.1°E, 27.5°S; 64.1°E, 28.2°S



**Fig. A: Area of operation**

For further info on INDIAN Hydrothermal Sulphides Exploration areas visit:

<https://www.isa.org.jm/contractors/exploration-areas>

<https://www.isa.org.jm/index.php/map/government-india-0>

# **TENDER DOCUMENT**

## **CONDUCTING NEAR-BOTTOM AUV-ROV SURVEYS AND EXPLORATORY WORKS TO DELINEATE LOCATIONS OF SEAFLOOR MASSIVE SULPHIDE DEPOSITS**

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## **SECTION -A**

### **INTRODUCTION & SCOPE OF WORK**

National Centre for Polar and Ocean Research (NCPOR), an autonomous body under the Ministry of Earth Sciences (MoES) Government of India, is entrusted as the nodal organization for the implementation of the national programme on survey and exploration of Hydrothermal Sulphides in the mid-oceanic ridges of the Indian Ocean region. Forthcoming proposed activities for the said programme are scheduled to start during October/November, 2022.

The primary objective of the proposed activities is to explore Seafloor Massive Sulphide (SMS) resources associated with active and inactive Hydrothermal Vent Fields in the Indian Exploration area (Figure A) in the Indian Ocean using near-seabed survey techniques. The proposed work involves undertaking integrated multi-sensor and multi-platform deep-sea near-seabed investigations using Autonomous Underwater Vehicles (AUVs) and Work-class Remotely Operated Vehicle(s) (ROV) over the southern segment of the Central Indian Ridge (CIR), and the eastern segment of the South-West Indian Ridge (SWIR) (See Figure-A, Page-6 for indicative map).

The exploration efforts should result in developing anomaly maps based on various geological, geophysical, and geochemical attributes which, in turn, should lead to identifying/delineating mineralisation zones and/or sulphide ore bodies.

#### **1. SCOPE OF WORK / SERVICES**

1.1. The proposed work consists of:

- a) Acquisition of near-bottom high-resolution geophysical and imaging data sets using AUVs at **SEVENTEEN (17) locations**, as detailed in Section-B;
- b) Analysis and interpretation of geophysical and imaging data to identify any signatures suggesting potential sites of active/inactive hydrothermal vents and seafloor/ near-seafloor sulphide deposits;
- c) Survey and sampling over those potential sites using Work-class ROV/s, as detailed in Section-B, to precisely locate and confirm the active/inactive hydrothermal vent fields or SMS deposits;
- d) Collection of Rocks/Sediments/biological/ water samples utilizing a Sampling basket.
- e) Atleast TWO (2) or more AUVs are to be deployed simultaneously for undertaking the geophysical and imaging surveys.
- f) Atleast ONE (1) or more Work-class ROV to be utilised for undertaking site-specific sampling and observations.



- 1.2. While the proposed system is to deploy AUV-ROV combinations, an alternate mapping and sampling system having similar capabilities including maintaining time schedules as AUV- ROV combination may also be accepted.
- 1.3. In order to undertake the said activities, a vessel with requisite facilities is required along with sufficiently experienced crew for the ship's operation, scientific operations, scientific data acquisition, processing, and interpretation. Instruments/ accessories/ spares for the satisfactory performance of the vessel for scheduled activities during the period should be maintained.
- 1.4. The scope of the work includes the acquisition of all associated marine geophysical, oceanographic & imaging data with precise positioning as well as onboard and/or onshore-based data processing, interpretation, and report/chart/map preparations etc. as per NCPOR instructions including systematic storage/archival. NCPOR representatives shall also be part of the onshore-based data processing at the CONTRACTOR's facility.
- 1.5. The scope of services includes engagement of trained and experienced scientific and technical personnel for handling, operating and maintaining all survey and scientific equipment engaged onboard the vessel, as well as processing, analysis, integration and interpretation of all geophysical, geological, physical, chemical, biological, and other datasets acquired onboard, integration with other geoscientific datasets, thus leading to identification and locating hydrothermal vents/ mineral deposits in the survey area. A comprehensive report with recommendations for future evaluation of the identified potential sites to be submitted.
- 1.6. CONTRACTOR and their onboard team should co-operate fully with the onboard NCPOR personnel in following the set guidelines/protocols for the data acquisition and hence achieving the project targets.
- 1.7. The CONTRACTOR must ensure that the vessel, equipment and personnel are ready to commence the survey in the designated area during **Oct./Nov., 2022**. A written undertaking to this effect will be required before signing the Agreement.
- 1.8. The CONTRACTOR must undertake to complete all aspects of the surveys with deliverables including data acquisition, onboard processing, post-processing, reports/documentation and making them available to NCPOR as detailed in this Tender Document to the best satisfaction of NCPOR within **Three months (90 days)** of completion of the survey i.e. Handing over Raw datasets, preliminary reports, offloading of samples and disembarkation of NCPOR personnel from the vessel.

## **2. INVITATION FOR TENDER**

Director, NCPOR invites sealed tenders for “*Conducting Near-Bottom AUV-ROV surveys and exploratory works to delineate locations of Seafloor Massive Sulphide deposits*” in the Indian Ocean under “Two Bid System” (Cover I: Techno-commercial bid and Cover II: Price Bid in separate covers within a sealed cover super-scribed with “**OFFER FOR CONDUCTING NEAR-BOTTOM AUV-ROV SURVEYS AND EXPLORATORY**”

**WORKS TO DELINEATE LOCATIONS OF SEAFLOOR MASSIVE SULPHIDE DEPOSITS”) commencing from 24<sup>th</sup> of Mar., 2022 as per terms and conditions.**

The tender document complete in all respects and complying with all requirements set out in this tender document **should be received by 1100Hrs IST, 02<sup>nd</sup> May 2022** at the following address:

**The GROUP DIRECTOR,  
Deep Sea Exploration and Mapping (DSEM) Group,  
National Centre for Polar & Ocean Research (NCPOR),  
Ministry of Earth Sciences, Govt. of India,  
Headland Sada, Vasco-Da-Gama, Goa – 403804, INDIA.**

### **3. ELIGIBILITY CRITERIA**

The eligibility criteria for the evaluation of bids are given below. NCPOR reserves the right to modify/ update the criteria after the discussion with the bidders during the pre-bid meeting.

Documentary evidence for eligibility as specified must be submitted along with the techno-commercial bid in order to determine the eligibility of the bidder:

- 3.1. The bidder should be a legal entity (enclose as **Appendix XI**).
- 3.2. The bidder’s average turnover of the last three financial years, with the last financial year ending on 31<sup>st</sup> March 2021, should not be less than INR 75 Crores or USD 10 million. Copies of the audited balance sheet, turnover certificate issued by a qualified Chartered Accountant; and profit & loss account of the respective Financial Year should be submitted along with the techno-commercial bid (enclose as **Appendix XI**).  
(3.1 & 3.2 shall be evaluated during the technical evaluation stage)
- 3.3. The bidder shall have experience and proven competence in executing deep-sea (>3000m water depth) exploratory surveys, including:
  - 3.3.1. At least ONE case of survey experience in having undertaken near seabed exploration utilising desired systems viz. AUV & Work class ROV etc. / any other system with similar mapping/ sampling capabilities as AUV & ROV, for deep-sea exploration and/or exploration of deep-sea mineral resources during last TEN (10) years.
  - 3.3.2. The following investigations in single or multiple campaigns:
    - Multibeam bathymetric surveys
    - Optical surveys (photography & video)
    - Magnetic surveys
    - Electrical: iSP/ SP/ CSEM
    - Physical sampling of in-situ ore bodies/ rocks.
  - 3.3.3. Must have experience in producing anomaly maps based on results from the investigations specified in 3.3.2.

Documentary evidence for fulfilling the eligibility criteria, to be submitted by the Bidder (enclose as **Appendix XIII**).

- 3.4. It is mandatory for the Bidder to provide lists of similar work successfully executed in the last Ten years (calculated from the closing date of the bid) and projects currently under execution, if any. (Enclose as **Appendix VII**).

**MINIMUM CRITERIA FOR THE VESSEL:**

- 3.5. **VALID CERTIFICATES** - The offered vessel should possess valid certificates at the time of presenting it in sea-worthy condition to NCPOR at Port Louis (Mauritius) and well beyond (about 30 days) the intended days of operations. The vessel should be suitably equipped with all the necessary facilities/utilities/spares for the voyage and scientific operations. The copies of all documents must be provided at least 20 days before the date of Embarkation.
- 3.6. Certified copies of all the statutory certificates, including but not limited to the following, should be enclosed (English language / Translated to English language and duly certified), as **Appendix XV**.
- 3.6.1. Classification certificate
  - 3.6.2. International load line certificate
  - 3.6.3. Safety radio certificate
  - 3.6.4. Compliance certificate to carry hazardous cargo
  - 3.6.5. SM safety management certificate
  - 3.6.6. International oil pollution prevention certificate
  - 3.6.7. Compliance certificate of sewage pollution prevention
  - 3.6.8. International tonnage certificate
- 3.7. The Vessel to have on-board valid certificates from the classification society of the Vessel(s), safety certificates, valid certificates for equipment on-board and certificates covering risks in connection with oil pollution etc. If any certificate is expiring during the term of the proposed surveys, the certificate with extended validity should be provided well in advance, else the payments may be withheld if the services are hampered and until a valid certificate is provided and services resumed.
- 3.8. However, the extension of any mandatory certificates/permissions etc. is the sole responsibility of the CONTRACTOR only and should not hamper the NCPOR's activities in any manner whatsoever. Acceptance and undertaking to this clause should be enclosed as **Appendix XV-A**.
- 3.9. **ENDURANCE:** The Vessel should have an endurance of 45 or more days. Documents to substantiate this clause should be enclosed as **Appendix XV-B**.
- 3.10. **ACCOMMODATION AND ACCESS TO OTHER AREAS:**
- 3.10.1. The offered vessel should have fully air-conditioned accommodation with W/C and bath facility for a minimum of 22 NCPOR personnel, exclusively besides the requirement of vessel crew and officers. The entire living accommodation should preferably be in the Super-structure of the vessel with at

least Six Single cabins. Two single cabins to have PC with Printer, TV, refrigerator etc. for Indian Chief Scientist & Deputy Chief Scientist. However, there should not be more than two persons in each cabin. All cabins should have attached bath and W/C toilet facilities with a working table, chairs and sufficient storage space for members to keep belongings and daily utility items etc. Each cabin should have electrical points (220V AC), with Indian style sockets/adapters, if needed, to operate electrical gadgets e.g. laptop, mobile charging etc. All above facilities should be made available before NCPOR personnel embarks on the vessel.

3.10.2. The whole reach and burden of the vessel as available on-board workshops, Radio rooms, Mess room, cabins for NCPOR personnel and spaces required for scientific exploration, experiments and research work, lawful deck capacity to be at the disposal of NCPOR. Acceptance to this should be provided as **Appendix V.**

- 3.11. Documentary proofs meeting the technical specifications as prescribed in Annexure-III of the techno-commercial bid should be enclosed as **Appendix XXI.**
- 3.12. The successful bidder (CONTRACTOR) assumes responsibility for the arrangement and costs of all access and other permits, including any clearance etc. of the crew and personnel deployed by the bidder, and for the vessel for conducting the surveys as defined in this tender document. NCPOR may assist, at its sole discretion, to offer necessary documentary support in this regard, if any.
- 3.13. NCPOR shall have an option to use the vessel's communication equipment subject to proper record-keeping of such usage and including entries in the ship's radio logbook as appropriate. Each phone call and message sent to be recorded/logged in the ship's radio logbook.
- 3.14. NCPOR shall have the liberty of installing their communications/data transmitting systems or any other equipment/s, if need be, onboard the vessel. The equipment/s will remain the property of NCPOR and NCPOR will be entitled to remove the same on completion of the proposed work.
- 3.15. DYNAMIC POSITIONING: The vessel should be equipped with Dynamic Positioning (DP2 class) system for precise navigation and station keeping of the vessel for smooth operations in rough weather conditions (Up to seastate 4 on Beaufort scale) in the area of operations. Adequate documents to substantiate and indicate the details of the above requirement to fulfill this clause should be enclosed as **Appendix XVI.**
- 3.16. OTHER REQUIREMENTS: Adequate documents/photos etc. to substantiate this clause and indicating the details of the below said requirements should be enclosed as **Appendix XVIII-A.**
  - 3.16.1. The vessel should have proper medical facilities along with a Doctor and MI room with adequate medicine and equipment in systematic storage to meet the emergency and routine medical needs.
  - 3.16.2. The vessel should have a proper kitchen to cater to the requirements of the NCPOR scientific crew apart from the vessel crew, with adequate equipment and crockery. Dining hall to accommodate about 15 persons at a time. An Indian cook

is to be provided to prepare and serve Indian-style food. Stewards (Two) to be provided for cleaning cabins allocated for NCPOR use, change linen/bedding, personal laundry, laboratory/work area etc. Sufficient number of washing machines must be provided for NCPOR personnel use.

3.16.3. Adequate recreation and conferencing facilities such as TV, Audio and few indoor games.

3.16.4. The vessel should have an office room equipped with a computer, scanner, printer and photocopier for the use of NCPOR personnel. Necessary office stationeries must be provided.

### 3.17. OTHER FACILITIES ONBOARD:

The offered vessel should have sufficient deck space in the aft for operating the scientific equipment for oceanographic research and other facilities as indicated below:

- Laboratory space (approx. 20 sq.m.) with running water supply, washbasin & drainage for chemical analysis, sub-sampling etc.
- Minimum four computers with latest Windows OS and MS Office software for offline work with color LaserJet Multifunction printer devices (4 Nos.) and A0-size color plotter (1 No.) printing facility with sufficient paper.
- Cold storage facility for Water samples at various temperatures (4°C, -20°C; Approx. 2000L capacity each (@ 4°C, -20°C) in Vertical Freezers).
- Cold room facility
- Weather proof storage area on-board for stocking samples collected onboard and consumables etc.
- A place to keep securely and operate one standard 20-feet Refer container. The container shall be delivered at the wharf by NCPOR and loading/offloading to be arranged by CONTRACTOR including crane, slings, manpower etc., if required.

Adequate documents to substantiate this clause, indicating the space offered and indicating details to fulfill abovesaid requirements including specifications etc. should be enclosed as **Appendix XVIII-B**.

3.18. Bidders to submit information containing details on the following as **Appendix XVI**:

<b>Data Acquisition work related</b>	<b>Data Processing work related</b>
1. Lists of similar work successfully executed in the last Ten years and projects currently under execution.	Lists of similar marine surveys including AUV & work-class ROV-based data acquisition and processing work successfully executed in the last Ten years and projects currently under execution, if any.
2. Personnel details including bio-data of key personnel.	Personnel details including bio-data of key personnel.
3. Equipment listings and vessel availability details.	Available software and hardware details.
4. Company and management structure together with logistic support details.	QA/QC procedure details.
5. Acquisition methodology.	Details of processing flow & description of project deliverables.
6. Lists of policies, procedures and quality assurance practices currently in place for the execution of similar work.	
7. Health, Safety and Environment policies, procedures and statistics covering the last Ten years.	
8. Corporate financial details.	
9. Details of legal / court rulings against your company, if any, in the last Ten years.	

#### **4. PRICING**

- 4.1. Pricing must be reflected to include all components as per the **enclosed price bid format** in this document (given as Annexure-VII). Bidders must submit quotes against all columns mentioned in the price bid format.
- 4.2. The quoted prices shall include all costs related to the vessel, its movement, crew, equipment, survey operation, manpower deployment, insurance, data acquisition, cost of recording media, consumables, processing and interpretation of all acquired datasets, and the accommodation and victualling charges of personnel representing NCPOR onboard the vessel during the surveys etc., as specified.
- 4.3. All port calls related charges, pilotage and harbour dues, bunkering etc. shall be borne by the CONTRACTOR.

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## **SECTION B**

### **SPECIFICATIONS OF SURVEY WORK & SERVICES**

#### **1. INTRODUCTION**

The proposed survey involves undertaking integrated multi-sensor and multi-platform deep-sea near-bottom investigations using Autonomous Underwater Vehicles (AUVs) and Work-class Remotely Operated Vehicle(s) (ROV) to explore and locate hydrothermal mineral deposits over the southern segment of the Central Indian Ridge (CIR) and the eastern segment of the South West Indian Ridge (SWIR). It includes the acquisition of near seabed high-resolution geophysical data sets using AUVs, focused sampling of target areas using Work-Class Remotely Operated Vehicle/s (ROV), and seabed video & photography using both AUV and ROV

**The survey must be completed in a duration of approx. 100 ± 15 days at maximum**, in line with the fair-weather window for operations and towards fulfilling targets and commitments of the programme. Bidders may plan the work in two Legs/cruises with an intermediate port call at Port Louis, Mauritius being the nearest port. Efforts should be made to optimize the survey time to keep it minimum.

#### **2. WORK & SERVICES**

The work and services include acquisition of AUV and ROV-based datasets, physical sampling, and all associated marine geophysical, oceanographic & imaging data with precise positioning as well as onboard and/or onshore-based data processing, interpretation, and report/chart/map preparations etc.

2.1. The various datasets to be acquired by utilizing AUVs and Work-Class ROV(s) operations must include the following:

##### **I. AUV based near-seabed survey**

- i. Multibeam bathymetry data with 0.5 meter or better resolution
- ii. Sub-bottom profiler (SBP) data
- iii. Synthetic Aperture Sonar (SAS) data with 3 to 5 cm resolution.
- iv. Magnetic data
- v. CTD data (with multiple auxiliary sensors)
- vi. Seafloor imaging by high-resolution digital cameras
- vii. Electrical potential survey - Induced Spontaneous Potential (iSP)/ Spontaneous Potential (SP).

##### **II. Work-Class ROV – based survey and sampling**

- i. Bathymetry survey
- ii. High resolution still and video imaging
- iii. In-situ temperature probes capable of measuring up to 600°C

- iv. Fluid sampling
- v. Rock, sediment, and biological sampling using manipulator arms

**III. Seabed Sampling Basket:** Bulk Sampling Trays/basket facility to collect samples of upto 500kgs or more in tandem with ROV is to be provided.

- 2.2. Bidders to provide detailed specifications, valid calibration reports /certificates of all survey and scientific equipment and sensors onboard, as per OEM recommendations for periodic calibration, to be provided for inspection before acceptance.
- 2.3. The term ‘Survey and scientific equipment’ includes all required sub-units, peripherals and Launch-Recovery systems with required cables & spares required for satisfactory data/sample collection. The processed datasets for all geophysical data acquired are to be provided in required format as per NCPOR User requirements as in Section-6. Sufficient spare cables/wire-ropes etc. should be available onboard for continuous operations unhindered.

Adequate documents to substantiate the above-said clauses, should be enclosed as **Appendix XXII** of the bid.

### **3. SURVEY AREA AND SPECIFICATIONS**

- 3.1. Broadly, the survey areas are located over the southern segment of Central Indian Ridge (up to 22°30’S) and the eastern segment of South-West Indian Ridge (up to 63°E) regions of the Indian Ocean, situated towards north and west of the Rodrigues Triple Junction (RTJ) [located at 25°30’S, 70°E].
- 3.2. Available ship-borne multibeam echo-sounding data (50m/100m resolution grid, as available) and CTD cast data at all the locations listed below will be made available to the successful bidder i.e. Contractor, after signing of the contract, for preliminary planning purposes. The Contractor shall not keep any copy of the data, in any form.
- 3.3. Based on the analysis of this existing and available data at NCPOR, a detailed survey plan for all proposed blocks is to be prepared by the Contractor and submitted to NCPOR, the plan shall be discussed mutually between NCPOR and Contractor for optimization, fine-tuning and meeting the desired objectives of the survey.
- 3.4. The bidders to provide a total solution to meet the objectives specified above and also fulfill the minimum survey criteria as listed below.

**THE TASKS INDICATED BELOW ARE INDICATIVE, BUT NOT LIMITED TO, PRIMARILY DUE TO THE NATURE OF THE EXPLORATORY WORK AND THE OPERATIONS MAY ALSO CHANGE ACCORDING TO THE FIELD SITUATIONS AND TO OPTIMISE THE SURVEY TO ACHIEVE OBJECTIVES.**

- 3.4.1. A total of 17 locations (*Table-A*) are planned to be explored in detail by utilizing near-seabed survey facilities using AUVs and work-class ROV(s). The given



locations are approximate and precise locations will be finalized before commencing field operations.

