

NATIONAL CENTRE FOR POLAR & OCEAN RESEARCH

(An Autonomous Society under the Ministry of Earth Sciences)

HEADLAND SADA, VASCO-DA-GAMA, GOA 403 804.



TENDER NO: NCPOR/EST/EE/01/21-22

**Name of The Work: Annual Operation and Comprehensive Maintenance Contract of HVAC,
Cold room, AHU, Clean room, VRF/VRV etc. at NCPOR**

TENDER DOCUMENT

Notice Inviting Tender

Director, National Centre for Polar and Ocean Research, Goa invites sealed tender for '**Annual Operation and Comprehensive Maintenance Contract of HVAC, Cold room, AHU, Clean room, VRF/VRV etc.** at NCPOR, Goa from the eligible contractors of Government/PSU/ Reputed Organizations. Interested bidders can download the tender documents from web site <http://www.ncpor.res.in> or Central Public Procurement portal <http://eprocure/epublish.gov.in>. Last date of submission of bid is **19.04.2021** at 11.00 Hrs.

ANNEXURE - I

TENDER TERMS AND CONDITIONS

1. The Director, National Centre for Polar and Ocean Research, Goa (NCPOR), invites sealed Tenders in one cover for the work of **Annual Operation and Comprehensive Maintenance Contract of HVAC, Cold room, AHU, Clean room, VRF/VRV etc. at NCPOR** from the eligible Contractors of Government/PSU/Reputed Organizations. The eligibility criteria is as below.
2. Eligibility Criteria:- The bidder should have,
 - (a) Experience of maintenance of Cold room, HVAC systems. The bidder should have executed at least one single AMC of HVAC and Cold Room units amounting not less than Rs. 40 lakh per annum Or two AMC of HVAC and Cold Room units amounting not less than Rs. 30 lakh per annum Or three AMC of HVAC and Cold Room units amounting not less than Rs. 20 lakh per annum, of any Govt/PSU/reputed organization, company during last seven years ending March 2021
 - (b) Valid Electrical Contractor License of minimum 11KV, issued by a Competent Licensing Authority of Electricity Department of Government of any State/UT, on his name.
 - (c) The bidding firm should have average Annual Financial Turnover of Rs. 30 lakh per annum or above during last three financial years ending March 2021. (Pl. provide Audited Balance Sheet/Chartered Accountant Certified profit-loss statement.)
 - (d) The bidder should not have incurred any loss (profit after tax should be positive) in more than two years during last five consecutive balance sheet, duly audited or certified by a Chartered Accountant. (Pl. provide Audited Balance sheet/Chartered Accountant Certified profit-loss statement.)
 - (e) Registration of EPF
 - (f) Registration of ESI
 - (g) GST Registration
 - (h) PAN number
 - *AMC of HVAC and Cold Room units means Annual Maintenance Contracts of both Heating-Ventilation- Air Conditioning units and Cold Rooms of below zero degree celsius temperature.*
 - *Self attested copies of all above documents should be enclosed. The original documents should be presented for verification as & when asked.*
 - *A contractor who is either terminated or black listed from any institute or who has been denied/ not granted extension of contract by NCPOR or any other institute for poor/non satisfactory performance is not eligible for this tender.*
3. The Contract period is initially for one year extendable on yearly basis for a further period of two years on the same Rates, Terms & Conditions of the agreement based on the satisfactory performance as assessed by NCPOR.
4. Rates ó While quoting rates for manpower, the bidder should strictly consider Minimum Wages regulations as per the prevailing Government of India Labour Laws, ESI, EPF, Bonus Rules & other regulations.
After award of Contract, the Contractor will have to submit Bank a/c statements of previous month of all staff for the monthly bill payment. The Contract is liable for termination if it is observed that payment made is less than the prevailing 'Minimum Wages' as prescribed by Ministry of Labour & Employment, Govt. of India.
5. Entire tender document (signed and stamped on all pages) should be submitted in a sealed cover, super scribed with the tender number & name of the work, date and time of opening. **Tenders will be received up to 11.00 a.m. on 19.04.2021 and will be opened at 11.30 a.m. on the same day.** Tenders should be dropped in the tender box kept in the Estate Section before the closing date and

time. In case Tenders are sent by post/courier it should be addressed to **The Director, NCPOR**. Tenderers need to ensure that they post the tender well in advance so as to reach before the closing time and date. NCPOR is not responsible for any postal/transit delay. If the Tender Opening day happens to be a holiday then tenders will be opened on the next working day on the same time.