**Table-A: Details of locations proposed for undertaking surveys. The locations may be changed at the discretion of NCPOR due to the exploratory nature of the works.**

Sl.	ID	Min. Depth (m)	Max. Depth (m)	Avg. Depth (m)
CIR-Region (Block- 1 & 2)				
1.	PS-A	1977	2327	2152
2.	PS-B	3170	3335	3252
3.	IA-MZ	2698	3270	3006
4.	PC-A	2615	4266	3332
5.	PC-B1	2711	3809	3311
6.	PC-B2	2812	3823	3392
7.	PM-B	2668	4155	3196
8.	AC-KF	2221	3266	2673
SWIR-1 (Block- 3)				
9.	PM-D	3450	4288	3869
10.	PC-D	3685	4793	4225
11.	OCC1	1038	2928	2048
12.	OCC2	1578	3261	2303
SWIR-2 (Block- 4)				
13.	IA-MJ	2661	3727	3109
14.	SE	2310	4197	3327
15.	PC-E	3503	4867	4079
16.	TWO additional locations shall be decided before/during surveys, in-consultation with the onboard experts of the contractor and NCPOR representative.			
<b>NOTE:</b> A. The above table gives the region and depth range of the survey locations, blocks in which the locations falls etc. B. Exact Latitude/Longitude details of each location and previous geophysical and oceanographic data from those locations will be provided to the successful bidder (CONTRACTOR) ONLY, after signing the contract, for survey planning purposes.				

3.4.2. For each location mentioned in the above table, an area of approx. 50 sq. km. is required to be surveyed by using multiple AUVs (minimum of 2 AUVs to be engaged simultaneously). The survey should include multibeam bathymetry, SAS (with 100% coverage), CTD, SBP, magnetic, electrical and seabed imaging /photography. Track spacing and altitude for AUV surveys should be optimized for Electrical SP/iSP data acquisition and must be finalized in consultation with NCPOR personnel onboard. The anticipated quantum of work shall be:

- a. AUV based geophysical survey: 17 locations = 8,500 Line km
- b. AUV based photography survey: 17 locations = 1,700 Line km (~20% of geophysical survey).

3.4.3. The Contractor should undertake the preliminary processing, analysis, interpretation and integration of all the data acquired during AUV surveys, to identify any signatures indicating potential sites of active/inactive hydrothermal vents and/or seafloor massive sulphide deposits. The Contractor should engage adequate and experienced scientific and technical experts onboard for fast and efficient delivery of results onboard. The final identification of potential sites needs to be carried out in consultation and with the approval of the onboard NCPOR team.

3.4.4. All the potential sites, identified based on AUV surveys in the 17 Locations need to be surveyed and sampled using ROV/s to precisely locate and confirm the active / inactive hydrothermal vent fields and/or SMS deposits. The planning of ROV surveys should be carried out in mutual consultation between the NCPOR team and the onboard scientific/technical experts of the Contractor. The ROV survey tasks include, but are not limited to, still & video imaging, seabed topographic survey, measurement of physical oceanographic parameters, fluid, seabed rock/sulphide and biological sampling etc. The anticipated quantum of work includes an average of 4 dives at each location with an average of about 6 hours of working time per dive at the seabed. Thus total quantum of work shall be:

Total ROV dives: 17 locations \* 4 dives per location = 68 dives.

#### **4. DETAILS OF ANTICIPATED OPERATIONS AND MINIMUM SPECIFICATIONS OF EQUIPMENTS**

##### **4.1. Ship-borne Instruments and observations:**

<b>Sl.</b>	<b>Instrument</b>	<b>Specifications / Operations / Purpose</b>
1.	Ultrapure Water Supply e.g. Milli Q System	For various analysis
2.	Laminar Flow/Clean bench	For various analysis

3.	Automatic Weather Station (AWS): with data recording
	List of desired Sensors: Wind Speed Sensor, Wind Direction Sensor, Air Pressure Sensor, Air Pressure Sensor, RH & Temperature Sensor, Shortwave Radiation Sensor, Long wave radiation Sensor, Sea surface Temperature (SST) Sensor, Rain Gauge Sensor, Chlorophyll (Optical Fluorescence), Turbidity (Optical Turbidity), Gyro/Digital compass, DGPS

**4.2. Autonomous Underwater Vehicle (AUV) based instruments and sensors:** All instruments/sensors/sub-systems to be suitable for operations in 6000m water depths.

Sl.	Instrument	Specifications / Operations / Purpose
1.	Swath Bathymetric Multibeam Echosounder	<ul style="list-style-type: none"> <li>▪ Dual-frequency of 200 and 400 kHz (or more)</li> <li>▪ Swath angle of &gt;140°</li> <li>▪ Beam angle 1.0° x 0.7° or better</li> <li>▪ including Side Scan Sonar image water fall</li> <li>▪ Backscatter and water column imaging (WCI) with data recording</li> <li>▪ Resolution: 0.5 m or better</li> </ul>
2.	Synthetic Aperture Sonar (SAS)	<ul style="list-style-type: none"> <li>▪ Frequency 50 - 400 kHz</li> <li>▪ Swath of 300m minimum at 50 m altitude</li> <li>▪ with spatial resolution of 3 to 5 cm or better</li> <li>▪ with geo-referenced images</li> </ul>
3.	Induced Spontaneous Potential (iSP)/ Spontaneous Potential (SP) system	<ul style="list-style-type: none"> <li>▪ To acquire high-resolution measurements of the electric fields in order to delineate active/inactive hydrothermal mineral deposits</li> <li>▪ To study three components of the electric field.</li> <li>▪ Integrated interpretation with AUV based precise positioning, magnetometer, MBES, SAS/SSS, &amp; water chemistry etc. to generate a 3D model of probable SMS deposits/vents.</li> </ul>
4.	Magnetometer	<ul style="list-style-type: none"> <li>▪ 3-axis Self Compensating Magnetometer</li> <li>▪ Noise level: <math>\pm 0.5</math> nT or better</li> <li>▪ Range: <math>\pm 60</math> to 70 Gauss</li> <li>▪ Resolution: 0.0001-0.0002 mGauss</li> </ul>
5.	Chirp Sub-bottom Profiler	<ul style="list-style-type: none"> <li>▪ 2 to 16 kHz, user selectable</li> <li>▪ SEG-Y rev 2.0 or SEG-Y compatible is preferable</li> </ul>
6.	CTD with Aux. Sensors	<ul style="list-style-type: none"> <li>▪ Seabird SBE 49 Fast Cat or equivalent</li> <li>– Temperature -5 to +45°C,</li> <li>– Conductivity 0 to 9 S/m, Accuracy <math>\pm 0.0003</math></li> <li>– Depth rating <math>\geq 6000</math> m; 0.1% of Full-scale accuracy</li> </ul>
7.	Sound Velocity sensor	<ul style="list-style-type: none"> <li>▪ Digital time of flight SV sensor</li> <li>▪ Resolution 0.001m/s</li> </ul>
8.	Dissolved Oxygen sensor	<ul style="list-style-type: none"> <li>▪ Membrane type with Range 120% of surface saturation in all-natural waters</li> <li>▪ Resolution: &lt;1 <math>\mu</math>M</li> <li>▪ Accuracy: &lt; 5 <math>\mu</math>M or <math>\pm 2\%</math></li> </ul>
9.	pH sensor	<ul style="list-style-type: none"> <li>▪ Range 1 – 14/ standard 2 – 11</li> </ul>

		<ul style="list-style-type: none"> <li>▪ Accuracy <math>\pm 0.05</math></li> <li>▪ Resolution 0.01</li> </ul>
10.	Methane sensor	<ul style="list-style-type: none"> <li>▪ Electrode/semiconductor type micro-sensor</li> <li>▪ Range 50<math>\mu</math>M to 10<math>\mu</math>M</li> </ul>
11.	Turbidity sensor	<ul style="list-style-type: none"> <li>▪ Range of 0 to 10,000 NTU</li> <li>▪ Sensitivity 0.01-0.015 NTU</li> <li>▪ Sensitivity/Range:</li> <li>▪ 100x gain: 200 mV/FTU 25 FTU</li> <li>▪ 1x gain: 2 mV/FTU 4000 FTU</li> </ul>
12.	Redox sensor	<ul style="list-style-type: none"> <li>▪ Electrode type micro-sensor</li> <li>▪ Range <math>\pm 500</math> mv, sensitivity 0.001 mv</li> </ul>
13.	Navigational Systems	<ul style="list-style-type: none"> <li>▪ AUV should have an Integrated Inertial Navigation System (INS)</li> <li>▪ Depth Sensor (accuracy: <math>\leq 0.05\%</math>)</li> <li>▪ DVL (<math>&gt; 300</math> kHz) and USBL transponder.</li> <li>▪ INS heading accuracy should be better than <math>0.1^\circ</math></li> <li>▪ Position accuracy with all aids should be better than <math>0.1\%</math> of distance travelled.</li> <li>▪ Spatial positional accuracy to be 4 to 6 m or better.</li> </ul>
14.	Camera with lights	<ul style="list-style-type: none"> <li>▪ Underwater HD colour camera</li> <li>▪ 10 or more Mega pixel 12-bit dynamic range Gigabit Ethernet camera with associated strobe</li> <li>▪ Time stamp with geo-referencing</li> <li>▪ At least 8000 lumen or more</li> <li>▪ With image processing &amp; mosaicking s/w</li> <li>▪ Sampling Range 4 Hz to 0.1 Hz</li> </ul>

#### 4.3. Work-Class Remotely Operated Vehicle (ROV) based instruments and sensors:

All instruments /Sensors / sub-systems to be suitable for operations in 6000m water depths.

Sl.	Instrument	Specifications / Operations / Purpose / Sensors
<b>CAMERAS &amp; LIGHTS</b>		
1.	Multiple Colour pan-zoom-tilt cameras	<ul style="list-style-type: none"> <li>▪ Still &amp; Video in 4K, FHD &amp; SD resolution</li> </ul>
2.	Low light navigation camera	<ul style="list-style-type: none"> <li>▪ Imaging</li> </ul>
3.	Tooling & wrist cameras	<ul style="list-style-type: none"> <li>▪ Imaging</li> </ul>
4.	LED Full Spectrum, halogen and Flood lights	<ul style="list-style-type: none"> <li>▪ Dimmable, High Intensity &amp; Strobe modes</li> <li>▪ Switchable for LED and Halogen type</li> </ul>
<b>SONARS</b>		
5.	Multibeam Echosounder	<ul style="list-style-type: none"> <li>▪ Dual-frequency of 200 and 400 kHz (or more)</li> <li>▪ Swath angle of <math>&gt;140^\circ</math></li> <li>▪ Beam angle <math>1.0^\circ \times 0.7^\circ</math> or better</li> <li>▪ including Side Scan Sonar image water fall</li> </ul>

		<ul style="list-style-type: none"> <li>Backscatter and water column imaging (WCI) with recording of data</li> </ul>
6.	Laser Scaling & Imaging Systems	<ul style="list-style-type: none"> <li>Laser Scaler: Object scaling, (Multi-dot, Multi-Line, range upto 10m)</li> <li>Laser Scanner: Range upto 15m, Viewing angle &gt;45°</li> </ul>
7.	Forward-Looking or Sector Scan Sonar	100m range
<b>MANIPULATOR ARMS</b>		
8.	Manipulator arms with 5 or more functions	<ul style="list-style-type: none"> <li>Two or more Manipulator arms</li> <li>With tools to grab small rocks etc. from the seabed</li> </ul>
<b>TOOLS</b>		
9.	Underwater chain saw/Rock Saw / Cutter / Splitter	Various types
10.	Scoops, nets, knives	Various types
<b>ROV SAMPLING SYSTEMS</b>		
Seawater characterization including chemical and thermal data collection:		
11.	Extendable temperature probe	<ul style="list-style-type: none"> <li>350° C or more</li> <li>With titanium needle</li> <li>ICL-T probe or better</li> </ul>
12.	Multi-Chamber Suction Sampler with extendable Suction tubes	<ul style="list-style-type: none"> <li>6 chambers or more</li> </ul>
13.	Deep-sea Water Sampling	<ul style="list-style-type: none"> <li>4 or more bottles; 150ml or more</li> <li>pure and uncontaminated in-situ samples</li> <li>non-reactive and high-temperature resistance</li> <li>similar to KIPS (Emma Tech.) system or better</li> </ul>
14.	Gas Tight Deep-sea Water Sampling	<ul style="list-style-type: none"> <li>Similar to as below or better; for 4 samples or more</li> <li>i. <a href="https://onlinelibrary.wiley.com/doi/full/10.1111/j.1468-8123.2006.00143.x">https://onlinelibrary.wiley.com/doi/full/10.1111/j.1468-8123.2006.00143.x</a></li> <li>ii. <a href="https://oceanexplorer.noaa.gov/explorations/05lostcity/background/sampling/sampling.html">https://oceanexplorer.noaa.gov/explorations/05lostcity/background/sampling/sampling.html</a></li> </ul>
15.	Push Core with sample collection Boxes	<ul style="list-style-type: none"> <li>6 or more</li> </ul>
16.	Water Bottle rack	<ul style="list-style-type: none"> <li>5L bottles Go-Flo type, 5 or more</li> </ul>
17.	Hydraulic Multi-corer	<ul style="list-style-type: none"> <li>With 4 tubes or more</li> </ul>
18.	ROV-Mounted Box Corer	<ul style="list-style-type: none"> <li>2 or more</li> </ul>
19.	Multi-chamber Insulated Bio-boxes	<ul style="list-style-type: none"> <li>4 chambers or more (for fragile animals)</li> </ul>
<b>PHYSICAL OCEANOGRAPHY</b>		

20.	CTD Sensor (with following aux. sensors)	▪ Seabird FastCAT SBE49, Similar to or better
21.	Pressure Depth Sensor	▪ Paroscientific 8000 Series, Similar to or better
22.	Oxygen Sensor	▪ Aanderaa 3841 O2 Optode, Similar to or better
23.	PH Sensor	▪ AMT Deep Water Sensor, Similar to or better
24.	Turbidity Sensor	▪ Sea-Point Turbidity Meter (STM/MCBH6M), Similar to or better
25.	Carbon Dioxide Sensor	▪ ControsHydroC CO2, Similar to or better
26.	Nitrate Sensor	▪ Seabird DeepSUNA, Similar to or better
27.	Sound Velocity sensor	▪ ‘Digital Time of Flight’ sensor
28.	High-Temperature probe	▪ Upto 600° C ▪ PT100 or better
29.	Biomolecular Analyzer	-
30.	Redox Potential Sensor	-
31.	Fluorometer	-
32.	Methane sensor	-

4.4. **Seabed Sampling Basket:** Bulk Sampling Trays/basket facility to collect samples of upto 500kgs or more in tandem with ROV is to be provided.

Note: A few of the above-stated equipment/instruments/samplers etc. are not commercial-of-the-shelf products, being of very specific utility and thus can be dispensed with at the discretion of NCPOR (during technical evaluation). However, efforts are to be made to arrive at a feasible solution for undertaking the desired scientific task by the bidders/contractors. Some technical requirements may be modified as per discussions in the Pre-bid meeting.

## 5. NAVIGATION AND POSITIONING

- 5.1. All positioning is to be obtained by Differential Global Positioning System (DGPS) with Satellite-based corrections or better.
- 5.2. All positioning is to be referenced to WGS-84 Datum in Decimal degrees.
- 5.3. All times will be represented in UTC and units in the Metric system.
- 5.4. All survey work shall be undertaken using UTM Positioning in the WGS-84 datum.
- 5.5. USBL based navigational control facility to be provided for positional accuracy of 5m or better for ROV & AUV operations.
- 5.6. Geodetic conversion parameters to be provided, if any.
- 5.7. All Vessel offsets are to be defined and a diagram showing the vessel offsets is to be rendered.

## 6. DELIVERABLES

The following deliverables are required by NCPOR from the bidder during the period of the services:

- 6.1. Daily Reports: The Daily Reports shall be in a format acceptable to NCPOR (Format to be proposed by Contractor and approved by NCPOR, with modifications, if any), and shall include all relevant operational, nautical and technical information for each calendar day the vessel is engaged in providing the services for NCPOR. The Daily Reports shall include as a minimum, the weather and sea conditions (a breakdown of all hours associated with the vessel activities and allocation of these hours as Survey Days, Transit Days, Maintenance and Minor Repair Days, Weather Downtime Days, Other Downtime Days, In-Port Days etc.); Scientific Operations undertaken; the progress of the onboard data processing; details of any significant Health, Safety and Environment related occurrences; description of any problems and other items of note. The Daily Reports shall be signed each day by the Leader of the Contractor's team onboard and the NCPOR representative onboard who is authorized to sign, and all discrepancies shall be clearly annotated, if any. Copies of Daily Reports in a format shall also be sent by email every day to NCPOR, unless weather or atmospheric conditions or equipment failure prevents communication from the vessel to the shore, on any particular day.
- 6.2. Quality Assurance Check: Quality Assurance Check shall be in a format acceptable to NCPOR, and shall be checked and initialed by an appropriately trained, experienced and authorized employee against all quality assurance steps as carried out by the bidder.
- 6.3. Operational Field Reports: The bidder shall submit to NCPOR, three copies of the Operational Field Report, plus a copy in electronic format (Microsoft Word or Excel/PDF) in a format proposed by the Contractor and accepted by NCPOR. The Operational Field Report shall contain, as a minimum, a voyage summary; Vessel and Equipment used, copies of the Daily Reports; a daily systems log; a parameter report which provides a detailed description of the equipment used in the survey, operational procedures associated with the equipment, the quality control procedures associated with the equipment, the parameters for that equipment to operate within the specifications; and the details of operations at survey locations, as detailed in the Tender Document etc.
- 6.4. Digital Data: The bidder shall, together with the Operational Field Report submit TWO copies of all raw and processed data as per the specifications provided in the Tender Document's section 6.5 and 6.6. This shall be handed over to NCPOR before cruise completion / Disembarkation.
- 6.5. A description of anticipated deliverables is given below and shall be part of the submitted digital data:
  - i. Cruise report with details of all scientific equipment onboard, survey plans, scientific observations / operational details, survey logs, detailed diary of events, preliminary observations.

- ii. Raw data, as per instrument/equipment (OEM format).
- iii. Processed data, as per instrument/equipment.
- iv. Maps/plots/charts for various parameters employed during the surveys for each location.
- v. Interpretation of results from all instruments/sensors employed during the surveys.
- vi. Maps showing zones of active and inactive hydrothermal vents.
- vii. Map showing location and extent of hydrothermal sulphide deposits.
- viii. Based on anomaly maps and the chemistry of samples collected, preparation of outlines of sulphide mineralisation zones where possible. The chemistry/mineralogical data of selected samples shall be shared by NCPOR after analysis (within 60 days of completion of surveys) and the same to be integrated with available datasets for preparation of an outline map of mineralization zones.
- ix. Comprehensive interpretation report of the exploratory works undertaken and the final outcome in terms of a detailed description of the Active and Inactive Hydrothermal vents and the location and extent of Hydrothermal Sulphide deposits (In document (.doc & .pdf) format and Five printed copies).
- x. Both primary and derived digital data to be provided in industry-standard formats such as PDF, MS Office, JPEG / PNG, DXF / DGN, GDF, XTF, SEGY, ASCII and GIS compatible formats, as suitable.
- xi. All AUV and ROV tracks synced with acquired data and video/still imagery, (preferably) accessible through EIVA Navimodel Producer software.

6.6. An instrument/sensor/parameter specific list of expected data deliverables is detailed below:

<b>Data</b>	<b>Description</b>
Navigation	<ul style="list-style-type: none"> <li>➤ Table of file names/line names for all sensors including metadata</li> <li>➤ Fix point table</li> <li>➤ Vessel track plot in GIS deliverable (SSDM survey track line)</li> <li>➤ Sensor track plot in GIS deliverable (SSDM survey track line)</li> <li>➤ Raw navigation files in OGP P1 and P2 format</li> <li>➤ Processed navigation files in OGP P1 and P2 format</li> </ul>
Navigation (Processed)	<ul style="list-style-type: none"> <li>➤ Processed navigation in OGP P1 and P2 format navigation files.</li> <li>➤ Edited track plots in GIS database, GIS projects etc.</li> <li>➤ GIS file + symbology (SSDM-V2 as default)</li> <li>➤ SSDM Metadata standards throughout</li> <li>➤ Navigation in project geodesy/projection</li> <li>➤ Lease block Identifier throughout (in SSDM attribute fields)</li> </ul>
Electrical potential	<ul style="list-style-type: none"> <li>➤ Raw data in OEM native and Open-source compatible format.</li> <li>➤ Processed data.</li> <li>➤ Anomaly maps for each location.</li> </ul>



	<ul style="list-style-type: none"> <li>➤ Prospect Map.</li> <li>➤ 3D model of the deposits.</li> </ul>
Imaging - Still and Video	<ul style="list-style-type: none"> <li>➤ Raw format</li> <li>➤ Processed images and Video</li> <li>➤ Orthophoto mosaic images for each location</li> <li>➤ High-resolution bathymetry (XYZ and DTM) using Structure-from-Motion (SfM) photogrammetry</li> </ul>
Bathymetry and Backscatter (Raw)	<ul style="list-style-type: none"> <li>➤ Un-gridded bathymetry and backscatter XYZ, processed for heave, roll, pitch, velocity, draught, tide, and de-spiked</li> <li>➤ Data to be supplied in manageable file sizes</li> <li>➤ OGP P1-format header to be appended to each file, as required</li> <li>➤ XYZ records to be in Longitude (DD), Latitude (DD), negative depth (m) - space or comma-delimited, 8 decimal places for position and two decimal places for depth</li> <li>➤ Also, XYZ records to be in Easting (m), Northing (m), negative depth (m), - space or comma-delimited, two decimal places</li> <li>➤ Maps / plots / charts</li> </ul>
Bathymetry and Backscatter (Processed)	<ul style="list-style-type: none"> <li>➤ Gridded bathymetry and backscatter XYZ, processed for heave, roll, pitch, velocity, draught, tide and de-spiked.</li> <li>➤ OGP P1-format header to be appended to each file, as required</li> <li>➤ XYZ records to be in Longitude (DD), Latitude (DD), negative depth (m) - space or comma-delimited, 8 decimal places for position and two decimal places for depth</li> <li>➤ Easting (m), Northing (m), negative depth (m), - space or comma-delimited, two decimal places</li> <li>➤ Cell size shall be 0.5m x 0.5m or better</li> <li>➤ TVU and THU uncertainty grids at 0.5m<sup>2</sup> resolution</li> <li>➤ Median Surface using the CUBE method applied during data processing</li> <li>➤ Gridding parameters to be agreed onboard, shall be based on the best grid resolution achievable within each survey area.</li> <li>➤ Data to be supplied in manageable file sizes</li> <li>➤ DTM file in GIS grid file format</li> <li>➤ Data to be supplied in Open-source / widely compatible file formats</li> <li>➤ Combined MBES/ SSS target table (in GIS format) with data examples</li> <li>➤ Maps / plots / charts for each location.</li> <li>➤ Bathymetry with electric potential inversion draped, SBP profiles, 3D magnetic inversion, ORP anomalies, pH and turbidity etc.</li> </ul>

Sound velocity	<ul style="list-style-type: none"> <li>➤ SVP data in CSV / MS Excel format</li> <li>➤ Both upward and downward profiles</li> </ul>
Other Geophysical (Raw)	<ul style="list-style-type: none"> <li>➤ Raw SAS / SSS data to be delivered in .XTF/ open-source format with navigation embedded</li> <li>➤ Raw SBP data OEM and SEG-Y format (TWTT) with navigation embedded</li> <li>➤ Raw magnetometer data in x, y, z format with navigation embedded</li> <li>➤ Raw navigation in OGP P1 and P2 format navigation files, as required</li> </ul>
Sub-bottom Profiler (Processed)	<ul style="list-style-type: none"> <li>➤ SBP data processed and delivered in SEG-Y format with terrain correction embedded in the file header/data (water column replacement)</li> <li>➤ Annotated cross-sections in PDF and JPG format</li> <li>➤ KP/Depth represented on X/Y axes</li> <li>➤ Sediment thickness maps for each location</li> </ul>
Sidescan Sonar (Processed)	<ul style="list-style-type: none"> <li>➤ SSS data processed to GeoTiff and Geodatabase Raster</li> <li>➤ SSDM mosaic to 0.25m<sup>2</sup> resolution</li> <li>➤ Seabed features point/line/polygons in GIS database</li> <li>➤ Bedform features in GIS database</li> <li>➤ Combined MBES/SSS target table in GIS database with associated hyperlinked data example images.</li> <li>➤ Processed SSA maps for each location.</li> </ul>
Magnetometer (Processed)	<ul style="list-style-type: none"> <li>➤ Anomaly table in GIS format</li> <li>➤ Full magnetometer ungridded data, in GIS database (point format)</li> <li>➤ Anomaly targets in GIS database</li> <li>➤ Processed data in x, y, z format with navigation embedded</li> <li>➤ Maps / plots / charts for each location</li> </ul>
CTD	<ul style="list-style-type: none"> <li>➤ Raw data including instrument Configuration files etc.</li> <li>➤ Processed data in CSV/ASCII format</li> <li>➤ Maps / plots / charts</li> </ul>
Water / Sediment / Rock samples	<ul style="list-style-type: none"> <li>➤ As per NCPOR requirements and stored in appropriate cold storage as indicated in specifications of onboard facilities.</li> </ul>

## 7. OTHERS

7.1. Bidders to propose a methodology for execution of surveys including details like Track spacing (optimal) for various geophysical and imaging surveys with AUV flight height etc. with justification, estimated duration of completion of all activities with timelines (each activity-wise timelines and including the time needed for preparation and submission of final exploration report etc.), and any other details as deemed relevant.

Any additional sensors and mapping tools relevant for the said activities for undertaking the task effectively, productively and rapidly may also be suggested.

- 7.2. The successful bidder must undertake to complete all aspects of the surveys with deliverables including data acquisition, onboard processing, post-processing, documentation and making them available to NCPOR as detailed in this Tender Document to the best satisfaction of NCPOR within 90 days of completion of the survey.
- 7.3. The successful bidder shall undertake to provide (including but not limited to) all materials, labour, expenses, consumables, fuel, lubricants, and data media, such as paper, CDs, DVDs, external hard disks, as may be required for the performance of the services.
- 7.4. The bidder shall undertake the responsibility of deleting/erasing/handing over to NCPOR all the products of the acquired, processing and interpretation of the various datasets from the computers/ Hard disks/ or any other media used for the purpose during the survey and any paper print outs or maps, or notings made shall be handed over to NCPOR.
- 7.5. The successful bidder undertakes to deliver, upon the completion of the work, all originals and copies of maps, charts, documents, reports, and data provided by NCPOR or acquired/generated by the bidder in the course of providing the services, along with the storage media and the particulars of the format of recording of the data, in a properly packed and secure manner to NCPOR; and undertakes to provide all the deliverables as provided in this Tender Document within the schedule provided.
- 7.6. The bidder is fully liable for compliance in all respects with, and giving of all notices and paying of all taxes, duties and fees as required by the provisions of any country by-law.
- 7.7. The bidder is fully liable for payment of Customs duty and other charges and for arranging clearance from the Customs and Port Authorities, all equipment, instruments, other items Scientists/technical personnel participating in the vessel/expedition as may be required for providing the Services, whenever such clearances are necessary.
- 7.8. The bidder undertakes to re-export, at its own cost, all equipment, spares and consumables that were imported but were not consumed for providing the services under this tender document, and to bear any penalty that may be levied by the concerned authorities for delay/failure to re-export such material after the completion of the work within such a time as stipulated by the authorities.
- 7.9. The bidder takes full responsibility for the removal and appropriate disposal of any wreck or debris of the vessel(s) or any part thereof.
- 7.10. The bidder undertakes to bear all costs and delays arising out of any breakdown, industrial action and any other contingency. If the bidder breaches any of its obligations under this clause, the bidder shall remedy, at its own cost, any defect, which includes any failure to meet the required standard(s), to NCPOR's satisfaction and within such time as may be specified by NCPOR.

## 8. DATA DELIVERY

Unless otherwise directed by NCPOR, all datasets shall be delivered to NCPOR Representative onboard and/or, transportation prepaid (if any) to:

**The Group Director (DSE&M),  
National Centre for Polar & Ocean Research (NCPOR)  
Ministry of Earth Sciences, Govt. of India, Headland Sada, Vasco-da-Gama,  
Goa – 403 804. (India).Email: [john@ncpor.res.in](mailto:john@ncpor.res.in), Phone: +91-832-2525570**

## 9. ADDITIONAL DETAILS, IF ANY

Please provide any other relevant details separately e.g. Brochures etc. The details/information may be provided as an appendix separately, and reference about the appendix may be made in the appropriate column in the format.

## 10. OWNERSHIP OF INFORMATION / DATA AND CONFIDENTIALITY

“Confidential Information” shall mean any information/data acquired or shared under this contract in any form (written/digital) including but not limited to data pertaining to geological, geophysical, geochemical, biological, physical oceanographic and meteorological observations etc. as well as all interpretative and derivative data, including maps/charts, photographs and video, reports, analyses, interpretations, evaluation and all other associated information.

### OWNERSHIP

- i. Ownership of all acquired data, in any form, is assigned to NCPOR at the time it is initially recorded/obtained.
- ii. The Contractor shall, as soon as possible, provide to NCPOR, free of cost, all data collected/generated in pursuance of this contract, but not later than the timelines stipulated in the contract.
- iii. All data shall be the sole property and Proprietary Information of the NCPOR / Ministry of Earth Sciences (Government of India) only, at all times during and after the contract.
- iv. All intellectual property rights relating to datasets/information created under this Agreement shall be the sole property of NCPOR.

### CONFIDENTIALITY

1. The Contractor undertakes and acknowledges:
  - i. To keep all Information confidential and shall take all reasonable steps to preserve the confidentiality of the Confidential Information and indemnify NCPOR from all losses, damages and expenses they may incur or sustain as a result of any unauthorised use or disclosure of the Confidential Information.

- ii. Upon successful completion of the contract (or upon termination, if any) to immediately deliver all material relating to NCPOR's Confidential Information/datasets (including all copies of such materials).
  - iii. Acknowledges the strict confidentiality and proprietary nature of all Confidential Information and that no right, entitlement or interest in NCPOR's Confidential Information is extended or conveyed to any other party.
  - iv. Shall not at any time disclose, divulge, communicate, publish or make available in any way to any person or entity any of the Confidential Information in full or parts. Nor shall directly or indirectly take advantage of, use or in any way exploit the Confidential Information.
  - v. Not to use such Confidential Information otherwise than for the purposes of the contract unless such use is specifically authorized in writing by the NCPOR explicitly.
  - vi. Not to disclose Confidential Information to any persons employed in its business other than those having a need-to-know for the purposes of the contract, and then only on the understanding that such persons are made aware of and undertake to observe the provisions of this Agreement.
  - vii. Not to disclose Confidential Information to any third party except for the purposes of the contract and with the prior written consent of NCPOR (which consent shall not be unreasonably withheld) and then only on the understanding that such third party is made aware of and undertakes to observe the provisions of this Agreement.
  - viii. Not to copy or reduce Confidential Information to writing except as may be strictly necessary for the purposes of the contract; and
  - ix. To return to the NCPOR on demand all copies of Confidential Information reduced to writing (or other permanent form) and to destroy all notes and any other written reports or documents which may have been made by the Contractor to the extent they contain any part of or reference to the Confidential Information in whole or part except as authorized in writing by the NCPOR or as is strictly necessary to complete any outstanding obligations relating to the contract where after such Confidential Information shall be returned or destroyed as aforesaid.
2. This Agreement shall not be construed as granting expressly or impliedly any rights under patents, copyright or other forms of intellectual property rights belonging to the Government of India in respect of Confidential / Proprietary Information, the ownership of which shall remain vested in the NCPOR / Ministry of Earth Sciences (Government of India) at all times.
  3. Should the Contractor hereto be the subject of a merger or any other form of reorganization, it is agreed that the successor in law to such party shall also be bound by the terms of this Agreement as if such party were an original part hereto.

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## **SECTION C**

### **TERMS AND CONDITIONS OF THE TENDER AND INSTRUCTIONS FOR BID SUBMISSION**

Director, NCPOR invites sealed tenders for “*Conducting Near-Bottom AUV-ROV surveys and exploratory works to delineate locations of Seafloor Massive Sulphide deposits*” in the Indian Ocean under “Two Bid System” (Cover I: Techno-commercial bid and Cover II: Price Bid in separate covers within a sealed cover super-scribed with “**OFFER FOR CONDUCTING NEAR-BOTTOM AUV-ROV SURVEYS AND EXPLORATORY WORKS TO DELINEATE LOCATIONS OF SEAFLOOR MASSIVE SULPHIDE DEPOSITS**”) commencing from 24<sup>th</sup> of Mar., 2022 as per terms and conditions.

Tender document can be downloaded from the NCPOR website ([www.ncpor.res.in](http://www.ncpor.res.in)) or from the CPP portal (<https://eprocure.gov.in/cppp/>) and shall be submitted in the prescribed format.

The bidders are required to submit their sealed bids to Director, NCPOR and/or dropped in the designated tender box kept at NCPOR, Goa on or before the last date of tender submission. Instructions for bid submission are given below:

#### **1. SEARCHING FOR TENDER DOCUMENTS**

- 1.1. There are various search options built in CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 1.2. Once the bidders have selected the tenders they are interested in, they may download the requirement documents/tender schedules.

#### **2. INSTRUCTIONS TO BIDDERS**

- 2.1. Preparation of bids:
  - 2.1.1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
  - 2.1.2. Please go through the tender advertisement and the tender document carefully to understand these documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents-including the names and content of each of the documents that need to be submitted. Any deviations from these may lead to the rejection of the bid.

- 2.1.3. An authorized letter needs to be brought for the pre-bid meeting, if any.
- 2.2. Bidders are advised to go through the Notice Inviting Tender (NIT), Bid Evaluation Criteria and Bid documents before submission of bids.
- 2.3. Bidders must ensure that all documents, certificates and supporting technical literature etc. including the documents/certificates of Vessel offered are submitted in the English language. If original documents are in any other language, then the certified English translations are to be provided.
- 2.4. Ensure that the bids are submitted under the “*Two Bid System*” (Cover-I: Techno commercial Bid and Cover-II: Price Bid) failing which offer will be rejected.
- 2.5. ***Techno commercial bid (Cover I)*** should contain the following:
  - 2.5.1. Tender Acceptance Form as per Annexure-I duly endorsed in acceptance.
  - 2.5.2. Compliance Statement duly endorsed in acceptance as per Annexure-II.
  - 2.5.3. Criteria for Technical Evaluation duly endorsed in acceptance as per Annexure-III.
  - 2.5.4. Details of Bidder and offered services as Annexure-IV.
  - 2.5.5. Bid Bond/EMD of requisite value and validity as per Annexure-VI.
  - 2.5.6. The unpriced bid in the given format (Annexure VII) indicating all contents excluding prices to be enclosed. Disclosure of any prices in the unpriced bid shall be liable for rejection.
  - 2.5.7. Any other technical information and documents considered necessary as Annexure -XI.
  - 2.5.8. All supporting documents to substantiate the qualification criteria must be attached as Annexure-XII.
  - 2.5.9. In case the bidder is a Joint venture company, the Joint venture Company or its technical collaborator/Joint venture partner should meet the criteria for performing the work. The bidder should submit a Memorandum of Understanding (MoU)/Agreement with their technical collaborator/joint venture partner (in case of Joint venture) clearly indicating their roles under the scope of work.
  - 2.5.10. In case the bid is submitted by a consortium, the following documents should be enclosed:
    - 2.5.10.1. All the members of the consortium must undertake in their MOU that each party shall be jointly and severally liable to NCPOR for any and all obligations and responsibilities arising out of this contract.
    - 2.5.10.2. The leader of the consortium should confirm unconditional acceptance of full responsibility towards the scope of work and deliverables of this tender. This confirmation should be submitted along with the techno-commercial bid as an Undertaking.
  - 2.5.11. Pre-Contract Integrity Pact as per Annexure-IX.

2.6. **Price bid (Cover-II)** should contain the following:

- 2.6.1. Duly filled in typewritten or printed in ink and also indicating currency of quote whether Indian Rupees or United States Dollar (USD) or EURO must be enclosed strictly as per the PRICE BID FORMAT (Annexure-VII) without any alterations or any conditions, with authorized signatures and stamp.

While making the payment all bank charges within India shall be borne by NCPOR and outside of India to the bidder account. Bids shall be evaluated in equivalent Indian Rupees at the Foreign exchange Bill Selling rate as declared by State Bank of India, Vasco-da-Gama, Goa, India, on the day of the opening of the techno-commercial bid.

Price bid must be filled considering the following points:

- 2.6.1.1. Indian bidders should quote in Indian Rupees only.
- 2.6.1.2. L1 shall be arrived by total cost as per enquiry specifications.
- 2.7. Both techno-commercial and price bids must be submitted to NCPOR under one sealed cover super-scribed **“OFFER FOR CONDUCTING NEAR-BOTTOM AUV-ROV SURVEYS AND EXPLORATORY WORKS TO DELINEATE LOCATIONS OF SEAFLOOR MASSIVE SULPHIDE DEPOSITS”** containing **techno-commercial bid (Cover-I) and Price bid (Cover-II)** in two separate sealed envelopes super-scribed as **“TECHNO COMMERCIAL BID”** AND **“PRICE BID”** respectively not later than **1100Hrs IST, 02<sup>nd</sup> of May., 2022** on the following address:

**The GROUP DIRECTOR,  
Deep Sea Exploration and Mapping (DSEM) Group,  
National Centre for Polar & Ocean Research,  
Ministry of Earth Sciences, Govt. of India,  
Headland Sada, Vasco-Da-Gama, Goa – 403804, INDIA.**

- 2.8. Ensure that your bid reaches NCPOR, Goa before the last date and time for submitting the tender. Any bids received after the closing date and time of the tender will not be considered for evaluation.
- 2.9. Ensure that each page of the tender document are signed by the Bidder and returned in original to this office along with the bid.
- 2.10. The complete bid including the prices must be type-written or printed in Ink. Bids written in pencil will be rejected.
- 2.11. Currency of quote in Indian Rupees for Indian Bidders OR in case of foreign bidders in United States Dollar (USD) or EURO, should be indicated on the quoted financial bid format (Annexure-VII), else the quotation will be summarily rejected. Currency once quoted will not be allowed to change. The Contract Agreement shall be entered in the currency of quote.
- 2.12. Bid bonds should be submitted in the prescribed format (given in Annexure VI) or as a DD drawn in favour of NCPOR, Goa along with the techno-commercial bid Bank



guarantee in physical form. Any foreign bidder who opts to submit the bid bond through bank guarantee (as per the prescribed format) may send the same through SWIFT MESSAGE after remitting applicable bank charges of State Bank of India, Commercial Branch, Vasco-da-Gama on or before the due date of the tender to the following bank address:

Name of the Beneficiary	National Centre for Polar and Ocean Research (NCPOR)
Name & Address of Bank Branch	State Bank of India, Commercial Branch, Shree Vidyadiraj Bhavan, Francisco Luis Gomes Road, Vasco-Da-Gama Goa – 403 802, India.
Bank Account Number	10153336180
Bank Account Type	Savings Account
Bank Branch Code	04116
IFS Code	SBIN0004116
MICR No.	403002047
SWIFT CODE	SBININBB229
PAN No.	AACFN4991P
TAN No.	BLRN01981A

The Bank Guarantee (BG) for Bid Bond or Earnest Money Deposit (EMD) & BG for Delivery cum Performance Bank Guarantee should be provided from Scheduled Bank in India or Foreign Bank having a branch in India.

Bank Guarantee (BG) shall be issued by the issuing bank to the SWIFT account of the NCPOR as per the details below and SWIFT message copy to this effect to be provided to NCPOR in time. All BG charges including the BG handling charges at NCPOR's bank i.e. State Bank of India, Vasco-da-Gama, shall be paid by issuing bank.

Indian banks at their option may issue original BG on a stamp paper in place of the SWIFT option.

2.13. The EMD amount in currency will also be accepted by enclosing the following along with the technical bid.

- i. EMD transferred SWIFT code message and while transferring narration should be DSEMHSSEMD.....(bidder name)
- ii. Transaction/bank charges should be added to the EMD amount before remittance. Final receipt at NCPOR account should not be less than the EMD amount sought in this tender.
- iii. Undertaking in the following format with seal and signature of the bidder.

### Undertaking by the Bidder (Format)

I/We the bidder M/s ..... undertake that while remitting EMD against the tender No....., all the bank charges and loss in foreign exchange during the time of crediting the amount to NCPOR account as well as while refunding the amount by NCPOR to the beneficiary account in foreign currency will be borne by the bidder. Accordingly, I/We accept that NCPOR shall refund the net EMD amount after deducting all estimated bank charges and estimated loss in foreign exchange involved to the bidder account including the cushion for fluctuations in exchange rates and without interest.