6. The Earnest Money Deposit (EMD)/Bid Security : It is **Rs. 1,50,750/- (Rupees One Lakh Fifty Thousand Seven Hundred Fifty only)** in the form of a Demand Draft from any schedule bank, drawn in favour of **Director, NCPOR, payable at Vasco-Da-Gama, Goa**
Pl. Note : Bidders need not to enclose EMD along with the bid document however, bidders should submit undertaking in the format provided at Annexure 6 X. Only the successful bidder will require to submit the EMD amount as detailed above. EMD of the successful bidder will be converted into Security Deposit.
7. It is mandatory to quote all items of the price bid. If all items are not quoted then tender is for rejection.
8. NCPOR does not bind to accept the lowest or any tender and reserves the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
9. Tender submitted shall remain valid for **90 days** from the date of opening for the purpose of acceptance and award of work. The extension of validity beyond 90 days from the date of opening shall be by mutual consent.
10. Re-writing, over-writing, use of correction fluid (whitener) is not allowed in the tender. The price bid should neatly handwritten/typed/printed & submitted in original with signature & stamp on all pages. Tender will be rejected if scanned copy or xerox copy is submitted.
11. The Tenderer shall quote rates both in figures and words against each item in English language only. Correction, cutting, omission, should be avoided. However even if any correction is made, it should be endorsed with signature. Use of correction fluid is not allowed & should be strictly avoided.
On checking if there are differences noticed between the rates quoted by the tenderer in words and figures or in the amount worked out by him, the following procedure will be followed: (A).If there is a difference between the amount of, rate in figure and in words of an item, and the total amount is worked out, then the rate which corresponds to the amount worked by the bidder shall be taken as correct. (B).If the bidder has not worked out the amount of an item, or the same does not correspond with the rates written either in figures or in words, then the rate quoted by him in words shall be taken as correct. (C) If the rate quoted by the bidder in figures and in words tallies, but the amount is not worked out correctly, the rate quoted by the bidder shall be taken as correct and not the amount.
12. Before submission of tender, interested bidders should inspect the site to acquaint himself about the condition in regard to accessibility of site, nature and extent of ground, working condition of site and locality including stacking of materials, installations of tools and plants etc., conditions affecting accommodations and movement of labour etc. required for the satisfactory execution of work contract. Accordingly bidders should submit duly signed & stamped Tender Submission Letter as per the format provided in the tender, on the Firm's/Company's Letter Head. No claim whatsoever on such account shall be entertained later by NCPOR under any circumstances.
13. Except writing rates and amount, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the Price bid of the tender. Tenders with conditional prices will not be considered.
14. In the event of any tenderer withdrawing/modifying his tender during the validity of tender, EMD of such bidders will be forfeited.

15. Successful bidder should commence the work within One Week from the date of issuance of Work Order, failure of which the Earnest money will be forfeited.

16. Director, NCPOR reserves the right to accept or reject any or all bids in full or part, or the right to not to accept lowest offer without assigning any reasons thereof, whatsoever. In case of any dispute, decision of Director, NCPOR shall be final and legally binding on the bidders.

ANNEXURE – II

TERMS & CONDITIONS FOR OPERATION & MAINTENANCE

- 1) The cold room or walk-in-freezer room in NCPOR is made to preserve precious samples from POLAR & Arctic region for the purpose of research. Therefore, its smooth & non-stop functioning on 24 x 7 throughout the year is an important aspect of this contract.
- 2) The entire installations of HVAC & Cold room units are almost 16+ years old & required proper monitoring & maintenance to avoid break-downs.
- 3) The contract is comprehensive including all labour and all major- minor electrical & mechanical parts, consumables, wear & tear items, coils, relays, gas filling, lubricants etc. but it is excluding new Compressors, Evaporators & Hepa Filters. However, in case if any compressor fails, the contractor will have to immediately arrange a temporary standby compressor of the same capacity at his own cost till the original one gets repaired by him or purchase of new Compressor by NCPOR if the original one is beyond repairs, as certified by the NCPOR Engineer.
- 4) The Contractor should have his office in Goa. It is essential that the Contractor should have his local office cum work shop in Goa for effective maintenance & repairs.
- 5) All welfare measures of the contractor's personnel will have to be borne by the contractor only.
- 6) The NCPOR will not provide any accommodation and transportation facilities to contractor's persons.
- 7) Any lapse of the duty from the part of operation & maintenance as well as any damage of official equipment will be taken very seriously and the loss will be made good by the contractor. And in the event of any loss, damage, theft or encroachment of the NCPOR property, due to negligence of the work / duty etc. the agency shall indemnify the NCPOR and reimburse the actual loss so caused.
- 8) The contractor shall be responsible for compliance with the provision of the Contract Labour Act including Contract Labour Registration and Abolition Act, 1970, the Indian Contract Act : The Industrial Disputes Act 1947 : The payment of wages Act : The minimum wages Act etc.
 - a. **Payment to staff:** The Contractor shall make payment to his staff as per the prescribed rates of Minimum Wages Act of **Govt. of India for Area B (Goa)** or above. Junior Technician is to be considered as Semi Skilled, Senior Technician to be considered as Skilled worker and Supervisor should be considered as Highly Skilled worker.
 - b. Pl refer **Order No./F.No.1/20(3)/2020-LS-II Government of India, Ministry of Labour & Employment, Office of the Chief Labour Commissioner (C) dated 12/10/2020 for Industrial Workers – B Area** and consequent orders issued. Bidders should strictly follow the above orders for fixing/quoting wages for his staff along with the current orders of the Government of India for EPF, ESI, Bonus etc.
- 9) The contractor shall be deemed to have satisfied himself before entering into the contract as to the correctness and sufficiency of his offer for the work and of the rates and prices quoted in the schedule of works. These rates and prices shall cover all his obligations under the contract and all matters and things necessary for proper completion and maintenance of work.
- 10) The contractor at his own cost shall arrange table/chairs etc. for his staff. Water, electricity shall be made available by NCPOR free of cost.
- 11) The Contractor has to keep all the equipment neat and clean at site to avoid any accident or fire hazards.
- 12) All operation and maintenance work should be documented as per ISO standards. All data loggers and instruments like temperature sensors, airflow meters, etc should be calibrated at every 6 months and data log should be maintained.
- 13) The contractor should have round the clock contact telephone numbers of its responsible persons. In case of any emergency, contractor and authorized engineer/supervisor should make themselves available at site on a short notice and make all efforts to make the situation normal at the earliest, by taking all possible precautionary measures.

- 14) To facilitate the proper and smooth functioning of the comprehensive AMC, the contractor should have a local office in Goa, with competent technical/service personnel. All repair should be made at the NCPOR premises as much as possible. In case any parts has to be taken outside NCPOR for repair, then the same should be taken by a written request and issue of necessary gate pass. The contractor shall replace/return the parts within two working days.
- 15) The trained persons should be placed round the clock at site who could take initial steps under emergency situation.
- 16) A complaint book shall be kept up to date at site (separate for each component of work) by the contractor and the same shall be made available for checking and verification.
- 17) NCPOR shall neither be responsible for any causality/death/ injury/accident/ damage/risk to the Contractor's staff which may arise out of and in the course of their duties nor be liable to pay any damage or compensation to such person or persons or their kin in this regard. The Contractor shall be wholly responsible for such eventualities/ injuries/death etc of his person on duty & their compensation.
- 18) The staff appointed by the contractor shall be under the direct and exclusive control and the supervision of the Contractor. However, such staff should comply with the direction and instructions issued by the Estate In-Charge /Engineer. The staff deployed for the work of NCPOR shall not be allowed to take any other outside work, contract or sub-contract during this period/contract.
- 19) The Contractor shall have all necessary equipments at its own expenses necessary for operation & maintenance and also safeguarding the NCPOR premises. At any point of time, it shall not be the responsibility of the NCPOR to bear these expenses.
- 20) The NCPOR shall have the exclusive right to terminate the services of any person appointed by the Contractor if found unsatisfactory and ask the contractor to provide other substitute qualified person. The decision of NCPOR in this regard shall be final and binding on the Contractor at any point of time. The duty register for a month with the names of the Contractor staff shall be provided by the Contractor to the NCPOR well in advance.
- 21) Contractor should provide Photo Identity Cards to all their employees.
- 22) The Contractor has to submit Bio-datas with Qualification & Experience certificates of all his staff while appointing & while change of staff.
- 23) The Contractor shall provide all safety gadgets like shock/heat resistant Hand Gloves, Safety shoes, Raincoats, Torches etc. to the each staff. engaged by him during Operation and Maintenance services at site.
- 24) The contractor's staff should attend their duties in uniform. The contractor should provide them at least two pairs of uniforms & one pair of safety shoes per year. The material of uniform is generally natural cotton/tericotton. The design, colour, quality of uniform will be approved by Estate In-Charge.
- 25) If any personnel of the contractor found absent from the duty, the payment of the respective personnel will be deducted on pro-rata basis of the quoted rate. If any staff observed with non performance or performance below par, the contractor/agency shall be fined accordingly as per the tender terms.
- 26) **Contractor to provide everything necessary :**
 - a. The contractor shall provide at his own cost all materials, (except such materials, if any as may in accordance with the contract, be supplied by the Employer). Plants, tools, tackles, appliances, ladders, scaffolding, temporary works , manpower, transportation and other etc. requisite for the proper execution of the work whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or which may be necessary for the purpose of satisfying or complying to the requirements of Engineer, as to any manner as to which under these conditions he is entitled to be satisfied together with carriage therefore to and from the work. No extra charges will be paid by the authority regarding tools & tackles, manpower, transportation etc The contractor shall also supply without charge the requisite number of persons with means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or materials. Failing his so doing, the same may be