- 2.14. If any bidder prefers to deposit the EMD / Performance bond amount directly in the NCPOR's bank, it may be noted that NCPOR will refund the same as per tender terms in the currency of quote without any interest and only the amount credited at the time of bid submission in NCPOR's account in Indian Rupees. Estimated bank transaction charges and cushion for FOREX rate fluctuations etc. would be deducted before refund.
- 2.15. Bid Bond shall be forfeited in the following events:
- 2.15.1. If the offer is withdrawn during the validity period or any extension thereof.
  - 2.15.2. If the offer is altered or modified in a manner not acceptable to NCPOR during the validity period or any extension of the validity duly agreed by the Bidder or after issue of Letter of Intent (LOI) by the NCPOR.
  - 2.15.3. If a bidder whose tender has been accepted but fails to enter into the contract within 30 days of LOI issued by NCPOR; and fails to furnish 10% of the total contract value as Delivery cum Performance Bank Guarantee at least 15 days before the expiry of Bid bond.
- 2.16. Bid Bond of unsuccessful bidders will be returned after the finalization of the tender. Bid Bond of the successful bidder will be returned on receipt of Delivery cum Performance Bank Guarantee or can be adjusted in case of account transfer.
- 2.17. Ensure that each page of the tender document are signed by the bidder and returned in original to this office along with the bid.
- 2.18. The complete bid including the prices must be type-written or printed in Ink. Bids written in pencil will be rejected.
- 2.19. Offer(s) are to be dropped in the box placed in NCPOR or may be sent by post or courier. However, NCPOR will not be responsible for delay, loss or non-receipt of application or Tender Document sent by post/courier and will not entertain any correspondence in this regard. Tenders by Fax/E-mail will not be accepted.
- 2.20. **NOTE:** Any Payment to/from foreign bidders would be made in the quoted currency as per the tender. However, in case of any sanctions on any specific currency transactions by any country or by UN/EU/OFAC etc. which may cause delay/blockage/rejection etc., a suitable alternate currency as mutually agreed will be used for the fund transactions. The bidders may consider such sanctions while submitting the bid.

- 2.21. For international transfers of funds towards the payments by the NCPOR to the Bidders/Contractor, the bank charges that would be applicable within India would be borne by the NCPOR and any charges that would be applicable outside India would be borne by the Bidders/Contractor.

### 3. GENERAL TERMS AND CONDITIONS

- 3.1. NCPOR reserves the right to reject any or all Tenders without assigning any reasons thereof.
- 3.2. In case the bidder is not the owner, agents or authorized representatives should provide a letter from Owners authorizing them to bid on their behalf.
- 3.3. The following critical dates must be adhered to:

Critical Dates	Date(DD/MM/YYYY)	Time (Hrs:Mins) IST
Tender Publishing	24.Mar.2022	11:00
Document download start	24.Mar.2022	11:00
Last date to receive any queries/clarifications (in writing/email) regarding tender	05.Apr.2022	17:00
Pre-Bid Meeting	08.Apr.2022	11:00
Bid Submission end date	02.May.2022	11:00
Bid opening date	04.May.2022	11:00

A pre-bid meeting shall be arranged on 08.Apr.2022 or the next working day (in case it falls on a holiday or declared a closed holiday) to clarify any queries etc. from the bidders. Bidders to ensure that all the queries reach NCPOR in-writing/email before 1700 hrs IST on the 05.Apr.2022. Only the queries received before the stipulated time shall be addressed by NCPOR, if any.

A web-meeting shall be arranged at 1100 hrs IST on the scheduled date, and link to join the meeting shall be shared with concerned bidders as indicated above.

In case any queries are received, the last date of submitting the tender shall be 15 days from the date of publication of the corrigendum of the tender, and the same shall also be notified on the NCPOR website.

- 3.4. In case certain clarifications are sought by NCPOR after the opening of tenders, the reply of the bidder should be restricted only to the clarifications sought.
- 3.5. Delay in mobilization and Liquidated Damages (LD):

- 3.5.1. LD will be calculated on the basis of Total contract value (i.e. Services Contract Value charges) excluding duties and taxes, where such duties/taxes have been shown separately in the contract, if any.
  - 3.5.2. The service provider should mobilize and deploy the required Vessel, manpower and complete set of equipment so as to commence the services as specified by NCPOR.
  - 3.5.3. Any delay on the part of the service provider in mobilization/commencement/handing over of deliverables within the specified period, shall attract LD charges. If the contractor is unable to mobilize/deploy and commence the services within the period specified, it may request NCPOR for extension of the time with unconditionally agreeing for levy and recovery of LD. Upon receipt of such a request, NCPOR may at its discretion, extend the period of mobilization and shall recover from the CONTRACTOR. The LD charges shall be levied as a sum equivalent to 2% (Two percent) of the contract value, for each week of delay or part thereof, at pro-rata basis (More than 6 Hours to be considered as Full Day and more than 3 days to be considered as Full Week), subject to a maximum of 10% of the total contract value.
  - 3.5.4. The parties agree that the sum specified above is not a penalty but a genuine pre-estimate of the loss/damage which will be suffered by NCPOR on account of delay on the part of the CONTRACTOR and the said amount will be payable without proof of actual loss or damage caused by such delay.
  - 3.5.5. If the entire scope of work is not completed within project completion schedule, due to reasons attributable to CONTRACTOR, then NCPOR at its option may extend the contract with the levy of Liquidated Damages (LD). In such event, the bidder shall arrange re-mobilisation of the vessel(s), equipment and personnel, if required, at its cost and complete the work with the approval of NCPOR.
  - 3.5.6. The applicable taxes e.g. GST etc. on the LD shall have to be borne by the CONTRACTOR, if any. Accordingly, the Liquidated Damages shall be recovered from the CONTRACTOR along with taxes, as applicable.
- 3.6. Force Majeure:
- "Force Majeure" means but not be limited to any act, circumstances or event beyond the control of either party, including, without limitation, earthquakes, fires, tropical cyclones, other acts of God, riots, strikes, lock outs, insurrection resulting from rebellions, civil disturbances or orders from governmental authority. For the avoidance of doubt, equipment breakdown shall not be considered a Force Majeure event. The following events/circumstances can be considered as Force Majeure:
- 3.6.1. Riot, war, invasion, act of foreign enemies, hostilities (whether war be declared or not) acts of terrorism, civil war, rebellion, revolution, insurrection of military or usurped power;

- 3.6.2. Requisition or compulsory acquisition by any governmental or competent authority; ionizing radiation or contamination, radio activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive assembly or nuclear component;
- 3.6.3. Pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds;
- 3.6.4. Earthquakes, floods, fires or other physical natural disasters, but excluding weather conditions regardless of severity.
- 3.7. Arbitration Clause:  
All questions and disputes relating to the meaning of the specifications and instructions herein and as to the quality of work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be referred to a sole arbitrator for adjudication through arbitration. The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act 1996 of India in an arbitration court in India or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force, shall apply to the arbitration proceedings. An officer not below the rank of Director to Government of India, preferably drawn from the panel of Arbitrators drawn by the Government, if any, may be appointed to act as arbitrator by an appointing authority, which should normally be an officer not below the rank of Joint Secretary to the Government of India.
- 3.8. Signing of Integrity Pact:  
An Integrity Pact is required to be signed between NCPOR and the prospective bidders in order to ensure that the parties are bound by the recommendations of Independent External Monitors (IEMs), in case any complaint related to the contract is found substantiated. The pact essentially envisages an agreement between the prospective bidders and the buyer committing the persons/officials of both the parties not to exercise any corrupt influence on any aspect of the contract. Only those bidders who have entered into such an Integrity Pact with the buyer would be competent to participate in the bidding. The Integrity Pact would be effective from the stage of invitation of bids till the complete execution of the contract. A copy of the Integrity Pact is enclosed as Annexure IX.

NCPOR has implemented the Integrity Pact for which the appointment of the following Independent External Monitors (IEMs) has been done:

- 3.8.1. **Dr. S.K. Sarkar**, IAS (Retd.), B-104, Nayantara Aprt., Plot 8 B, Sector- 07, Dwarka, New Delhi – 110 075. INDIA (E Mail: [sksarkar1979@gmail.com](mailto:sksarkar1979@gmail.com); Mobile No. 0091-9811149324).

3.8.2. **Shri. Rakesh Goyal**, IRSE (Retd.), 2094, Joy Apartment, Sector-02, Dwarka, New Delhi – 110 075. INDIA (E Mail:goyal1259@gmail.com; Mobile No. 0091-9717644264).

3.9. The successful bidder should agree to enter the contract with NCPOR including terms and conditions, as per the model agreement at Annexure X.

\* \* \*

## SECTION - D

### PAYMENT TERMS AND CONDITIONS

1. No advance payment shall be made by NCPOR.
2. Inspection and Survey: The Inspection of all scientific and technical capabilities of the offered vessel shall be carried out by NCPOR alongside a safe berth at Port Louis (Mauritius). Acceptance and condition survey by an independent surveyor to be arranged by the CONTRACTOR in presence of NCPOR Representative(s) at CONTRACTOR's cost.

SL.	MILESTONE	PAYMENT TERMS
1	Milestone-1	10% of the total contract value payment shall be payable upon acceptance of vessel with requisite facilities, Embarkation of NCPOR's personnel and departure to survey area and successful sea-trails, as duly certified by NCPOR's representative onboard within 15 days on submission of invoice.
2	Milestone-2	25% of the total contract value payment shall be payable after the completion of first SIX (6) survey locations duly certified by NCPOR's representative onboard and on submission of raw datasets and preliminary reports etc. and acceptance of NCPOR, within 15 days on submission of invoice.
3	Milestone-3	25% of the total contract value payment shall be payable after the completion of additional SIX (6) i.e. total 12 survey locations completion duly certified by NCPOR's representative onboard and on submission of raw datasets and preliminary reports etc. and acceptance of NCPOR, within 15 days on submission of invoice.
4	Milestone-4	15% of the total contract value payment shall be payable after the completion of additional FIVE (5) i.e. total 17 survey locations completion duly certified by NCPOR's representative onboard and on submission of raw datasets and preliminary reports etc. and acceptance of NCPOR, within 15 days on submission of invoice.
5	Milestone-5	25% of the total contract value payment shall be payable on disembarkation and on submission of processed datasets, Interpretation reports and Final report/maps etc. and acceptance of NCPOR, within 15 days on submission of invoice.
NOTE: Victualling charges shall not be paid separately. Same to be included in Services contract value for TWENTY TWO (22) NCPOR personnel.		

3. Communication Charges: Routine telephone/data communication (including atleast 15Mb per person per day via. Wi-Fi network at common places e.g. recreation room etc.) to be free of cost. Any other Communication charges (Personal phone calls etc.) only for NCPOR's usage shall be payable as per actuals along with supporting documents in form of telephone/data usage bill in original in English Language and duly authenticated by Master of Vessel and Chief Scientist/NCPOR Representative within 15 days of submission of invoice in original.
4. Bunker, Port dues and agency Charges: CONTRACTOR to pay and arrange for all bunkers / other Oils/ lubricants etc. and all Port dues and related charges, agency Charges etc.
5. In case of failure to provide data as per the work standards of the enquiry specifications, no charges shall be payable.
6. The applicable Tax Deductible at Source (TDS) as per Indian Income Tax Act, 1961 amended from time to time shall be deducted from the gross payment to the CONTRACTOR. The bidder should provide Permanent Account Number (PAN) for Indian bidders and Tax Identification Number for foreign bidders as per Indian Income Tax Act, 1961, or as applicable from time to time.
7. While making the payment all bank charges within India shall be borne by NCPOR and outside of India to the bidder account. Bids shall be evaluated in equivalent Indian Rupees at the Foreign exchange Bill Selling rate as declared by State Bank of India, Vasco-da-Gama, Goa, India, on the day of opening of the techno-commercial bid.
8. GSTN should be provided by the bidder (As applicable).

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**TENDER ACCEPTANCE FORM**

**To:**

**The Director  
The National Centre for Polar and Ocean Research (NCPOR),  
Headland Sada, Vasco-Da-Gama,  
Goa-403 804, India**

1. Having examined the Tender Document No. NCPOR/DSEM/HSS/22 dated \_\_\_\_\_ along with all annexures for the performance of the Services tendered for, we, the undersigned, hereby offer to perform the Services in conformity with all the conditions set out in the Tender Document.
2. We agree to abide by this Tender for a period of 120 days from the last date fixed for receiving the same and it shall remain binding upon us until the expiration of the offer.
3. We understand that NCPOR is not bound to accept the lowest or any Tender received.

Signature.....

Name.....

For and on behalf of

.....  
.....  
.....

Duly authorized to sign Tenders for and on behalf of the bidder

.....

Date: .....

**ANNEXURE – II**  
(TO BE SUBMITTED WITH TECHNO COMMERCIAL BID – COVER-I)

**COMPLIANCE STATEMENT**

I/We understand that the bid which does not fulfill any of the following criteria shall be rejected.

<b>S. No.</b>	<b>Compliance clause</b>	<b>Compliance (Strike out whichever is not applicable)</b>		<b>Supporting document for complied criteria to be enclosed by the bidders with technical bid (cover-I) as appendix serial number:</b>
1	Submission of bids in “Two Bid System”. (Techno commercial bid and Price Bid)	Complied	Not Complied	Appendix –I
2	Submission of Bid Bond INR 3,75,00,000/- or USD 4,90,000 or EURO 4,50,000 along with Technical Bid	Complied	Not Complied	Appendix –II
3	Mobilization of the vessel from Port, during Oct./Nov., 2022 for surveys	Complied	Not Complied	Appendix –III
4	Unconditional validity of bid for 120 days from the last date of submission of the bid.	Complied	Not Complied	Appendix –IV
5	Agree to enter the contract with NCPOR as prescribed in the tender document	Complied	Not Complied	Appendix –V
6	Acceptance for submission of Delivery cum Performance Bank Guarantee for the execution of the contract for a sum amount of 10% of total project cost, in case of award of contract to the successful bidder.	Complied	Not Complied	Appendix –VI
7	List of similar work successfully executed in the last Ten years (calculated from the closing date of the bid) and projects currently under execution, if any.	Complied	Not Complied	Appendix –VII
8	In case of any delays in execution of works, the bidder shall extend the validity of Delivery cum Performance Bank Guarantee by atleast 30 days or shall submit a fresh Delivery cum Performance Bank	Complied	Not Complied	Appendix –VIII

	Guarantee 15 days before the expiry of the Delivery cum Performance Bank Guarantee.			
9	Offer submitted in original duly signed by the Owners/authorized representative on each page.	Complied	Not Complied	Appendix –IX
10	Bidder accepts to render services on specifications, terms and conditions mentioned in the tender document.	Complied	Not Complied	Appendix –X
11	Document of legal entity. Turnover related documents. Submission of authority letter from the owner, in case the bidder is not the owner.	Complied	Not Complied	Appendix –XI
12	Pre-Contract Integrity Pact	Complied	Not Complied	Appendix-XII
13	Documentary evidence for fulfilling the eligibility criteria	Complied	Not Complied	Appendix-XIII
14	Class of the Vessel, Seaworthiness & Endurance	Complied	Not Complied	Appendix-XIV
15	Valid Certificates of the vessel	Complied	Not Complied	Appendix-XV
16	Dynamic Positioning (DP) and class	Complied	Not Complied	Appendix-XVI
17	Scientific Facilities (including latest calibration certificates for all sensors etc.)	Complied	Not Complied	Appendix-XVII
18	Other Equipment and Laboratory facilities	Complied	Not Complied	Appendix-XVIII
19	Accommodation	Complied	Not Complied	Appendix-XIX
20	Communication and Navigational facilities	Complied	Not Complied	Appendix-XX
21	Documentary proofs meeting the technical specifications	Complied	Not Complied	Appendix-XXI
22	Work & services related and other Requirements	Complied	Not Complied	Appendix-XXII
23	Any other supporting documents etc.	Complied	Not Complied	Appendix-XXIII

Signature.....

Name.....

For and on behalf of .....

Duly authorized to sign Tenders for and on behalf of the bidder .....

Date: .....

**ANNEXURE – III**(TO BE SUBMITTED WITH TECHNO COMMERCIAL BID – COVER-I as **Appendix 5**)**CRITERIA FOR TECHNICAL EVALUATION**

<b>Sl.</b>	<b>Description</b>	<b>Availability</b>
1	Experience and proven competence in executing similar surveys for exploration of Deep-sea mineral resources and/or Deep-sea surveys and exploration (>3000m water depth) during last TEN (10) years.	
1.a.	Atleast One survey experience utilizing all the desired techniques viz. AUV & Work-class ROV etc. for exploration of Deep-sea mineral resources and/or Deep-sea surveys and exploration (>3000m water depth) during last TEN (10) years.	
1.b.	Atleast TWO (2) or more AUVs are to be deployed simultaneously for undertaking the surveys.	
1.c.	Atleast ONE (1) or more Work-class ROV to be utilised for undertaking site-specific observations.	

**2. Technical specifications of Autonomous Underwater Vehicle (AUV) based sensors:**  
AUV, all sensors and sub-systems to be suitable for 6000m sea-water depth operations

<b>Sl.</b>	<b>Description</b>	<b>Availability</b>
i.	Swath Bathymetric Multibeam Echosounder	
ii.	Synthetic Aperture Sonar	
iii.	Electrical system- iSP/SP	
iv.	Magnetometer	
v.	Chirp Sub-bottom Profiler	
vi.	CTD with Aux. Sensors	
vii.	Sound Velocity sensor	
viii.	Dissolved Oxygen sensor	
ix.	pH sensor	
x.	Methane sensor	
xi.	Turbidity sensor	
xii.	Redox sensor	
xiii.	Navigational Systems	
xiv.	Camera with lights	

**3 Technical specifications of Work-class Remotely Operated Vehicle (ROV) based sensors:** ROV, all sensors and sub-systems to be suitable for 6000m sea-water depth operations

<b>Sl.</b>	<b>Description</b>	<b>Availability</b>
A	CAMERAS & LIGHTS as below:	
i.	Multiple Colour pan-zoom-tilt cameras	
ii.	Low light navigation camera	
iii.	Tooling & wrist cameras	
iv.	LED Full Spectrum, halogen and Flood lights (Switchable)	
B	SONARS & Laser scaling	

i.	Multibeam Echo-sounder	
ii.	Forward Looking or Sector Scan Sonar	
iii.	Laser Scanning & Imaging Systems	
C	MANIPULATOR ARMS AND TOOLS	
i.	Manipulator arms with 5 or more functions	
ii.	Underwater chain saw/Rock Saw/Cutter/Splitter	
iii.	Scoops, nets, knives	
D	SAMPLING SYSTEMS (for Seawater characterization including chemical and thermal data collection)	
i.	Extendable temperature probe	
ii.	Multi-Chamber Suction Sampler with extendable Suction tubes	
iii.	Deep-sea Water Sampling	
iv.	Gas Tight Deep-sea Water Sampling	
v.	Push Core with sample collection Boxes	
vi.	Water Bottle rack	
vii.	Hydraulic Multi-corer	
viii.	ROV-Mounted Box Corer	
ix.	Multi-chamber Insulated Bio-boxes (for fragile animals)	
E	PHYSICAL OCEANOGRAPHY	
i.	CTD System (with following aux. sensors)	
ii.	Pressure Depth Sensor	
iii.	Oxygen Sensor	
iv.	PH Sensor	
v.	Turbidity Sensor	
vi.	Carbon Dioxide Sensor	
vii.	Nitrate Sensor	
viii.	Sound Velocity sensor	
ix.	High-Temperature Water Sensors	
x.	Biomolecular Analyzer	
xi.	Redox Potential Sensor	
xii.	Fluorometer	
xiii.	Methane sensor	
<b>4 Technical specification of seabed sampling basket with atleast 500Kg load capacity</b>		
<b>Sl.</b>	<b>Description</b>	<b>Availability</b>
i.	Bulk Sampling Trays/basket facility to collect samples of upto 500kgs or more in tandem with ROV	
<b>5 Technical specification of optional vessel borne facilities/equipment's</b>		
<b>Sl.</b>	<b>Description</b>	<b>Availability</b>
i.	Ultrapure Water Supply e.g. MilliQ System	
ii.	Laminar Flow/Clean bench	
iii.	Automatic Weather Station (AWS)	

Signature.....

Name.....

For and on behalf of

.....

.....

.....

Duly authorized to sign Tenders for and on behalf of the bidder

.....

Date: .....

**ANNEXURE – IV**  
(TO BE SUBMITTED WITH TECHNO COMMERCIAL BID - COVER-I)

**DETAILS OF BIDDER**

The bidders are advised to give necessary information required by respective points along with documentary support therefore as proof.

		<b>Details</b>	<b>Details of Supporting Document(s) Appended</b>
1	<b>BIDDER/AGENT COMPANY</b>		
	Address		
	Contact Person		
	Contact Number		
	Fax Number		
	Email		
2	<b>REGISTERED OWNER</b>		
	Address		
	Contact Person		
	Contact Number		
	Fax Number		
	Email		

Signature.....

Name.....

For and on behalf of

.....  
.....  
.....

Duly authorized to sign Tenders for and on behalf of the bidder

.....

Date: .....

**ANNEXURE – V**  
(TO BE SUBMITTED WITH TECHNO COMMERCIAL BID - COVER-I)

**DETAILS OF VESSEL**

The bidders are advised to give necessary information required by respective point along with documentary support therefore as proof.

Sl. No.	Description	Details	Details of Supporting Document(s) Appended
<b>1</b>	<b>VESSEL DETAILS</b>		
1.1	Vessel Name		
1.2	Year of Built		
1.3	Year of registration		
1.4	Year of refit/ refurbishment		
1.5	IMO Number		
1.6	Ice class of the vessel, if any		
1.7	Dynamic Positioning System and class		
1.8	Seaworthiness		
1.9	Endurance (Number of Days)		
1.10	Length (m); LOA & LBP		
1.11	Breadth (m)		
1.12	Draft max. (m)		
1.13	Gross Tonnage (MT)		
1.14	Net Tonnage (MT)		
1.15	Dead Weight Normal Operation (MT)		
1.16	CARGO FACILITIES		
1.17	Cargo Holds (m <sup>3</sup> )		
1.18	Cargo Deck Area (m <sup>2</sup> )		
1.19	Number of Holds/Hatches		
1.20	Number of Cranes and maximum load lifting capacity		
1.21	Maximum Lifting capacity with single crane (MT)		
1.22	Water Production/day (m <sup>3</sup> )		
1.23	Number of life boats/rescue boats with capacity for number of persons		
1.24	Number of life rafts with capacity for number of persons		
1.25	Any other details		
<b>2</b>	<b>ACCOMMODATION (NCPOR personnel only)</b>		
2.1	Capacity		
2.2	No. of cabins: Single and Double		
2.3	Dining Hall with seating capacity		
2.4	Separate Recreation room with seating		
2.5	Galley/Kitchen		



	(Indicate Separate or Shared)		
2.6	Medical Room		
2.7	Radio Room with VHF/Satellite Phone/Internet facility, Printer/scanner/copier etc.		
2.8	Any other details		
<b>3</b>	<b>ENGINE, BOILER, FUEL &amp; SPEED</b>		
3.1	Number of Engine(s)		
3.2	Main Engine Type		
3.3	Main Engine (BHP)		
3.4	Auxiliary Engine Type		
3.5	Auxiliary Engine (BHP)		
3.6	Central Heating System, if any		
3.7	Bunker/Fuel type/Grade		
3.8	Bunker capacity (MT)		
3.9	Speed Max. (knots)		
3.10	Speed Normal Cruising (knots)		
3.11	FUEL GRADE: Indicate vessel using Marine Gas Oil (MGO)/Marine Diesel Oil (MDO)/IFO.		
3.12	Fuel Consumption per 24 hrs : Normal Cruising (MT)		
3.13	Fuel Consumption per 24 hrs at survey speed (indicate speed e.g. 7 Knots)		
3.14	Fuel Consumption per 24 hrs during AUV/ROV operations)		
3.15	Fuel Consumption per 24 hrs Max. Speed (MT) (max. speed also to be indicated)		
3.16	Fuel consumption while at port per 24 hrs.		
3.17	Any other details		
<b>4</b>	Indicate other vessel facilities, if any		
4.1	A-Frame (10T/20T or more)		
4.2	LARS		
4.3	Deep-sea Winch with wire details and capacity		
4.4	CTD winch with deployment facility		
4.5	Any other details		
	Hydrographic winch with wire details and capacity		

The technical bid (cover I) should be accompanied by a GA plan of the vessel, Documents in support of Technical Specifications, Drawings and color photographs etc. to be enclosed.

**ANNEXURE – VI**

(TO BE SUBMITTED WITH TECHNO COMMERCIAL BID - COVER-I)

**FORMAT FOR BANK GUARANTEE FOR BID BOND**

(To be stamped in accordance with the stamp Act, Govt. of India)

**To**

**National Centre for Polar & Ocean Research (NCPOR)**

**(Ministry of Earth Sciences, Govt. of India)**

**Headland Sada, Vasco-Da-Gama,**

**Goa – 403 804. (INDIA)**

Dear Sir,

1. Whereas, National Centre for Polar & Ocean Research having its registered office at Headland Sada, Vasco-Da-Gama, Goa – 403 804. INDIA (hereafter called as Tenderer which expression shall unless repugnant to context or meaning thereof, including all its successors, administrators, executors and assignees) has floated a tender enquiry for **“Conducting near-bottom AUV-ROV surveys and exploratory works to delineate locations of Seafloor Massive Sulphide deposits”** and M/s. \_\_\_\_\_ having registered office at \_\_\_\_\_ (hereinafter called the bidder which expression shall, unless repugnant to context or meaning thereof, mean and include all its successors, administrators, executors and assignees) are submitting a Tender Reference No. NCPOR/DSEM/HSS/22 dated: 24-03-2022 (hereinafter referred to as Tender) and bidder having agreed to furnish an unconditional and Irrevocable Bank Guarantee of ..... **(Indian Rupees only / US Dollars / EURO only) (as applicable)** towards bid bond/EMD as stated in tender document & notice inviting of global tender & Instructions to Bidder and other terms and conditions of tender especially the condition that bidder shall keep his tender open for a period of 120 days or as extended from time to time and shall not withdraw or modify it to which the bidder has given absolute and unconditional acceptance and **45 days i.e. from (last date of receipt of tender) -----** or undertaking and is bound without any reservations as to any matter or thing whatsoever on such acceptance and for the BID-BOND/EMD conditions of this tender obligation are:

- i) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- ii) If the tenderer having been notified of the acceptance of his tender by NCPOR during the period of its validity.
  - ii.a) If the tenderer fails to furnish the Performance security for the due performance of the contract.
  - ii.b) Fails or refuses to execute the contract

2. Therefore, we \_\_\_\_\_(Name of Bank)\_\_\_\_\_ a bank registered under the laws of \_\_\_\_\_(Country)\_\_\_\_\_ having head/ registered office at \_\_\_\_\_(Address)\_\_\_\_\_ (hereinafter referred to as the Bank which expression shall unless repugnant to the context or meaning

thereof, include all its successors, administrators, executors and assignees) hereby issue irrevocable and unconditional bank guarantee and undertake to pay immediately on first demand in writing in xxxxxxxx INR / US \$ / EURO (Indian Rupees only / US Dollars / EURO only) (as applicable) or in such convertible currency as acceptable to the NCPOR any or all money to the extent of INR / US \$ / EURO (Indian Rupees only / US Dollars / EURO only) (as applicable) at any time without any demur, reservations, recourse, context or protest and/or without any reference to the bidder and any such demand made by the NCPOR on the Bank shall be conclusive and binding notwithstanding any difference between the NCPOR and the bidder or any dispute pending before any court, arbitrator or any other authority and/or any other matter whatsoever. We also agree that guarantee herein contained shall be irrevocable unless it is invoked, earlier by the NCPOR in writing. The guarantee shall not be determined/discharged/affected by the liquidated, winding-up, dissolution or insolvency of the bidder and will remain valid, binding and operative against the bank.

3. The Bank also undertakes that the NCPOR at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor, in the first instance, without proceeding against the Bidder.

4. The Bank further agree that as between the Bank and the NCPOR for the purpose this guarantee any notice for the breach of any of the conditions contained in invitation for tender instructions to bidders and other terms and conditions contained in the tender form especially the bidder's undertaking that he shall keep his tender open and shall not change it during the validity period or extended period, given to the bank by the NCPOR shall be conclusive and binding on us without any proof, notwithstanding any other matter or difference or dispute whatsoever. We further agree that this guarantee shall not be affected by any change in our constitution, in the constitution of NCPOR or that of the Bidder. We also undertake not to revoke in any case this Guarantee during its currency.

5. The Bank further agree that NCPOR shall have the fullest liberty without affecting in any manner our obligation and without reference to us vary any of the terms and conditions of the tender, instructions to bidders and other terms and conditions contained in the tender and that shall not be released from our liability under the guarantee by reason of any such variation by NCPOR.

6. We also agree that this guarantee shall be governed construed in accordance with Indian Laws subject to the exclusive jurisdiction of Indian Courts.

7. Notwithstanding anything contained herein above, our liability under this guarantee is limited to xxxxxxxx INR / US \$ / EURO (as applicable) in aggregate and it shall remain in full force upto and including 45 days after \_\_\_\_\_ (last date of the validity period) unless extended further from time to time, for such period as may be instructed in writing by M/s. \_\_\_\_\_ (Name of the Bidder) on whose behalf this guarantee has been given, in which case it shall remain in full force upto and including 45 days after the extended date. Any claim under this guarantee must be received by us from the last date of the validity period or before the expiry of 45 days from the extended date, if any. If no such claim has been received by us within the 45 days after the said date/extended date, the NCPOR's right under this guarantee will cease. However, if such a claim has been received by us within and upto 45 days after the said date/extended date, all the NCPOR's rights under this guarantee shall be valid and shall not cease. In case bidder (hereinafter called "Contractor") becomes successful bidder as declared by NCPOR,

i.e. his tender is accepted the validity of this Bank Guarantee will automatically be extended until the Contractor furnishes to the NCPOR a Bank Guarantee for an amount equivalent to 10% of the Total Contract Value towards Delivery cum performance guarantee for contract for **“Conducting near-bottom AUV-ROV surveys and exploratory works to delineate locations of Seafloor Massive Sulphide deposits”** and satisfactory performance of the Contract. In case of failure to furnish the Delivery cum performance Bank Guarantee the claim must be submitted to us within 45 days after the last date of the validity period or extended period. If no such claim has been received by us within 45 days after the said date/extended date, the NCPOR’s right under this guarantee will cease. However, if such claim has been received by us within and upto 45 days after the said date/extended date, all the NCPOR’s rights under this guarantee shall be valid and shall not cease.

This guarantee is valid until the \_\_\_\_\_ day of \_\_\_\_\_ year 20\_\_\_\_.

The Bank confirms that this Guarantee has been issued with observance of the appropriate exchange-control rules and regulations of the country.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, year 20\_\_\_\_ at \_\_\_\_\_.

Witness:

Signature:

Signature

(Full name in capital letters)

Designation with Bank stamp

Attorney as per Power Attorney

**PRICE BID FORMAT (UNPRICED)**

Instructions for filling Price bid:

- (a) *Indian bidders should quote firm price in Indian Rupees only and Indian bidders will be paid in INR only.*
- (b) *Bidders are advised not to indicate any separate discount. Discount, if any should be merged with the quoted prices.*
- (c) *Price bid without mentioning appropriate quoted single currency (Indian Rupees or International tradable single currency in USD / EURO ONLY) shall be summarily rejected. The bidder should quote in ONLY ONE currency against each item in the price bid.*
- (d) *While making the payment all bank charges within India shall be borne by NCPOR and outside of India to the bidder account. Bids shall be evaluated in equivalent Indian Rupees at the closing market rate of Foreign exchange Bill Selling rate as declared by State Bank of India, Vasco-da-Gama, Goa, India, on the day of the opening of the techno-commercial bid.*
- (e) *The applicable Tax Deductible at Source (TDS) as per Indian Income Tax Act, 1961 amended from time to time shall be deducted from the gross payment to the bidder. The bidder should provide Permanent Account Number (PAN) for Indian bidders and Tax Identification Number for foreign bidders as per Indian Income Tax Act, 1961.*
- (f) *Quoted price should be inclusive of all applicable taxes (Indian taxes including GST etc. as on closing date of tender).*
- (g) *Indian Taxes to be applicable for all transactions between NCPOR and Bidder/Contractor, at applicable rates from time to time.*
- (h) *The quote should be submitted in the following format:*

Sl. No	Description	Rate (if written bid will be rejected)	
		INR ₹ (only for Indian bidders)	USD \$ /EURO € (only for foreign bidders)
1.	Services Contract Value: Charges towards Services includes all costs & charges towards vessel operations (including mobilization and demobilization of vessel, bunkers, provisions, agency, port dues, victualling etc.) / facilities/ equipment/ experienced manpower/ spares etc., Charges towards ROVs and Two or more AUVs, processing, analysis and interpretation of data sets, submission of final report etc. towards undertaking survey and exploration activities for NCPOR at 17 Locations.	Do not write here (if written bid will be rejected)	Do not write here (if written bid will be rejected)
<i>Communication charges, if any, will be paid by the NCPOR to the CONTRACTOR on actual as detailed in payment terms.</i>			
<i>GST Amount (indicating applied % as per HSN code, if applicable)</i>			
<b>GRAND TOTAL: -----Do not write here (if written bid will be rejected)-----</b>			

\* GSTN \_\_\_\_\_ (please indicate, if applicable).

**The price bid evaluation criteria to arrive at the lowest (L1):**

The financial bid evaluation criteria to arrive at the Lowest (L1) bid, shall be based on the total financial implications to NCPOR on account of Conducting surveys including the vessel with requisite facilities, as per tender terms and conditions.

**(Bidders Signature & the Seal  
of the Company /Agency)**

**ANNEXURE – VII (b)**  
(TO BE SUBMITTED WITH PRICE BID – COVER-II)

**PRICE BID FORMAT (STRICTLY IN SEALED COVER)**

Instructions for filling Price bid:

- (a) *Indian bidders should quote firm price in Indian Rupees only and Indian bidders will be paid in INR only.*
- (b) *Bidders are advised not to indicate any separate discount. Discount, if any should be merged with the quoted prices.*
- (c) *Price bid without mentioning appropriate quoted single currency (Indian Rupees or International tradable single currency in USD / EURO ONLY) shall be summarily rejected. The bidder should quote in ONLY ONE currency against each item in the price bid.*
- (d) *While making the payment all bank charges within India shall be borne by NCPOR and outside of India to the bidder account. Bids shall be evaluated in equivalent Indian Rupees at the closing market rate of Foreign exchange Bill Selling rate as declared by State Bank of India, Vasco-da-Gama, Goa, India, on the day of the opening of the techno-commercial bid.*
- (e) *The applicable Tax Deductible at Source (TDS) as per Indian Income Tax Act, 1961 amended from time to time shall be deducted from the gross payment to the bidder. The bidder should provide Permanent Account Number (PAN) for Indian bidders and Tax Identification Number for foreign bidders as per Indian Income Tax Act, 1961.*
- (f) *Quoted price should be inclusive of all applicable taxes (Indian taxes including GST etc. as on closing date of tender).*
- (g) *Indian Taxes to be applicable for all transactions between NCPOR and Bidder/Contractor, at applicable rates from time to time.*
- (h) *The quote should be submitted in the following format:*

Sl. No	Description ( <u>STRICTLY IN SEALED COVER</u> )	Rate	
		INR ₹ (only for Indian bidders)	USD \$ /EURO € (only for foreign bidders) <u>INDICATE CURRENCY CLEARLY</u>
1.	Services Contract Value: Charges towards Services includes all costs & charges towards vessel operations (including mobilization and demobilization of vessel, bunkers, provisions, agency, port dues, victualling etc.) / facilities/ equipment/ experienced manpower/ spares etc., Charges towards ROVs and Two or more AUVs, processing, analysis and interpretation of data sets, submission of final report etc. towards undertaking survey and exploration activities for NCPOR at 17 Locations.		
<i>Communication charges, if any, will be paid by the NCPOR to the CONTRACTOR on actual as detailed in payment terms.</i>			
<i>GST Amount (indicating applied % as per HSN code, if applicable)</i>			
<b>GRAND TOTAL:</b>			

\* GSTN \_\_\_\_\_ (please indicate, if applicable).

**The price bid evaluation criteria to arrive at the lowest (L1):**

The financial bid evaluation criteria to arrive at the Lowest (L1) bid, shall be based on the total financial implications to NCPOR on account of Conducting surveys including the vessel with requisite facilities, as per tender terms and conditions.

**(Bidders Signature & the Seal  
of the Company /Agency)**



**ANNEXURE – VIII**  
(TO BE SUBMITTED BY SUCCESSFUL BIDDER  
BEFORE EXPIRY OF BID BOND)

**PROFORMA FOR BANK GUARANTEE FOR DELIVERY OF SERVICES CUM  
PERFORMANCE BOND**

Ref: Bank Guarantee No. \_\_\_\_\_  
Date \_\_\_\_\_

To  
**The Director**  
**National Centre for Polar & Ocean Research (NCPOR)**  
**(Ministry of Earth Sciences, Govt. of India)**  
**Headland Sada, Vasco-Da-Gama,**  
**Goa – 403 804 (INDIA)**

Dear Sir,

In consideration of National Centre for Polar & Ocean Research having its registered office at Headland Sada, Vasco-Da-Gama, Goa – 403 804 INDIA (hereinafter referred to as “THE NCPOR”) which expression shall unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and assigns and having entered into a Contract/Notification of Award of Contract dated \_\_\_\_\_ (hereinafter called “THE CONTRACT”) which expression shall include all the amendments thereto with M/s. \_\_\_\_\_ (name of Company) \_\_\_\_\_ having its Head/Registered Office at \_\_\_\_\_ (address) \_\_\_\_\_ (hereinafter referred to as “THE CONTRACTOR”) which expression shall unless repugnant to the context or meaning thereof, shall include all its successors, administrators, executors and assigns and the contract having been unequivocally accepted by the Contractor resulting in a contract for a value in agreed currency at INR/US \$/ EURO ----- (of Services Contract Value including Mobilisation and Demobilisation Charges etc., as per tender terms and conditions) (Indian Rupees/US Dollars/ EURO \_\_\_\_\_) for **100±15** days of work Contract including One suitable ship (**Name of the vessel & IMO Number** \_\_\_\_\_) for NCPOR’s Operations and the NCPOR having agreed that the Contractor shall furnish to NCPOR a Delivery cum Performance Guarantee for **“Conducting near-bottom AUV-ROV surveys and exploratory works to delineate locations of Seafloor Massive Sulphide deposits”** as well as faithful performance of the entire contract (as per requirements of NCPOR) to the extent of 10% of the value of the contract i.e. INR./US \$/ EURO ----- (Services Contract Value including Mobilisation and Demobilisation Charges etc., as per tender terms and conditions).

1. We (Bank) \_\_\_\_\_ having its registered office at \_\_\_\_\_ (hereinafter referred to as “THE BANK”) (which expression shall unless repugnant to the context or meaning thereof, include all the successors, administrators, executors and assigns) do hereby guarantee and undertake to pay on demand to the NCPOR any money or all monies in agreed currency to the extent of INR/US \$/ EURO \_\_\_\_\_ (Indian Rupees/US Dollars/ EURO \_\_\_\_\_)

\_\_\_\_\_ ) in aggregate on breach of contract by the contractor at any time without any demur, reservation, recourse, contest or protest and/or without any reference to the Contractor. Any such demand made by the NCPOR on the Bank shall be conclusive and binding notwithstanding any difference between the NCPOR and the Contractor or any dispute pending before any Court, Tribunal, Arbitrators or any other authority. We agree that the Guarantee herein contained shall be irrevocable and shall continue to be enforceable till it is discharged by the NCPOR in writing.

2. The NCPOR shall have the fullest liberty, without affecting in any way the liability of the Bank under this Guarantee from time to time, to extend the time for performance of the Contract by the Contractor or NCPOR & Contractor may mutually vary the terms of the Contract. The NCPOR shall have the fullest liberty, without affecting this Guarantee to postpone, from time to time exercise power vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner and either to enforce or to forebear to enforce any covenants contained or implied in the Contract between the NCPOR and the Contractor or any other course of remedy or security available to NCPOR. The Bank shall not be released of its obligations under these presents by any exercise by the NCPOR of its liberty with reference to matters aforesaid or any of them or by reason of any other act or forbearance or other acts of NCPOR or omission on the part of the NCPOR or other matter of thing whatsoever which under the law would, but for this provisions have the effect of relieving the Bank.

3. The Bank also agrees that the NCPOR to its option shall be entitled to enforce this Guarantee against the bank as a principal debtor, in the first instance, without proceeding against the Contractor and notwithstanding any security or other guarantee that NCPOR may have in relation to the Contractor's liabilities.

4. NCPOR shall have the unqualified option to operate this Bank Guarantee to recover Liquidated Damages as liable under the contract. In that case the Bank Guarantee amount shall thereupon be increased to the original amount by the Contractor or the Contractor may alternatively submit Liquidated Damages recovered by NCPOR.

5. The Bank further agrees that the guarantee herein contained shall remain in full force during the period that is taken for the performance of the Contract and it shall continue to be enforceable till all the dues of the NCPOR under or by virtue of this Contract have been fully paid and its claim satisfied or discharged or till the NCPOR discharges the guarantee in writing.

6. We further agree that as between us and NCPOR for the purpose of this Guarantee any notice given to us by the NCPOR that the money is payable by the Contractor and any amount claimed in such notice by the NCPOR shall be conclusive and binding on us notwithstanding any difference between the NCPOR and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We further agree that this Guarantee shall not be affected by any change in our constitution or that of the Contractor. We also undertake not to revoke this Guarantee during its currency.