provided by the Engineer at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract and /or from his Security Deposit.

- b. The Contractor will to arrange i) Refrigerant Gas ii) Lubricating oil for compressor systems iii)Packing / Couplings / gaskets / insulation material / other general spares. iv) All electrical spares e.g. Fuses / Relays, contactors, Condensers etc. v)Indoor units Filter /Belts / Bearings / Valves / Other spares etc.
- c. Following parts are covered under CAMC scope for VRF SYSTEM ó compressors, Spares of compressor, Software, control relayø, control panel cards, blower motor, thermostat, actuators, magnetic contactors, 3 way/2 way valves, blower assembly, v-belts, sensor lightø, control relay, timerø, magnetic switch, capacitors, refrigerant, Remotes, valves, filters, strainer, NRV, cooling coils, condenser coils, copper/MS piping/insulation, grills, diffusers, temp/pressure gauges etc. which may be required during maintenance of the all the system will have to be supplied by the contractor as per instruction of the Authority.
- d. In case of breakdown of any system, the Contractor should personally present & supervise each work till its completion.
- e. NCPOR shall provide requisite quantity of water, electricity for carrying out the work free of cost, subject to availability in the NCPOR campus.
- f. NCPOR on no account shall be responsible for the expenses incurred by the contractor for anything hired, which the contractor needs to complete the ordered work.
- g. Periodical maintenance of AHU motor belts, filter cleaning and motor bearing greasing should be done quarterly.
- h. VRF/VRV indoor unit air filter cleaning should be carried out every quarter.
- i. VRF/VRV outdoor unit along with its base stand should be painted using primer and enamel paint once in a year to avoid corrosion and ensure durability of the equipment.

ANNEXURE – III

SCOPE OF WORK FOR AMC

Comprehensive Annual Maintenance includes maintenance of HVAC, Walk-in freezer rooms (Cold Rooms) with refrigeration equipment, Clean room, Air Shower, VRF/VRV system with indoor units, Reefer Container and related installations.

1. Continuous Operation and Comprehensive Maintenance of ice core lab (Walk-in-Freezer rooms maintained at -20°C x 2 Nos, -15°C & -5°C), clean room, HVAC, etc.
2. The Walk-in-Freezer room will be housing highly sensitive/crucial ice samples from the POLAR REGION like Antarctica, Arctic and it should be operational continuously on a 24x7 basis.
3. The HVAC and clean room systems need to be operated on all days for at least 12 hrs per day, or as per the requirement of the research work at the labs on recommendation from Lab In-Charge.
4. The comprehensive AMC will be carried out systematically. The Class 100 Clean Room Temp. should be maintained at 24°C ($\pm 1^{\circ}\text{C}$) and accordingly the activity chart as per schedule enclosed should be maintained by the contractor through his/her agency for the entire satisfaction of NCPOR. The AMC activity charts should be produced on demand as well to be submitted along with the monthly bill.
5. Maintenance register and all log books consisting of, (Room temperature of all the rooms/Cold room & HVAC Log book voltage/ampere of machine of including reefer container, VRF/VRV, reefer container etc.), and submit weekly report.
6. Air filter for all the machines to be cleaned regularly at (every quarter) certain intervals for the better cooling system and to avoid low pressure tripping relay.
7. Any fault in the system, should be repaired immediately and to be reported to Electrical Engineer or Estate In-Charge / P.D.Labs NCPOR immediately.
8. Only qualified and authorized operator/technicians are allowed to operate and maintain the system.
9. Attending complaints of the system which include routine as well as breakdown maintenance of all the system, repair the system immediately and replace the unserviceable electrical/mechanical parts with new one as per the requirement. The contractor/agency should maintain stock of all essential parts, components, spares & consumables for safe maintenance.
10. If there is any fault in the electrical cable lines/wiring of the control panels or any other electrical/mechanical problems, the Contractor shall attend and replace the same immediately.
11. The electrical faults at sub-distribution panel for HVAC plant and cold rooms should be attended and rectified by the contractor immediately. The failed panel parts should be replaced by the contractor.
12. The comprehensive AMC contract is 24 hours a day, 7 days a week and year round.
13. All stand by equipments to be operated as per mutually agreed programme.
14. Proper housekeeping of all areas which are under the contract. Maintenance of the corridors and clean room, HVAC plant, Compressor room etc.
15. The clean room HEPA filters should be maintained in such a way that the class 100 room complies to its certification.
16. Reefer container : of ðCareer Incö make which is to be kept on or in running condition for 24x7 period. Its maintenance is limited to monitoring, recording readings, cleaning of its exterior etc. However in case of its break down, the Contractor has to repair or get it repaired & make it functional at the extra charges which will be reimbursed as per the actual.
17. Periodical maintenance of AHU motor belts, filter cleaning and motor bearing greasing should be done quarterly.
18. VRF/VRV indoor unit air filter cleaning should be carried out every quarter.
19. VRF/VRV outdoor unit along with its base stand should be painted using primer and enamel paint once in a year to avoid corrosion and ensure durability of the equipment.