7. Notwithstanding anything contained hereinabove, our liability under this Guarantee is limited to the agreed currency INR/US\$/ EURO \_\_\_\_\_ (Indian Rupees/US Dollars/ EURO \_\_\_\_\_) in aggregate and it shall remain in full force upto and including Seventy-five days after \_\_\_\_\_ unless extended further, from \_\_\_\_\_

time to time for such period as may be instructed in writing by M/s. \_\_\_\_\_ whose behalf this Guarantee has been given in which case it shall remain in full force upto and including seventy-five (75) days after the extended date. Any claim under this Guarantee must be received by us before the expiry of seventy-five (75) days from \_\_\_\_\_ or before the expiry of 75 days from the extended date, if no such claim have been received by us within the seventy-five (75) days after the said date/extended date, the NCPOR's right under this Guarantee will cease. However, if such a claim has been received by us within and upto seventy-five (75) days after the said date/extended date, all the NCPOR's right under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

The Bank confirms that this Guarantee has been issued with observance of the appropriate exchange control rules and regulations of the country.

8. We agree that this guarantee shall be governed and construed in accordance with Indian Laws and subject to the Exclusive Jurisdiction of Indian Court. The Bank also agrees that courts in Goa shall have exclusive jurisdiction.

Date this \_\_\_\_\_ day of \_\_\_\_\_ year 2022 at \_\_\_\_\_

WITNESS:

(SIGNATURE)

\_\_\_\_\_

NAME

OFFICIAL ADDRESS

SIGNATURE:

NAME & DESIGNATION WITH  
BANK STAMP

**ANNEXURE – IX**  
(TO BE SUBMITTED BY PROSPECTIVE BIDDERS)

**PRE-CONTRACT INTEGRITY PACT**

**General**

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on \_\_\_\_\_day of the month of \_\_\_\_\_year 2022, between, on one hand, the Director, National Centre for Polar & Ocean Research, Headland Sada, Goa, India (hereinafter called the “NCPOR”, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s\_\_\_\_\_ represented by Mr.\_\_\_\_\_, Designation, (hereinafter called the “BIDDER” which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the NCPOR proposes for **“Conducting Near-Bottom AUV-ROV surveys and exploratory works to delineate locations of Seafloor Massive Sulphide deposits”** including the vessel with requisite facilities including AUV/ROV etc. (herein after called the ‘SERVICES’ which expression shall mean and include, unless context otherwise requires) and the BIDDER is willing to offer/has offered the same and

WHEREAS the BIDDER is a private company/public company/Government undertaking/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the NCPOR is an autonomous R&D institute under Ministry of Earth Sciences, Government of India performing its functions in oceanographic and polar research.

NOW, THEREFORE, to avoid all forms of corruptions by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to :-

Enabling the NCPOR to utilize the SERVICES at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the NCPOR will commit to prevent corruption, in any form, by its officials by following transparent procedures:

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

**1 Commitments of the NCPOR**

- 1.1 The NCPOR undertakes that no official of the NCPOR, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly

or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

- 1.2 The NCPOR will, during the pre-contract stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.
  - 1.3 All the officials of the NCPOR will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
- 2 In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the NCPOR with full and verifiable facts and the same is prima facie found to be correct by the NCPOR, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the NCPOR and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the NCPOR the proceedings under the contract would not be stalled.

### **Commitments of BIDDERS**

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-
  - 3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the NCPOR, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
  - 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the NCPOR or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Government.

- 3.3 BIDDERS shall disclose the name and address of agents and representatives in India.
- 3.4 BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 3.5 The BIDDER further confirms and declares to the NCPOR that the BIDDER is the BIDDER and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the NCPOR or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 3.6 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the NCPOR or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 3.7 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9 The BIDDER shall not use improperly, for the purposes of competition or personal gain, or pass on to others, any information provided by the NCPOR as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12 If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the NCPOR, or alternatively, if any relative of an officer of the NCPOR has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of tender. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.
- 3.13 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the NCPOR.

#### **4. Previous Transgression**

- 4.1 The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process.
- 4.2 The BIDDER agrees that if incorrect statements are made on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

#### **5. Earnest Money (Security Deposit)**

- 5.1 While submitting the commercial bid, the BIDDER shall deposit an amount (as will be specified) as Bid Security Bond with the NCPOR through the instruments as specified in the NIT/RFP.
- 5.2 The Bid Security Bond shall be valid up to a period, as will be specified in NIT/RFP, from the date of opening of bids and be suitably extended as requested by NCPOR.
- 5.3 In case of the successful BIDDER a clause would also be incorporated in the Article pertaining to Performance Bond in the Contract that the provisions of Sanctions for violation shall be applicable for forfeiture of Performance Bond in case of a decision by the NCPOR to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 5.4 No interest shall be payable by the NCPOR to the BIDDER on Bid Security Bond for the period of its currency.

#### **6. Sanctions for Violations**

- 6.1 Any breach of the aforesaid provisions by the BIDDER or anyone employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the NCPOR to take all or any one of the following actions, wherever required:-
  - i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
  - ii) Forfeiture of the Security Bid Bond (in pre-contract stage) and/or Performance Security Bond (after the contract is signed) stand forfeited either fully or partially, as decided by the NCPOR and the NCPOR shall not be required to assign any reason therefore.
  - iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.

- iv) To recover all sums already paid by the NCPOR, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the NCPOR in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
  - v) To encash the advance bank guarantee and performance bond/ warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the NCPOR, along with interest.
  - vi) To cancel all or any other contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the NCPOR resulting from such cancellation/rescission and the NCPOR shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
  - vii) To debar the bidder from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the NCPOR.
  - viii) To recover all sums paid in violation of this pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
  - ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by NCPOR with the BIDDER, the same shall not be opened.
  - x) Forfeiture of Performance Bond in case of a decision by NCPOR to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 6.2 The NCPOR will be entitled to take all or any of the actions mentioned at para 6.1 (i) to (x) of this Pact also on the Commission by the BIDDER or anyone employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 6.3 The decision of the NCPOR to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor(s) appointed for the purposes of this Pact.



## **7. Fall Clause**

- 7.1 The BIDDER undertakes that it has not supplied/is not supplying similar VESSEL at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar product/systems or sub-systems was supplied by the BIDDER to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the different in the cost would be refunded by the BIDDER to the NCPOR, if the contract has already been concluded.

## **8. Independent Monitors**

- 8.1 The Principal appoints a competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

### **Contact details of Independent External Monitors (IEMs):**

- 1) **Dr. S.K. Sarkar,**  
IAS (Retd.), B-104, Nayantara Apt., Plot 8 B,  
Sector- 07, Dwarka, New Delhi – 110 075. INDIA.  
Email : sksarkar1979@gmail.com  
Mobile phone : 0091-9811149324
- 2) **Shri. Rakesh Goyal,**  
IRSE (Retd.), 2094, Joy Apartment,  
Sector-02, Dwarka, New Delhi – 110 075. INDIA.  
Email : goyal1259@gmail.com  
Mobile phone : 0091-9717644264

- 8.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 8.3 The Monitors shall not be subjected to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 8.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings.
- 8.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the NCPOR.

- 8.6 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the NCPOR including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.
- 8.7 The NCPOR will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.
- 8.8 The Monitor will submit a written report to the designated Authority of NCPOR /Secretary in the Ministry within 8 to 10 weeks from the date of reference or intimation to him by the NCPOR / BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

#### **9. Facilitation of Investigation**

In case of any allegation of violation of any provisions of this Pact or payment of commission, the NCPOR or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

#### **10. Law and Place of Jurisdiction**

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the NCPOR.

#### **11. Other Legal Actions**

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

#### **12. Validity**

- 12.1 The validity of this Integrity Pact shall be from the date of its signing and extend upto 5 years or the complete execution of the contract to the satisfaction of both the NCPOR and the BIDDER, including warranty period if any, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.

12.2 Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

13. The parties hereby sign this Integrity Pact at \_\_\_\_\_ on \_\_\_\_\_

NCPOR

Name: \_\_\_\_\_

BIDDER

(Details: \_\_\_\_\_)

DIRECTOR

National Centre for Polar & Ocean Research,  
Headland Sada, Goa (INDIA) 403804 INDIA.

Witness:

1. \_\_\_\_\_

2. \_\_\_\_\_

Witness:

1. \_\_\_\_\_

2. \_\_\_\_\_

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**MODEL AGREEMENT**  
**CONTRACTOR TO PROVIDE A DRAFT WORK AGREEMENT**  
**(THE FOLLOWING TERMS TO BE INCLUDED)**

It is this day mutually agreed between

**NATIONAL CENTRE FOR POLAR & OCEAN RESEARCH (NCPOR),**  
**(MINISTRY OF EARTH SCIENCES, GOVERNMENT OF INDIA) HEADLAND**  
**SADA, VASCO-DA-GAMA, GOA – 403804, INDIA:**

**AND**

\_\_\_\_(Name, Address, CONTRACTOR, Operator) \_\_\_\_\_  
 \_\_\_\_\_ performing with \_\_\_\_\_ with \_\_\_\_\_ Registry :  
 Home Port : \_\_\_\_\_ of \_\_\_\_\_ tons Gross / \_\_\_\_\_tons Net Register : Classed  
 \_\_\_\_\_.

as follows:

WORK AGREEMENT: (To be provided by the CONTRACTOR)

**DESCRIPTION OF VESSEL WITH REQUISITE FACILITIES FOR UNDERTAKING NCPOR'S ACTIVITIES:**

**1. PERIOD:**

The vessel for undertaking the intended works is presented after all mandatory clearances / surveys and placed at the disposal of the NCPOR.

The CONTRACTOR will endeavour to stay longer within the dates, weather permitting for the time (not on a Sunday or a legal holiday unless taken over) the Vessel with requisite facilities is placed at the disposal of the NCPOR between 9 a.m. and 6 p.m. during weekdays Monday to Friday and between 9 a.m. and 2 p.m. if on a Saturday excluding National Holidays (As applicable).

**2. PORT OF EMBARKATION:**

At one safe port Port Louis (Mauritius) in such available berth, where she can safely lie always afloat, as the NCPOR may direct, she being in every way fitted for her special service. The NCPOR's option of Embarkation to the vessel in the Month of October/ November, 2022 is to be declared at the time of finalization of the Agreement.

**3. TIME OF ACCEPTANCE & COMMENCEMENT OF OPERATIONS:**

The vessel to be placed at the disposal of the NCPOR and surveys to commence during October / November, 2022 at Port Louis (Mauritius). The CONTRACTOR to keep NCPOR updated as accurately as possible on the vessel's expected arrival dates at Mauritius.

After embarkation of NCPOR personnel and sailing to survey area, sea-trials for all equipment's/facilities shall be carried out. If the trials are successful, the date & time of

departure to the survey area shall be considered as acceptance date. In case of unsatisfactory trials, the revised date of satisfactory trials shall be considered as the acceptance date.

CONTRACTOR to pay for all the port dues/pilotage/light dues/berth hire/other dues and arrange shipping agents as required at the ports. Reiterated: All vessel & scientific equipment related liabilities, port dues and any related charges etc. shall solely be on CONTRACTOR account only.

#### **4. TRADE:**

The Vessel to be employed in lawful trades for the carriage of lawful merchandise only between good and safe ports or places where she can safely lie always afloat within the following limits: The Vessel to be employed as a scientific research vessel in the designated areas as directed by the NCPOR for the purpose of scientific survey, exploration, experiments and scientific research during all-weather seasons. The vessel will carry NCPOR's scientists, personnel and their equipment and other scientific equipment and materials to the study area.

No livestock nor injurious, inflammable or dangerous goods (such as Acids, Explosives, Calcium Carbide, Ferro Silicon, Naphtha, Motor Spirit, Tar or their products) to be shipped unless carried/handled and stored according to IMO Rules.

#### **5. CONTRACTOR TO PROVIDE:**

**The scope of service also includes the engagement of trained and experienced personnel for handling, operating and maintaining all scientific equipment's onboard the research vessel. CONTRACTOR's personnel should undertake processing of all scientific data acquired onboard following the standard processing procedures and in consultation with the NCPOR.**

The CONTRACTOR to provide and pay for all provisions and wages, for insurance of the Vessel and personnel, for all deck and engine-room stores including Bunkers, Lubricating Oil, Fresh Water etc. and maintain her in a thoroughly efficient state in hull and machinery during service.

The CONTRACTOR to provide adequate number of Crane Drivers/operators and Crew for winches, windlass onboard for the NCPOR's stores, scientific equipment operations, scientific exploration, experiments and research or any other nautical operations including the NCPOR personnel gear or any other materials agreed of instruments and facilities.

Qualified Doctor will be provided onboard by the CONTRACTOR, with proper medical facilities to meet the medical needs of the NCPOR personnel. The vessel has a MI room for treating in-patients and adequate storage facilities for keeping medicines.

All ropes, slings and special runners, actually used for loading and discharging and any special gear, including special ropes, hawsers and chains required by the custom of the port for mooring to be for CONTRACTOR's account.

CONTRACTOR to provide and pay for armed guards onboard, whenever required, for the safety of vessel and personnel onboard.

The CONTRACTOR to provide and pay for all fuel oil/ diesel oil (including vessel's bunkers), port charges, pilotages (whether compulsory or not), canal steersmen, boatage, lights, tug assistance, consular charges (including those pertaining to the Master, Officers and Crew), canal, dock and other dues and charges also all dock, harbour and tonnage dues etc. at the port of acceptance.

Also to arrange for loading, trimming, stowing (including dunnage and shifting boards, excepting any already on-board), unloading, weighing, tallying and delivery of cargoes, surveys on hatches and all other charges and expenses whatsoever including detention and expenses through quarantine (including the cost of fumigation and disinfection).

#### **6. PAYMENT:**

The NCPOR to pay as per milestone linked payment terms **in quoted currency INR/USD/EURO** \_\_\_\_\_ (including applicable taxes, if any), all inclusive of overtime of the vessel's Officers and Crew and the cost of Bunkers/lubricants etc., if any.

Payment of hire to be transferred to:

#### **CONTRACTOR's BANK ACCOUNT details-**

**Account Holder Name:**

**Bank Name:**

**Bank Branch:**

**Swift Code:**

**Account Number:**

**Other Details:**

CONTRACTOR to send invoices for indicated Milestones after acceptance of vessel and on submission of Acceptance certificate and the payment to be made by NCPOR within 15 working days. Every subsequent Milestone linked bills to be submitted by CONTRACTOR upon completion, as certified by NCPOR's representative onboard and each payment will be made by the NCPOR to CONTRACTOR within 15 working days.

**NOTE: While making the payment all bank charges within India shall be borne by NCPOR and outside of India to the CONTRACTOR's account, if any.**

#### **7.CARGO SPACE:**

The whole reach and burden of the Vessel including, as available, on board workshops, radio rooms, cabins for the NCPOR personnel and spaces required for scientific exploration, experiments and research work, lawful deck capacity to be at the NCPOR's disposal, reserving proper and sufficient space for the Vessel's Master, Officers, Crew, tackle, apparel, furniture, provisions and stores.

#### **8.MASTER/ Contractors' Representative onboard:**

The Master/Contractors' Representative onboard to execute all voyages and nautical operations, voluntarily to assist research work, experiments, obtaining samples from outside and/or ocean bed with the utmost dispatch and to render required assistance with the Vessel's Crew as per Ship's Articles. The CONTRACTOR to indemnify the NCPOR against all consequences or liabilities arising from the Master, Officers or Agents signing Bills of Lading or other documents or otherwise complying with such orders, as well as from any irregularity in the vessel's papers or for over carrying goods. The NCPOR is not to be responsible for shortage, mixture, marks, nor for the number of pieces or packages, nor for damage to or claims on cargo caused by bad stowage or otherwise.

#### **9.DIRECTIONS AND LOGS:**

The NCPOR through the Contractors representative onboard to furnish the Master with all instructions and sailing directions and the Master and Engineer to keep full and correct logs accessible to the NCPOR or their Representatives.

#### **10.SUSPENSION:**

During operations for NCPOR or other necessary measures to maintain the efficiency of the Vessel, deficiency of CONTRACTOR's men or stores, breakdown of machinery (AUV, ROV, LARS, winch, Crane, A-Frame etc.), damage to the hull or other accident, either hindering or preventing the working of the Vessel and continuing for timelines specified therein, any payments shall remain suspended until services resumed.

The above is also applicable in the event of the vessel being driven into port or to anchorage through dangerous stress or weather, trading to shallow harbours or to rivers or ports with bars or suffering an accident to her cargo, any detention of the vessel and/or expenses or the cause by reason of which either is incurred, be due to, or be contributed to by, the negligence of the CONTRACTOR's personnel.

#### **11. RESPONSIBILITY AND EXEMPTIONS:**

The CONTRACTOR only to be responsible for delay in the arrangement of the Vessel or for delay during the operations period and for loss or damage to goods onboard, if such delay or loss has been caused by want of due diligence on the part of the CONTRACTOR or their Manager in making the Vessel seaworthy and fitted for the voyage or any other personal act or omission or default of the CONTRACTOR or the Manager.

The NCPOR is not to be liable for any consequent loss or damage arising or resulting from strikes, lockouts or stoppages or restraint of labour whether partial or general.

However, Payments to the CONTRACTOR are to cease if there is strike total or partial by Master, crew or any officers technical or scientific.

#### **12. BAD WEATHER -**

CONTRACTOR to account and be responsible for expected bad weather delays etc. based on global metrological data. If the Master considers it dangerous for the Vessel to remain at the research areas for fear of safety/hazard on account of weather conditions, he has the liberty to sail to a convenient open place and wait.

**All delays / any detention through the above causes to be for the CONTRACTOR's account only.**

**13. EXCLUDED PORTS:**

The vessel not to be ordered to nor bound to enter any place where fever or epidemics are prevalent or to which the Master, Officers and Crew by law are not bound to follow the Vessel.

**14. LOSS OF VESSEL:**

Should the Vessel be lost or missing, payments to cease from the date when she was lost. If the date of loss cannot be ascertained the reckoning shall be from the date of loss reported or last heard or whichever is earlier. Any money paid in advance and not earned shall be returned to the NCPOR at once.

**15. OVERTIME:**

No overtime charges shall be payable by NCPOR whatsoever.

**16. LIEN:**

Other than the scientific equipment and materials, additional equipment installed, brought or installed onboard the vessel by NCPOR or on behalf of NCPOR to be on NCPOR's account only, the CONTRACTOR to have a lien upon all cargoes and sub-freights belonging to the NCPOR and any Bill of Lading freight for all claims under this contract, and the NCPOR to have a lien on the Vessel for all moneys paid in advance and not earned.

**17. SALVAGE:**

During the period of this contract, this Vessel is not allowed to go for a salvage and/or assistance to other vessels in distress unless for the purpose of saving life only, on the CONTRACTOR's account only.

**18. WAR: ("Conwartime 1993")**

(A) For the purpose of this Clause, the words:

(i) "CONTRACTOR shall include the ship owners, bareboard charterers, disponent owners, managers or other operators who are charged with the management of the Vessel and the Master, and

(ii) "War Risks" shall include any war (whether actual or threatened), an act of war, civil war, hostilities, revolution, rebellion, civil commotion, warlike operations, the laying of mines (whether actual or reported), acts of piracy, acts of terrorists, acts of hostility or malicious damage, blockades (whether imposed against all vessels or imposed selectively against vessels of certain flags or ownership, or against certain cargoes or crews or otherwise howsoever), by any person, body, terrorist or political group, of the Government of any state whatsoever, which, in the reasonable judgement of the Master and/or the BIDDERS, may be dangerous or are likely to be or become dangerous to the Vessel, her cargo, Crew or other persons onboard the Vessel.

B) The Vessel, unless the written consent of the CONTRACTOR be first obtained, shall not be ordered to or required to continue to or through, any port, place, area or zone (whether of land or sea), or any waterway or canal, where it appears that the Vessel, her cargo, Crew or



other persons on board the Vessel, in the reasonable judgement of the Master and/or the CONTRACTOR may be, or are likely to be, exposed to War Risks. Should the vessel be within any such place as aforesaid, which only becomes dangerous, or is likely to be or become dangerous, after her entry into it, she shall be at liberty to leave it.

C) The Vessel shall not be required to load contraband cargo, or to pass through any blockade, whether such blockade be imposed on all vessels, or is imposed selectively in any way whatsoever against vessels of certain flags or ownership, or against certain cargoes or crew or otherwise howsoever, or to proceed to an area where she shall be subject, or is likely to be subject to a belligerent's right of search and/or confiscation.

D) The CONTRACTOR may effect war risks insurance in respect of the Hull and Machinery of the Vessel and their other interests (including, but not limited to, loss of earnings and detention, the crew and their Protection and Indemnity Risks), and the premiums and/or calls therefore shall be for their account.

E) If the CONTRACTOR become liable under the terms of employment to pay to the Crew any bonus or additional wages in respect of sailing into an area which is dangerous in the manner defined by the said terms, then such bonus or additional wages shall be on CONTRACTOR's account only.