The above guide lines for maintenance are just illustrative & not limited to any other activity which is essential for maintenance.

ANNEXURE – IV

SCOPE OF WORK FOR REPAIR & REPLACEMENT WORK**Supply & Installation testing and commissioning (SITC) work of 02 Nos. Emerson Scroll Compressor ZR19M3 (R-22 Gas):**

- I. Existing 02 Nos. of Emerson Scroll compressor ZR19M3 (R-22 Gas) need to be dismantled and replaced with new one.
- II. The work shall include SITC of 02 new compressors of the same brand without damaging other associated parts.
- III. In case while replacement any associated parts are found to be damaged or damaged during repairs the contractor should repair/replace the same.
- IV. The necessary materials to carry out the installation work of compressors should be available on site two days before installation work, for inspection.
- V. The contractor should do all necessary work to make the 02 new compressors work satisfactorily.
- VI. Contractor shall provide all necessary tools to get the work done.

Supply & Installation testing and commissioning (SITC) work of 02 Nos. Günter Evaporators:

- I. Existing 02 Nos of Evaporators of Günter make model no: GHF 045D/17-E for (-20°C) and model no: GHF 035D/17-E for (-15°C) needs to be dismantled and replaced with new Evaporators of Günter make of the same model make & model no: GHF 045D/17-E or new model no: GHF 045.2H/17-ENW50.E in Cold room 1[CR1] (-20°C), and model no: GHF 035D/17-E or new suitable available model of same brand in Cold Room 2[CR2] (-15°C).
- II. The Work shall include SITC of 02 Nos. new evaporators in CR1 and CR2 of same brand.
- III. This work is to be conducted in -20°C & -15°C, hence work shall be carried out in such a manner that one evaporator in the cold room is kept operational for entire duration of work. This shall ensure that required temperature is maintained and imp laboratory samples are not damaged. The Contractor should ensure his team of technician has experience of conducting this kind of work successfully in very low temperature conditions. The work shall begin with dismantling existing evaporators, cleaning/repairing/replacing drain pipes if necessary and then fixing of new evaporators. All tools, accessories required for the SITC work of evaporators shall be provided by Contractor. Shoes and clothing will be provided by NCPOR.
- IV. The work should be planed such that and all necessary required materials to carry out the work are available on site two days before installation work, for inspection.
- V. In case any associated part which is necessary in smooth functioning of cold rooms is visibly damaged or is damaged during work the contractor shall repair/replace the same.
- VI. Considering work restrictions in cold room & storage of samples, it is suggested that work in CR1 & CR2 may be done on two different days.
- VII. The contractor should do all the necessary work to make the 02 new Evaporators work satisfactorily.

Work Completion Period: The entire repair & replacement work as above should be completed within one month from the date of receipt of work order.

Warranty Terms:

After satisfactory completion of SITC work of 02 Nos. compressors and 02 Nos. Evaporators, both these item shall be under warranty for min one year from date of completion of work. In case of any fault is observed during this period the equipment shall be repaired/replaced immediately by the contractor with his own cost. After completion of warranty the will come under the scope of comprehensive AMC.

*After completion of the warranty period, the compressors, evaporators and repaired, replaced items will come under the ongoing comprehensive AMC of the Contractor as described at Annexure 0II & III

ANNEXURE – V**QUALIFICATION, DUTIES AND RESPONSIBILITIES** (of Contractor & his staff)**a) CONTRACTOR :**

Qualification : Qualified as per the eligibility criteria mentioned at Annex - I in the tender.

Duties & Responsibilities :

1. The contractor shall visit the site and inspect all work, plant installation at least once in a week & report to Engineer.
2. The Contractor should depute competent personnel as mentioned below to conduct the maintenance work,
3. Weekly verification, sign & submission of registers.
4. Providing all essential tools to his staff for day to day maintenance & emergency.
5. Providing all safety equipments, material to his staff. Providing uniform, safety shoes, insulated gloves, raincoats, caps, umbrellas, torch etc. to his all staff.
6. Provide necessary training to his staff on quality, safety & technology.
7. If any staff is on leave/absent for more than 24 hours, the contractor should provide immediate replacement with equally qualified & experienced person.
8. To arrange transport, loading, unloading if compressor or any other part, equipment is to be sent out for repairs.
9. **Payment to his staff :** The Contractor shall make payment to his staff as per the prescribed rates of Minimum Wages Act of Govt. of India for Area B (Goa) as explained at Annexure ó II.

Salary of all staff should be directly deposited to their bank a/c after deduction of ESI, EPF, perks etc. Bank a/c statement of a previous month of all staff should be enclosed with the monthly bill for payment.

The Contractor shall be liable for strict action if it is observed that payment made to his staff is less than the prevailing minimum wages.

b) SUPERVISOR:

- Qualification :** (i) Should have minimum qualification of Diploma in Electrical / Mechanical / Electronics Engineering, Three years course from Govt. recognized Institution.
(ii) Should have relevant work experience of minimum five years.

Duties & Responsibilities :

1. He should get the work done from the deployed staff of the contractor to the satisfaction of the Electrical Engineer / Estate In-Charge.
- He is responsible for normal operation in the campus, planning & execution of work.
2. He should have strict supervision on all his staff & maintain discipline.
 3. He should keep record of daily functioning of AHU/HVAC units & record timely temperature.
 4. He should frequently visit HVAC plant, AHU rooms, Compressor rooms, cold rooms, Clean rooms, reefer container etc. take a round to the campus on regular basis, inspect the electrical, water arrangements and inform/attend problems if found any.
 - 5 He should give all shifts report to the Engineer and get it signed in the Shift Log Register.
 6. He should monitor input voltage to the plant & take necessary measurements in case of power failure.
 7. Supervisor shall co-ordinate with his staff of all shifts & properly distribute work.

c) SENIOR TECHNICIAN:

- Qualification :** (i) Should have minimum qualification of ITI Refrigeration & Air-conditioning trade of any Government recognized Industrial Training Institute.
(ii) Should have relevant work experience of minimum Three years.

Duties & Responsibilities :

1. He will visit the problem area, plan action & execute under instructions from Supervisor/Engineers.
2. He should assist the Supervisor in work
3. He should take all readings like water meter, electricity meter, DG, Transformer etc.
4. Make Entries in the register.
5. He should attend the complaints.

d) JUNIOR TECHNICIAN:

- Qualification :** (i) Should have minimum qualification of ITI Refrigeration & Air-conditioning/ Electrician trade of any Government recognized Industrial Training Institute.
(ii) Should have relevant work experience of minimum One year.

Duties & Responsibilities :

- 1) He will visit the problem area, plan action & execute under instructions from Supervisor/Estate Engineer/Senior Electrician.
- 2) He should assist the Supervisor /Senior Electrician in work.
- 3) He should attend the complaints.
- 4) Assist Estate Office in day to day work.

ANNEXURE – VI

STANDARD TERMS AND CONDITIONS**1. INTERPRETATION:**

In construing these conditions the Specifications, the Schedule of Quantities, additional Conditions and Agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise requires. í

WORK OR WORKS: shall mean all work or works defined in schedule of quantities. Specifications and such other work or works as the contractor may be entrusted with for carrying out under this contract.

EMPLOYER: shall mean the Director, NCPOR (National Centre for POLAR & Ocean Research) or any other officer authorized by the Director for the purpose.

ENGINEER: shall mean the Engineer designated by the Employer to superintend and perform other duties as indicated in the contract.