F) The vessel shall have liberty:

- (i) To comply with all orders directions, recommendations or advice as to departure, arrival, routes, sailing in convoy, ports of call, stoppages, destinations, discharge of cargo, delivery, or in any other way whatsoever, which are given by the Government of the Nation under whose flag the Vessel sails, or other Government to whose laws the CONTRACTOR's are subject, or any other Government, body or group whatsoever acting with the power to compel compliance with their orders or directions.
- (ii) To comply with the order, directions or recommendations of any war risks underwriters who have authority to give the same under the terms of the war risks insurance.
- (iii) To comply with the terms of any resolution of the Security Council of the United Nations, any directives of the European Community, the effective orders of any other Supranational body, which has the right to issue and give the same, and with national laws aimed at enforcing the same to which the CONTRACTOR's are subject, and to obey the orders and directions of those who are charged with their enforcement.
- (iv) To divert and discharge at any other port any cargo or part thereof which may render the Vessel liable to confiscation as a contraband carrier.
- (v) To divert and call at any other port to change the crew or any part thereof or other persons on board the Vessel where there is a reason to believe that they may be subject to internment, imprisonment or other sanctions.

(G) If in accordance with their rights under the foregoing provisions of this Clause, the CONTRACTOR shall refuse to proceed to the loading or discharging ports or any one or more of them, they shall immediately inform the NCPOR. No cargo shall be discharged at any alternative port without first giving the NCPOR notice of the CONTRACTOR's intention to do so and requesting them to nominate a safe port for such discharge. Failing

such nomination by the NCPOR within 48 hours of the receipt of such notice and request, the CONTRACTOR may discharge the cargo at any safe port of their own choice.

(H) If in compliance with any of the provisions of the sub-clauses (B) to (G) of this Clause anything is done or not done, such shall not be deemed a deviation, but shall be considered as due fulfilment of this Contract.

#### **19. CANCELLING:**

Should the Vessel with requisite facilities, not be offered as set out by the 30<sup>th</sup> November 2022 or 30 days of Confirmation the NCPOR to have the option of cancelling the Contract.

If the Vessel with requisite facilities etc. cannot be offered by the cancelling date, the NCPOR, if required, to declare within 3 working days after receiving notice thereof whether they cancel the contract.

#### **20. DISPUTE RESOLUTION:**

All disputes arising under this CONTRACT shall be settled in India in accordance with the provisions of the Indian Arbitration & Conciliation Act, 1996 (No. 26 of 1996) or any other further amendments thereof and under the Maritime Arbitration Rules of the Indian Council of Arbitration. The Arbitrators are to be appointed from out of the Maritime Panel of Arbitrators of the Indian Council of Arbitration. The Arbitrators shall be commercial men.

#### **21. LOSS OR DAMAGE**

The CONTRACTOR is to be responsible for Loss/Damage caused to the equipment's, accessories or any other items loaded by the NCPOR due to the improper or negligent act of the CONTRACTOR's personnel.

#### **22. DESCRIPTION OF THE VESSEL**

The details of the \_\_\_\_\_ are as per the General arrangement Plan of the vessel attached (contents of same always subject to/overruled by the Vessel's particulars/details as attached specified hereunder, if applicable)

**Main details of \_\_\_\_\_ as follows:**

CONTRACTOR: \_\_\_\_\_ (Name and Complete Address)\_\_\_\_\_

<b>Name of vessel</b>	:	_____
<b>a. TYPE</b>	:	_____
<b>BUILT</b>	:	_____
<b>FLAG</b>	:	_____
<b>PORT OF REGISTRY &amp; CLASS</b>	:	_____
<b>CLASSIFICATION SOCIETY</b>	:	_____
<b>IMO NO.</b>	:	_____
<b>OFFICIAL NO.</b>	:	_____
<b>CALL SIGN</b>	:	_____
<b>INMARSAT- PHONE</b>	:	_____
<b>FAX</b>	:	_____
<b>INMARSAT-TLX</b>	:	_____
<b>SC NBR</b>	:	_____

MMSI NO. : \_\_\_\_\_  
LOA : \_\_\_\_\_  
LBP : \_\_\_\_\_  
BREADTH MOULDED : \_\_\_\_\_  
DEPTH MOULDED : \_\_\_\_\_  
NATIONALITY/NUMBER OF OFFICERS: \_\_\_\_\_  
NATIONALITY/NUMBER OF CREW: \_\_\_\_\_  
ADDITIONAL INFORMATION, If any: \_\_\_\_\_

**b.DRAFTS/DEADWEIGHT MTRS/MTNS**

TROPICAL/SW \_\_\_\_/\_\_\_\_  
TROPICAL FWA (SUMMER DRAFT): \_\_\_\_ MM  
LOADED SUMMER TPC: \_\_\_\_MTNS/CM  
CONSTANT(LUB OIL AND UNPUMPABLE BALLAST INCL,FW EXCL):\_\_\_\_ MTS

**c.TONNAGE GROSS/NET**

INTERNATIONAL: \_\_\_\_/\_\_\_\_  
SUEZ: \_\_\_\_/\_\_\_\_  
PANAMA: \_\_\_\_

**d. DIMENSIONS OF CARGO SPACES, if any**

**HOLDS**

NO.	LENGTH	BREADTH	HEIGHT
-----	--------	---------	--------

**TWEENDECKS**

NO.	LENGTH	BREADTH	HEIGHT
-----	--------	---------	--------

**HATCHES DIMENSIONS**

NO.	MAIN DECK/BETWEEN TWNS/HOLDS	POSITION
-----	------------------------------	----------

HATCH COVERS TYPE: \_\_\_\_\_

METHOD OF OPENING: \_\_\_\_\_

**HOLD CAPACITY**

NO. BULK/CBM BALE/CBM

**TWEENDECKS CAPACITY**

CONTAINER CAPACITY IN UNITS 20/40 FEET :

HOLD, TWEENDECK, HATCH COVERS:

**e. RO-RO EQUIPMENT (if any)\_\_\_\_\_**

**f. MAX PERMISSIBLE LOADS (T/SQ.M):**

HOLD(s)

HATCH COVERS:

TANK TOP:

TWN DECK:

**g. CARGO GEAR:**

NUMBER OF CRANES: \_\_\_\_\_  
MANUFACTURER: \_\_\_\_\_  
CRANES CAPACITY: \_\_\_\_\_  
MAX RADIUS (MTRS): \_\_\_\_ M (HOOK)  
MIN RADIUS (MTRS): \_\_\_\_ M  
HIGHEST HOOK POSITION: \_\_\_\_ M ABOVE DB  
HOISTING SPEED: \_\_\_\_ M/MIN  
SLEWING SPEED: \_\_\_\_ RPM  
LUFFING TIME: \_\_\_\_ SEC (TOPPING OF JIB)  
SLEWING SECTOR: \_\_\_\_/DOUBLE \_\_\_\_ GRAD

**h. MAIN ENGINE (ME):** \_\_\_\_\_

MAIN ENGINE DESCRIPTION: \_\_\_\_\_  
MAIN ENGINE BORE & STROKE: \_\_\_\_\_  
OUTPUT(KW/BHP)/RPM: \_\_\_\_/\_\_\_\_ KWT/HP AT \_\_\_\_RPM  
FUEL GRADE: \_\_\_\_\_  
STANDARD: \_\_\_\_\_  
DENSITY \_\_\_\_KG/M3, ALUMINA - \_\_\_\_MG/KG

**i. AUXILIARY ENGINE** : \_\_\_\_ UNITS

TYPE : \_\_\_\_  
RPM : \_\_\_\_  
FUEL GRADE : \_\_\_\_  
GENERATORS : \_\_\_\_  
OUTPUT : \_\_\_\_

**j. PROPULSION** : \_\_\_\_.

DIAM : \_\_\_\_  
WEIGHT : \_\_\_\_ KGS

**k. FRESH WATER GENERATOR:**

TYPE: \_\_\_\_  
CAPACITY: \_\_\_\_

**l. FUEL CONSUMPTION:**

SERVICE SPEED/DAILY CONSUMPTION  
SURVEY SPEED :  
MAX SPEED:  
IN PORT IDLE:

**m. TANK CAPACITY:**

WATER BALLAST: TOTAL: \_\_\_\_ CBM  
FUEL OIL: 90 PCNT: \_\_\_\_/\_\_\_\_ T/CBM (INCL OVERFLOW TANK)  
TOTAL: \_\_\_\_/\_\_\_\_ T/CBM  
DIESEL OIL: 90 PCNT: \_\_\_\_/\_\_\_\_ T/CBM  
LUBRICATING OIL: \_\_\_\_/\_\_\_\_ T/CBM

ALL SLUDGE AND DIRTY TANKS: \_\_\_\_/\_\_\_\_ T/CBM

FRESH WATER TANKS CAPACITY: \_\_\_\_ CBM

UNPUMPABLE TANK RESIDUES:

FUEL            \_\_\_\_    MTS

LUB            \_\_\_\_    MTS

BALLAST       \_\_\_\_    MTS

FW            \_\_\_\_    MTS

OTHER        \_\_\_\_    MTS

**n. DISTANCES (Between superstructure, holds etc.)**

**o. ALL KIND OF MANAGEMENT**

BIDDERS:

NAME:

ADDRESS

COUNTRY

TEL:

FAX:

E-MAIL:

**p. CLASSIFICATION SOCIETY, SURVEYS AND CERTIFICATES**

CLASSIFICATION SOCIETY : \_\_\_\_\_

DATE AND PLACE LAST DRYDOCK : \_\_\_\_\_

DATE AND PLACE NEXT SPECIAL SURVEY : \_\_\_\_\_

CERTIFICATE NAME    DATE OF ISSUED DATE OF LAST DATE OF EXPIRE

ANNUAL ENDORSEMENT

CLASSIFICATION CERTIFICATE : \_\_\_\_\_

SAFETY MANAGEMENT CERTIFICATE: \_\_\_\_\_

DOCUMENT OF COMPLIANCE : \_\_\_\_\_

LOADLINE : \_\_\_\_\_

SAFETY EQUIPMENT : \_\_\_\_\_

SAFETY CONSTRUCTION : \_\_\_\_\_

GEAR SURVEY : \_\_\_\_\_

CARGO SECURING MANUAL : \_\_\_\_\_

SAFETY RADIO : \_\_\_\_\_

I O P P : \_\_\_\_\_

DE-RATERISATING : \_\_\_\_\_

**q. INSURANCE – \_\_\_\_\_**

ALL PRESCRIBED CERTIFICATES IN THE “SPECIFICATION OF SHIP DATED \_\_\_\_\_ WOULD BE VALID ON VESSEL’S ACCEPTANCE. FOR \_\_\_\_\_ BIDDERS WOULD FURNISH A CERTIFICATE THAT “PERFORMING VESSEL WOULD MEET ALL SAFETY REGULATIONS IN RESPECT OF LIFE SAVING APPLIANCES, FIRE FIGHTING APPLIANCES, FOR A VESSEL SPECIFYING CARRIAGE OF 22 NC POR PERSONNEL, BESIDES VESSEL’S OFFICERS AND CREW.

**r. OTHERS**

RADAR MAST WITH ANTENNA: \_\_\_\_MTRS

MOORING ROPES SYNTHETIC : \_\_\_\_M

WIRE COMBINED ROPES: \_\_\_\_M

CO2 FITTED: \_\_\_\_

ITF FITTED: \_\_\_\_

GRAIN FITTED: \_\_\_\_

ELECTRIC VENTILATION FITTED: \_\_\_\_

**s. LIFE BOATS/ LIFE RAFTS/ZODIAC**

\_\_\_\_PIECES LIFE BOATS CAPACITY FOR \_\_PEOPLE EACH, IN TOTAL  
\_\_\_\_PERSONS TO BE ACCOMODATED WITH LIFE BOATS.

**t. NO. OF CABINS AVAILABLE FOR PASSENGERS:**

THERE ARE \_\_CABINS, \_\_CABINS – 2 SEATERS. \_\_ \_\_ SINGLE CABIN  
DINING HALL (SITTING CAPACITY):

**u. RECREATION ROOM;** \_\_\_\_ SQUARE METRES (For NCPOR's use only).

**v. NO. OF GALLEY (KITCHEN).**

**w. BOILER:**

**x. BUNKER (MGO/MDO) CAPACITY (METRICTONS)**

FUEL OIL; 90 PERCENT \_\_\_\_/\_\_\_\_ TONS (INCLUDING OVERFLOW TANK)

TOTAL \_\_\_\_/\_\_\_\_ TONS/CBM

DIESEL OIL: 90 PERCENT ; \_\_\_\_/\_\_\_\_ TONS/CBM

HENCE TOTAL : \_\_\_\_\_ TONS

**y. SPEED**

MAXIMUM LOADED/BALLAST CONDITION \_\_\_\_KNOTS

SPEED NORMAL CRUISING

IN LOADED/BALLAST CONDITION \_\_\_\_ KNOTS

**z. THRUSTERS**

BOW/STERN THRUSTER\_\_\_\_\_

DYNAMIC POSITIONING SYSTEM \_\_\_\_\_

**ALL DETAILS ABOUT AND GIVEN IN GOOD FAITH.**

**23.ACCOMMODATION:**

- i. The Vessel to have fully air-conditioned accommodation for a Minimum 22 NCPOR personnel, besides the Vessel's crew. The entire living accommodation is to be in the superstructure of the Vessel, preferably. Each cabin will have a working table, chairs and sufficient space for members to keep clothing and their daily utility items. Each cabin will also have electrical points/adapters (Indian type) to operate electrical gadgets.

- ii. The whole reach and burden of the Vessel as available onboard workshops, radio rooms, cabins for NCPOR personnel and spaces required for scientific exploration, experiments and research work, lawful deck capacity to be at the disposal of the NCPOR personnel.
- iii. The Vessel will have adequate waste-disposal facilities, recommended for International waters for both for solid and liquid wastes.
- iv. The Vessel will have proper medical facilities to meet the emergency medical needs of the NCPOR personnel.
- v. Medicines and equipment to be as per required regulations with sufficient storage space.
- vi. The Vessel will have proper kitchen with adequate number of equipment and crockery, dining hall to accommodate at least 15 NCPOR personnel at a time and sufficient number of washing machines for the use of the NCPOR personnel.
- vii. The Vessel will have sufficient lifesaving equipment to rescue the NCPOR personnel and crew, in any unforeseen eventuality as per the International Requirements.
- viii. The Vessel will have facilities such as television, audio, library, gymnasium, table tennis/ few in-door games for use by the NCPOR personnel. It will have a room with attached bath and toilet facilities for the use of the Indian Chief Scientist including Laptop PC (Win10 OS, MS OFFICE) with MFD printer, TV, Music system, refrigerator etc.
- ix. The Vessel will have an office room equipped with Laptop PC (Win10 OS, MS OFFICE), printer and photocopier for use by the NCPOR personnel. Cabins should be provided with suitable power adapters for operating PC/Laptops or other equipment of Indian type. Table stationery items to be provided, wherever required.
- x. The Vessel will be willing to take up welding jobs those may be necessary for securing/anchoring the cargo and any other installations, such as winch, other scientific instruments etc. those may be needed by the NCPOR personnel for scientific / operational purposes at the CONTRACTOR's cost.
- xi. Adequate fresh water facilities for bath and potable drinking water for consumption by expedition members will be available. Packaged Potable drinking water for at least 4 litres per person per day to be provided by the ship. Additional means of producing fresh water on-board the vessel will be available.
- xii. The Vessel is equipped with an intercom system in all the cabins, mess rooms, lounge and deck, common areas etc.
- xiii. Running hot and cold water will be available at all times.

**24:** The CONTRACTOR confirms that they will have onboard the vessel \_\_\_\_\_ (Vessel) \_\_\_\_\_ experienced Master having the experience of research vessel operations and in addition the Chief Officer and/or Chief Engineer. The balance of the officers and crew will also be individually selected in order to endeavor that most or all of the crew have research vessel experience, preferably. Technical experts to operate all scientific equipment/other machinery onboard to the utmost satisfaction of NCPOR's representative.

**25:** If the vessel is more than 25 years of age the following to apply:

- i. The vessel must be classed by one of the International Association of Classification Society (IACS).
- ii. All statutory and class certificates including P&I cover should be valid at all times during the operations of the vessel.

**26:** The Vessel(s) to work day and night as per Ship's Articles as and where required by the NCPOR always consistent with the safety of the crew, vessel, cargo and the Vessel's crew shall operate appropriate machinery onboard the vessel for loading and unloading cargoes, materials, structures, containers, provisions when necessary embarking and disembarking passengers and assist in all other operations associated with the employment of the vessel in so far as the vessel is manned, certified and capable of without making any claims for additional payments.

CONTRACTOR's Scientists/Technicians should be available on a 24-hour basis for manning the scientific equipments and its operation. It may be noted that 24-hour basis operations also includes simultaneous AUV/ROV/Vessel operations at nearby locations.

**27:** Without prejudice should the vessel(s) put back whilst on voyage by reason of an accident to or breakdown to the Vessel or sickness or accident to a member of the crew onboard, the payments shall be suspended from the time of her putting back until she is again in the same or equivalent position and the voyage to be resumed there from. All costs during the period and other expenses to be for CONTRACTOR's account only.

If any Scientific equipment or machinery fails/rendered non-operational or lost, the contract may be suspended at NCPOR's discretion.

## **28. DELAY IN MOBILISATION AND LIQUIDATED DAMAGES (LD)**

- (A) CONTRACTOR (successful bidder) shall mobilize and deploy the required vessel, manpower and the complete equipment's so as to commence the services at the specified site (s) and mentioned timelines from the date of Award of Contract.
- (B) If the contractor fails to mobilize and deploy the required vessel, manpower/equipment and/or fails to commence the services within the period specified, NCPOR shall have, without prejudice to any other right or remedy in law or contract, the right to terminate the contract.
- (C) If the contractor is unable to mobilize/deploy and commence the services within the period specified, it may request NCPOR for an extension of the time with unconditionally agreeing for levy and recovery of LD. Upon receipt of such a request, NCPOR may at its discretion, extend the period of mobilization and shall recover from the CONTRACTOR, as an ascertained and agreed liquidated damages, a sum equivalent to 2% of Total contract value (i.e. Services Contract Value charges), for each week of delay or part thereof at pro-rata basis (More than 6 hours to be considered as Full Day and more than 3 days to be considered as Full Week), subject to a maximum of 10% of the total contract value.



- (D) The parties agree that the sum specified above is not a penalty but a genuine pre-estimate of the loss/damage which will be suffered by NCPOR on account of delay on part of the CONTRACTOR and the said amount will be payable without proof of actual loss or damage caused by such delay.
- (E) LD will be calculated on the basis of Total contract value (i.e. Services Contract Value charges) excluding duties and taxes, where such duties/taxes have been shown separately in the contract.
- (F) The applicable GST on the LD shall have to be borne by the CONTRACTOR, if any. Accordingly, the Liquidated Damages shall be recovered from the CONTRACTOR along with applicable GST.

**If the entire scope of work is not completed within the project completion schedule, due to reasons attributable to CONTRACTOR, then NCPOR at its option may extend the contract with the levy of Liquidated Damages (LD). In such event, the bidder shall arrange re-mobilisation of vessel(s), equipment and personnel, if required, at its cost and complete the work with the approval of NCPOR.**

**29:** The CONTRACTOR undertakes to take and maintain during the contract period the following insurances in respect of the vessel(s):

- A. Hull Insurance on the basis of Institute Time Clause (Hulls) including 4/4 Running Down Clause or equivalent conditions, covering the vessel subject to a sum insured of not less than the full market value of the vessel. Any deductibles for CONTRACTOR's account. The CONTRACTOR to arrange NCPOR's liability on Hull insurance with the NCPOR insured and the cost of this Insurance shall be borne by the CONTRACTOR.
- B. Full P & I Club entry with a P & I Club of the London Group or equivalent. The CONTRACTOR guarantee that the Vessel is fully P & I Club covered and her P & I Club is to be a member of an international group of P & I Club and the CONTRACTOR guarantee that the Vessel's class is a member of the IACS and will remain so throughout the duration of this Contract.
- C. Hull Insurance policy shall include the NCPOR as co-assured and shall contain a waiver of subrogation for the benefit of the NCPOR, if applicable.
- D. CONTRACTOR to take out unnamed special contingency accident cover for NCPOR personnel onboard for individual value of USD 50,000/- each throughout the Contract period.

**30:** Pantry/saloon to be open for NCPOR personnel round the clock keeping in view the nature of work. The vessel should have a proper kitchen to cater to the requirements of the NCPOR personnel apart from the vessel crew. Indian Cook to be provided to prepare and serve Indian style food to the NCPOR personnel. One refrigerator (~500L capacity) to be provided in the saloon or suitable location for use of NCPOR Personnel.

**31:**The NCPOR personnel have the right to use all facilities and equipment's on the vessel including access to kitchen, rooms, gymnasium, etc., avail medical facilities and use the vessel's radio station, including telex machines, satellite navigator/ Marisat etc. onboard through the CONTRACTOR's qualified personnel and without any hindrance from the Master or crew of the vessel without any costs to the NCPOR or to NCPOR personnel.