CONTRACTOR: shall mean the individual or Firm or Company, whether incorporated or not, undertaking the work and shall include the legal personal representative or such individual or the persons composing such Firm or Company or the successors of such Firm or Company and the permitted assignees of such individual or Firm or Firms or Company.

SITE: shall mean the site of the contract works including any buildings and erections thereon and any other land adjoining thereto (inclusive) as aforesaid allotted by the Employer or the Engineer for the contractor's use.

COMPENSATION: shall mean all sums payable by way of compensation under any of the conditions shall be considered as reasonable compensation without reference to the actual loss or damage sustained and whether or not any damage sustained and whether or not any damage shall have sustained.

Words imputing persons include firms and corporations, words imputing the singular only also include the plural and vice versa where the context so required.

The headings are given to the clauses for convenience and they will not limit the meaning or scope of the clauses in any way.

2. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

- a. The contractor shall provide at his own cost all materials, (except such materials, if any as may in accordance with the contract, be supplied by the Employer). Plants, tools, appliances, implements, ladders, scaffolding, temporary works etc. requisite for the proper execution of the work whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or which may be necessary for the purpose of satisfying or complying to the requirements of Engineer, as to any manner as to which under these conditions he is entitled to be satisfied together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract and /or from his Security Deposit.
- b. The Contractor should personally supervise each work till completion or may appoint a qualified Supervisor, pre-approved by the Engineer till the completion of work. No separate supervision charges will be paid.
- c. NCPOR shall provide requisite quantity of water, electricity for carrying out the work free of cost, subject to availability in the NCPOR campus.
- d. The Employer on no account shall be responsible for the expenses incurred by the contractor for anything hired, which the contractor needs to complete the ordered work.

3. DUTIES & TAXES

Rates quoted by the contractor shall include all duties, octroi, toll tax, levies, royalties and all other taxes with respect to this contract. **Goods and Service Tax (GST)** as applicable is to be stated specifically in the prescribed columns of the price bid. In absence of any such stipulation, it will be presumed that rates quoted are inclusive of all taxes and no claim whatsoever in this regard will be entertained later.

4. PAYMENTS TERMS :

- a. NCPOR will release the payment to the party against submission of Monthly Bill in duplicate after satisfactory completion of monthly work after deduction of statutory taxes. No part payment/advance will be made. (As per the Govt. of India norms, payment to the Contractors are made online through Public Financial Management System (PFMS). The Contractor should submit his bank & other details in the prescribed format along with the first bill.)
- b. The copies of deposit challans of EPF and ESI and Bank Statements of previous month of all personnel is the pre-requisite for processing payment.
- c. The contract is a fixed price contract & no escalation will be permissible during any stage of contract.

5. **SECURITY DEPOSIT (SD):** This is security cum performance guarantee deposit. EMD of the successful bidder will be converted into Security Deposit and 10% amount of every monthly bill will be deducted as SD. It is an interest free deposit and will be refunded on successful completion of the contract period. In the event of contractor fails to comply the terms and conditions of the contract the Security Deposit will be forfeited.

6. TESTING OF MATERIALS

The contractor shall provide assistance, instruments, materials, labour and any other arrangement normally required for testing, checking of materials and workmanship as stipulated in the specifications and by statutory authority, at his own cost. The Employer has the right to appoint the testing authorities. The contractor shall pay for the cost of test samples, its packing, transportation including testing fees. Failing so doing the same shall be provided by the Engineer at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract and/or from the Security Deposit or proceeds thereof or of a sufficient portion thereof.

7. CONTRACTOR'S ENGINEERS/FOREMAN & WORKMEN

- a. The contractor shall give all necessary personal superintendence during the execution of the work and as long thereafter as the Engineer may consider necessary until the expiration of the Defects Liability Period. The contractor shall employ competent Site-Engineer/Foreman as per CPWD norms and as approved by the Engineer whose qualification must conform to the requirement specified by the Engineer who shall be constantly in attendance of the work while the men are at work. Any directions, explanations, instructions or notices given by the Engineer to such Site-Engineer or Foreman or any other authorized agent shall be held to be given to the contractor.
- b. The contractor shall on the request of the Engineer immediately dismiss from the works any person employed thereon who may in the opinion of the Engineer be unsuitable or incompetent or who may in the opinion of the Employer misconduct himself.