**32:**The NCPOR representative(s) may inspect the vessel prior to acceptance at a place and date to be mutually agreed and if any defect in class, lack of facilities or amenities, as prescribed herein, seaworthiness, vessel's equipment including gear defect and or diversions from agreed mobilization arrangements is found, same to be rectified by the CONTRACTOR prior to reconsideration of acceptance.

NCPOR representative(s) may inspect the vessel, at the port for proper and efficient functioning of all scientific equipments/machinery and other utilities such as (a) air-conditioning arrangements in NCPOR's accommodation; (b) proper functioning of toilet system including drainage from bathrooms/washbasins (including those in the kitchen/galley area); (c) water distillation/storage and distribution system for the supply of clean and potable drinking water; (d) communicational and navigational equipment's; (e) operation of all scientific equipment's/machineries onboard and other particulars mentioned in this Agreement.

To facilitate such an inspection at the port, the CONTRACTOR may provide a Certificate from an independent Surveyor attesting that 'utility'/'support systems' are in line with intended arrangements. The inspection may be carried out by the said surveyor at the port where the vessel is mobilizing prior to arrival at the port of Acceptance.

Should any deficiencies be found, the CONTRACTOR is to rectify the same prior to acceptance. Such inspection and survey will in no way absolve the CONTRACTOR from their responsibility in respect of any defect relating to seaworthiness, vessel's equipment and compliance of other terms of this Agreement. The CONTRACTOR in addition should take on sufficient stock of spare parts as per the requirements of the Classification Society and the ship's officers and crew should be able to repair breakdowns to the best of their ability etc. occurring in above 'utility' / 'support systems' until the completion of surveys.

**33:**The technical experts for all scientific equipment operations/repair has to be provided by the CONTRACTOR for NCPOR's usage for round the clock operations. Any equipment loss during operations will be the sole responsibility of the CONTRACTOR account only. A proper log book entry should be made for any such loss of equipment's on the spot.

**34:**Onboard the vessel, NCPOR shall have the right to install, replace, repair and remove any time all scientific and research equipments and materials belonging to the NCPOR.

**35.**NCPOR shall have an option to furnish the vessel with other equipment necessary for the completion of stated objectives, provided they are to be fully responsible for the installation, tuning, maintenance and removing of such equipment.

All said equipment shall not affect the safety of vessel and navigation, the safety of lives and health of the personnel on-board. In case of any technical breakdown of such equipment, the NCPOR have to arrange repair at own accounts. On completion of the utilization of the installed equipment NCPOR have to arrange full removal of such equipment at their cost and time. The vessel's crew to give all assistance to NCPOR personnel in installation/fixing and dismantling of NCPOR's equipment.

**36:**Onboard the vessel only, the pantry to be open for the NCPOR personnel round-the-clock, due to nature of their work. For Indian style food, the CONTRACTOR shall provide the necessary facilities for all cooking arrangements and preparations. The CONTRACTOR to arrange one Indian cook and two stewards exclusively for attending to the NCPOR personnel's work/accommodation etc. at the CONTRACTOR's cost on their payroll.

**37:**Routing, Survey, Research work and all data and samples collected will be the exclusive property of the NCPOR only. The CONTRACTOR, Master and their employees shall not have any right over it or disclose the information about the work to any other party during or after the expiry of the Contract.

**38:**The NCPOR's Representative on-board will have free access to the communications systems of the vessel and will have the liberty to send messages or data to any party or parties.

The Radio Room will be available for NCPOR personnel round-the-clock due to the nature of their work. However, operations of equipment shall be by the Ship's Personnel only (or by NCPOR's designated person, if so, allowed by the Master).

**39:**The Master, Officers and Crew to render all possible assistance to salvage, retrieving of any NCPOR equipment, personnel, stores, fallen or lost overboard during the period of contract.

**40:**The CONTRACTOR to give Notice on Fixing followed by 25/15 days approximate and 10 days definite notice for vessel arrival at Port Louis (Mauritius) to the NCPOR at:

Dr. John Kurian P, Group Director (DSE&M),  
NATIONAL CENTRE FOR POLAR AND OCEAN RESEARCH,  
MINISTRY OF EARTH SCIENCES, Government of India,  
Headland Sada, Vasco-Da- Gama, Goa 403804 INDIA  
Tel: +91-832-2525570 Fax : +91-832-2520877 Email: john@ncpor.res.in

**41:**It is understood that the time limit for recourse of claims between the CONTRACTOR and the NCPOR is 15 (Fifteen) months from the project completion date.

**42:**The NCPOR shall not be liable for loss of life nor personal injury nor arrest or seizure or loss or damage to the vessel, her equipment or other objects arising from perils, accidents or working on-board, unless otherwise specified in the terms of this Agreement. Should the vessel be arrested by the admiralty courts for any default on part of the CONTRACTOR, the Contract is to be suspended from the date of such occurrence and CONTRACTOR will be liable to pay for the following:

- i. Boarding and Lodging, local transport & associated expenses for NCPOR personnel (As per entitled class, Govt. of India Norms).
- ii. Repatriation by AIR (by entitled class) of NCPOR personnel.
- iii. Payment of port dues, berth hire and any other charges, as applicable.

The NCPOR personnel shall embark on the vessel only after receiving 15 days of notice of readiness with all supporting documents on release.

**43:**The CONTRACTOR guarantees that the vessel(s) is/are always safe in ballast without any solid ballast being required.

**44:**If any special vaccinations against cholera, yellow fever or any other diseases are required by the Port Authorities, the Master, Officers and Crew to be inoculated, vaccinated at the CONTRACTOR's expense and certificates to be kept on-board, likewise the NCPOR personnel at the NCPOR's expense.

**45:**The CONTRACTOR will have on-board the vessel Satellite communications / Satellite Navigation Equipment, with the cost of equipment, insurance and installation on the CONTRACTOR's account.

#### **46: PAYMENT**

The NCPOR to pay in **quoted currency INR/USD/EURO** \_\_\_\_\_, all inclusive of any overtime of the vessel's Officers and Crew and the cost of bunkers & lubricants etc. The Milestone linked payments commencing in accordance with the date of acceptance and embarkation onboard until the completion of the project.

Payments to be transferred to:

#### **CONTRACTOR BANK ACCOUNT DETAILS**

**Account Holder Name** :  
**Bank Name** :  
**Bank Branch** :  
**Swift Code** :  
**Account Number** :  
**Other Details** :

CONTRACTOR to send invoices after acceptance of vessel with requisite facilities and on submission of acceptance certificate and the payment to be made by NCPOR within 15 working days, as per milestones. Every subsequent milestone linked invoices to be submitted by CONTRACTOR and each payment will be made by the NCPOR to CONTRACTOR within 15 working days.

To offset office and Banker's errors and delays, when effecting hire payments the CONTRACTOR to give NCPOR 15 (Fifteen) working days, exclusive of Sundays and holidays, in written notice addressed to:

The DIRECTOR, (ATTN. DR. JOHN KURIAN P.)  
National Centre for Polar and Ocean Research (NCPOR),  
(Ministry of Earth Sciences), Headland Sada,  
Vasco-Da-Gama, Goa 403804, India.

**NOTE: While making the payment all bank charges within India shall be borne by NCPOR and outside of India to the CONTRACTOR's account, as applicable.**

**47:**

- i. All scientific/other operations and all activities onboard should be made with the full consent of the NCPOR Representative.
- ii. The vessel shall have a public address system in the mess room, lounge, deck and common areas.
- iii. The CONTRACTOR will provide for, costs inclusive, supply of sufficient drinking water in adequate quantity in Disposable drinking water bottles in sufficient (Average 4L per person per day; but not limited to) numbers. The BIDDERS additionally confirm that the freshwater tanks and desalination/RO plant on-board the vessel has been cleaned and the water quality is good and potable.
- iv. The crew of sufficient strength to operate vessel/cranes/radio room to be onboard the vessel.
- v. Embarkation/ Disembarkation to be alongside safe berth at Port by gangway. Embarkation/ Disembarkation of NCPOR personnel at Sea/anchorage is not admissible.

**48:** The cargo to be delivered by the NCPOR to the CONTRACTOR cost-free alongside the vessel, if any. The stevedoring costs, including charges/wharfage/quay dues etc. for the cargo / equipment of the NCPOR to be for the NCPOR's account. Such cargo to be carried on or under deck within IMO Regulations as decided by the Master and to be insured by the NCPOR. In other words, the CONTRACTOR will be carrying the NCPOR's cargo/equipment with cost inclusive.

**49:** The CONTRACTOR confirms that English-speaking and understanding officers and crew will be on-board the vessel and also that the operating instructions/manuals will also be available in English onboard.

**50:** In the event of unforeseen detention of the Vessel in operational areas or anywhere in the deployment area specified by the NCPOR or as a result of any unforeseen delays in the event of any accident, damage or disaster, resulting in dry docking or repairs necessary to maintain the efficiency of the vessel during the contract period, if the NCPOR so requires, the CONTRACTOR to agree to re-deliver the NCPOR's cargo/equipment at NCPOR, Goa including samples belonging to the NCPOR acquired during the expedition voyage within 30 (thirty) days from the time the NCPOR so notify the CONTRACTOR.

If required, the NCPOR to take adequate insurance for their cargo/equipment/samples being transported back to NCPOR, Goa in the event of an accident, damage or disaster to the performing vessel.

**51:** The CONTRACTOR to provide 20 (twenty) days prior to the arrival at Port Louis (Mauritius) of the performing vessel, a certificate from the classification society, which should be authenticated by the State whose flag the vessel sails under that the vessel would meet all safety regulations in respect lifesaving appliances, firefighting appliances, for a

vessel specifying carriage of 22 (Twenty Two) of NCPOR personnel, besides the vessels' officers and crew.

**52:**The vessel to be made fully passed for special survey and with no dry docking due in the contract period, with no adverse class recommendations and is to be fully covered for the entire employment period under this contract.

**53:**In case the vessel arrives outside the timelines proposed despite having given the appropriate notices as per the Contract and is delayed due to reasons which are proven to be due to the willful misrepresentation of the facts and are not due to unforeseen circumstances or weather delays or other acts of God, then the NCPOR have the right to claim compensation for costs incurred as per actual for the NCPOR personnel waiting at Port Louis (Mauritius).

**54:**

#### FORCE MAJEURE

Should by nature of expedition outside normal trading areas and accessibility to repair work/spares (other than those carried aboard) breakdowns occur due to "force majeure" in spite of the CONTRACTOR making the vessel in terms of 'utilities' / 'support systems' seaworthy and in line with arrangements agreed to upon including availability of major spares etc. same not to apply for the aforesaid deduction.

#### BOTH TO BLAME COLLISION CLAUSE

If the liability for any collision in which the vessel is involved while performing this Contract falls to be determined in accordance with the laws of the United States of America, the following Clause shall apply.

#### BOTH TO BLAME COLLISION CLAUSE

If the Ship comes into collision with another ship as a result of the negligence of the other ship and any act, neglect or default of the Master, Mariner, Pilot or the servants of the Carrier in the navigation or in the management of the ship, the Owners of the goods carried hereunder will indemnify the carrier against all loss or liability to the other or non-carrying ship or her Owners in so far as such loss or liability represents loss of or damage to or any claim whatsoever of the Owners of the said goods, paid or payable by the other or non-carrying ship or her Owners to the Owners of the said goods and set off, recouped or recovered by the other or non-carrying ship or her Owners as part of their claim against the carrying ship or carrier.

These foregoing provisions shall also apply where the Owners, Operators or those in charge of any ship or ships or objects other than or in addition to the colliding ships are at fault in respect to a collision or contact.

And the NCPOR shall procure that all Bills of lading issued under this Contract shall contain the same Clause.

#### GENERAL AVERAGE AND THE NEW JASON CLAUSE

General Average shall be payable according to the York-Antwerp Rules 1994 but where the adjustment is made in accordance with the law and practice of the United States of America, the following Clause shall apply

#### NEW JASON CLAUSE

In the event of accident, danger, damage or disaster before or after the commencement of the voyage, resulting from any cause whatsoever whether due to negligence or not, for which or for the consequence of which, the Carrier is not responsible by statute, contract or otherwise, the goods, shippers, consignees or Owners of the goods shall contribute with the Carrier in General Average to the payment of sacrifices, losses, expenses of a general average nature that may be made or incurred and shall pay salvage and special charges incurred in respect of the goods.

If a salving ship is owned or operated by the Carrier, the salvage shall be paid for as fully as if the said salving ship or ships belonged to strangers. Such deposit as the carrier or his agents may deem sufficient to cover the estimated contribution of the goods and any salvage and special charges thereon shall, if required be made by the goods, shippers, consignees or Owners of the goods to the Carrier beforehand.

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#### FOR GOOD ORDER SAKE

The following "For good order sake" Item **1 to 22** as attached and General Arrangement documents and reference to 'Fire fighting and Life-saving appliances, are deemed to be incorporated in this Contract.

**For good orders sake**, it is put on record that the following is understood and accepted mutually between the CONTRACTOR and the NCPOR:

- 1) Where ever there is operational contact with the NCPOR personnel and the Officers and Crew, there will not be any communication gap in way of a language barrier.
- 2) The Officers and Crew to extend all possible cooperation to make life and work comfortable for the NCPOR personnel onboard.
- 3) The Master to keep the required crew members and scientific equipment operators ready in all respects during the scientific operations as per the instruction by NCPOR Representative.
- 4) The CONTRACTOR will buy and provide all provisions as per the NCPOR personnel's food habits and the requirements compatible to the working conditions at sea. To elaborate on the NCPOR personnel's food habits, the following important items particularly to be taken by the CONTRACTOR in way of stocking/supply etc.

Cooking medium to be vegetable oil.

Flour to be of the type used for making Roti/Chapatis (Indian bread types).

Rice to be of the long grain Basmati quality.

Lentils to be provided of varieties such as Moong, Urad, Chana etc.(Green gram, black gram, chickpeas, Bengal gram, pigeon pea, Misc. lentils of various types e.g. split, skinned etc.) in sufficient quantities.

CONTRACTOR to take sufficient stock of chicken, goat meat, fish etc. in such a manner that equal consumption and rotation of all in menus can be maintained. The NCPOR will provide the approximate number of vegetarians amongst their personnel and the CONTRACTOR to stock vegetables in sufficient quantity and variety to compensate for the non-consumption of non-veg./meat items. Sufficient number of eggs to be taken allowing for about two eggs per person per day.

All ingredients, spices, dry fruits etc., normally required for Indian cuisine preparation to be stocked.

Different types of cereals such as cornflakes, rice bran, oats etc. to be stocked.

Sufficient stocking/supply of the following items to be considered: Long range milk, milk powder, condensed milk, yoghurt, jams, butter, marmalade, cheese, honey, fresh fruits, tinned fruits, tinned juices of orange, pineapple, apple, grapes, (quantum sufficient for 1 medium glass per person per day), tea, coffee. Various types of biscuits and confectionary items, lemons, lime cordial, lime juices (to compensate for Vitamin C etc.). Sufficient stock of material for making desserts to be on board for continuous supply of atleast once in a day (such as jellies, custards etc.)

For the sake of variety and social gatherings/invitations between the CONTRACTOR and the NCPOR personnel allowance to be made for extra supplies of provisions which are utilized for European style of food items such as cold meats, pies, salad oils, sausages etc.

- 5) The NCPOR shall be responsible for the maintenance of order between their personnel and for safety of their equipment onboard. However, CONTRACTOR to provide necessary assistance for securing/safely fixing NCPOR's equipment onboard.
- 6) The Indian cook (for Indian style food) will cater for the NCPOR personnel and the CONTRACTOR's cook for the ship's crew, both of them using the ship's galley at mutually agreed times and procedures arranged in consultation between the Indian Chief Scientist/NCPOR Representative and the Ship's Master. However both the CONTRACTOR's and the NCPOR's cooks will try to assist each other in operating the galley equipment, maintain order and cleanliness in the galley and give advice to each other in an amicable way. Generally, the meal timings are 0830hrs, 1300hrs and 2000 hrs for Breakfast, Lunch and Dinner respectively.
- 7) The NCPOR to give a list of all of the NCPOR personnel to the Master on the vessel's acceptance and the Master in consultation with the Indian Chief Scientist to allot Boat and Fire stations for all the NCPOR personnel, besides designating Leaders amongst the NCPOR personnel for such emergency drills etc.
- 8) The CONTRACTOR to provide facilities and show same on the plans for washing, pantry, recreation, library spaces, indoor sports area etc. The CONTRACTOR confirms that sufficient number of washing machines will be provided for the use of NCPOR personnel and to be operated by Stewards designated for NCPOR personnel.
- 9) The CONTRACTOR will arrange sufficient stock to be kept onboard in way of bedding, bath towels, hand towels, table napkins, keeping in view to allow for change as under:

Bedsheets, pillow covers, twice a week; hand/bath towels/table napkins thrice a week.



- 10) The CONTRACTOR to arrange supply of sufficient quantity of soaps, detergents, washing soaps, cleaning and scrubbing material, cleaning implements etc. Supply of soaps, detergents and washing soaps etc. to the NCPOR personnel to be in a similar manner as for the ship's officers.
- 11) Normally served soft drinks to be on-board in sufficient quantity and to be supplied by the CONTRACTOR to the NCPOR personnel's consumption with meals or otherwise. There should be no disparity in the quality and quantity in the supply of Soft Drinks, Tea, Coffee, Fresh fruits etc. between what is supplied to the Officers/Crew and the NCPOR personnel.
- 12) The two stewards designated for NCPOR work to keep the individual cabins, mess rooms, recreation rooms, including the bathrooms, water closets etc. clean. The CONTRACTOR personnel doing routine cleaning and maintenance of the common areas such as Sauna, Toilets, Public Places and alleyways etc. with the NCPOR cooperating in keeping these places as clean as possible.
- 13) Food; the CONTRACTOR to arrange and supply Chicken 35% , Fish/ Seafood 35%, Goat Meat 30% approx. or as advised by NCPOR. Vegetables, soups and fruits of different varieties, yoghurt, Indian pickles and teas of different varieties are also to be provided.
- 14) (a) The NCPOR prefer its personnel to be berthed with not more than 2 in a cabin and 6 single cabins.  
(b) The food served onboard should be fresh, varied, sufficient and must be planned keeping in mind the Indian Style preparations and taste. It is further understood that because of the trade it is impossible to replenish fruits & vegetables and deep-frozen to be served. List of food items to be mutually inspected by the NCPOR and CONTRACTOR representatives as regards to the quality and quantity upon the Vessel's arrival at port / before departure well in time. CONTRACTOR to provide good quality and adequate crockery and cutlery in the dining hall.  
(c) The CONTRACTOR to supply sufficient fresh water for the NCPOR's use throughout the contract period.
- 15) The vessel is constructed with air-conditioning/heating and it is the Master's discretion, in consultation with NCPOR representative, to regulate temperature to achieve the best possible comfort for all onboard keeping in view inside and outside temperatures.
- 16) The Vessel will be able to take up welding jobs those may be necessary for securing/anchoring the cargo and other installations such as winch etc. those may be needed for the NCPOR personnel for scientific operational purposes.
- 17) CONTRACTOR confirms that:
  - a) Air-conditioning in the NCPOR's accommodation spaces is functioning properly.
  - b) The water purification system onboard the vessel has been maintained and is in good working condition.
  - c) The vacuum system etc. for toilets/drainage is functioning properly.
  - d) The Vessel will provide proper communication facilities and linkage for telephone/fax/telex/e-mail/data.

- e) Routine communications to be free of cost and Prices for other communications will be as per actual, if any.
- 18) The CONTRACTOR to provide suitable safety railings/nets on main working decks to avoid danger to any personnel falling overboard, if necessary.
- 19) The CONTRACTOR to bear the port-related charges, starting from the date and time of acceptance up to the date and time of completion of contract/disembarkation of NCPOR personnel. The NCPOR is not liable for any such charges, levies etc. under any circumstances.
- 20) CONTRACTOR to provide good quality furnishings in the Cabins including quilts/blankets/ pillow/ bed sheets/ bed covers towels/ tissue papers etc.
- 21) The NCPOR may purchase liability insurance covering their personnel, equipment and materials, at their discretion as well.
- 22) Also:
- i. Fire-fighting appliances: The Vessel will have firefighting appliances for all persons onboard in accordance with the \_\_\_\_\_ of Shipping, the Classification Society of the vessel, for the voyages.
  - ii. Life-Saving appliances: The Vessel will have lifesaving appliances for all persons to be carried onboard in accordance with the \_\_\_\_\_ of Shipping, the Classification Society of the Vessel for the voyages.

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**CONTRACTOR**  
For and on behalf of CONTRACTOR

**NCPOR**  
For and on behalf of NCPOR  
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Ocean Research, (Ministry of Earth  
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