8. ACCESS

- a. The Engineer and the Employer or its representative shall at all reasonable time have free access to the works and /or workshops, factories or other places the materials are being prepared or constructed for the contract and also to any place where the materials are lying or from which they are being obtained and the contractor shall give every facility to them for inspection. Except the representatives of statutory authorities and those mentioned above no other person shall be allowed on the works at any time without the permission of the Engineer.
- b. If any work is to be done at a place other than the site of works, contractor shall obtain written permission of the Engineer.

9. VALUATION & PRICE FOR VARIATION

The Engineer with the approval of the Employer shall have power to make any alterations/omissions/additions and /or substitutions from the original specifications, drawings, designs and written instructions and such alterations, omissions, additions, substitutions shall not invalidate the contract and any altered , additional , or substituted work which the contractor may be directed to do, in the manner specified above as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work. The rates for such altered additional or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order,

- a. If the rates for the altered, additional, or substituted work are specified in the contract for the work the contractor is bound to carry out the altered additional, or substituted work at the same rates as are specified in the contract for the work.
- b. If the rates for the altered, additional or substituted work are not specifically provided in the contract for the work the rates will be derived from the rates for a similar class of work as are specified in the contract for the work.
- c. Under no circumstances the contractor shall suspend the work on the plea of non-settlement of rates of items falling under the clause.

10. FAULTY MATERIALS, WORKMANSHIP & DEFECTS AFTER COMPLETION

- a. The Engineer shall have powers to require the removal from the site of all materials and work, which in his opinion are not in accordance with specifications and in case of default , the Engineer shall be at liberty to employ other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials to be substituted thereof and in case of default the Engineer may cause the same to be supplied and all costs which may attend such removal and/or substitution are to be borne by the contractor.
- b. If it shall appear to the Engineer or to the Estate In-charge that any work has been executed with unsound imperfect or unskilful workmanship or with materials of any inferior description or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract any defects , shrinkage or other faults which may appear within the defects liability period of Six months from the date of completion arising in the opinion of the Engineer, the contractor shall on demand in writing which shall be made within six months of the completion of the work from the Engineer specifying the work, materials , articles defects or other faults complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify or remove and reconstruct the work so specified in whole or in part as the case may require or as the case may be removed the materials or articles so specified and provide other proper and Suitable materials or articles at his own cost. In case of any such failure, the Engineer may rectify or remove or re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and cost in all respects of the contractor.
- c. In lieu of rectifying the work not done in accordance with the contract, the Employer may, allow such work to remain, and in that case make allowance for the difference in value, together with such further reduction as in his opinion may be reasonable.
- d. Provided always that nothing in this clause shall relieve the contractor from his liability to execute the works in all respects in accordance with the terms and conditions of this contract, or from his liability to make good all defects.

11. WORKS SHOULD BE OPEN FOR INSPECTION

- a. All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer to visit the works shall have been given to the contractor.
- b. The contractor at least three days notice in writing to the Engineer before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken.

12. INDEMNIFYING AGAINST DAMAGES TO PERSONS, PROPERTY & STATUTES

The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of work.

- a. The contractor shall be responsible for all injury to persons, animals or things and for all damage whether such injury or damage arises from carelessness or accident in any way connected therewith. This clause shall be held to include inter alia any damage due to causes as aforesaid to work, building (whether immediately adjacent or otherwise) and to roads, streets, foot paths, bridges or ways as well as all damage caused to the buildings and works forming the subject of this contract by inclemency of weather. The contractor indemnifies the Employer and holds him harmless in respect of all expenses arising from such injury or damages as aforesaid and also in respect of any award of compensation or damage consequent.
- b. The contractor shall reinstate all damage of every sort mentioned in this clause so as to deliver the whole of the contracted works complete and perfect in every respect and so as to make good and otherwise satisfy all claims for damage as aforesaid to the property of third Parties.
- c. The contractor also indemnifies the Employer against all claim which may be made upon the Employer for acts during the currency of this contract by any employee or representative of an employee of the contractor or any sub-contractors, employed by him for any injury to or loss of life of such employees or for compensation payable under any law for the time being in force to any workmen or to the representative of any deceased or incapacitated workmen.
- d. The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages compensation costs charges and /or expenses arising or occurring from or in respect of any such claim and/or damages as aforesaid from any sum or sums due or to become due to the contractor or security deposit.
- e. The contractor shall indemnify the Employer against any action claim or proceedings relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against the Employer in respect of any such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty at his own expense to settle any dispute or to conduct any litigation that may arise there from provided that the contractor shall not be liable to indemnify the Employer if the infringement of the : patent or design of any alleged patent or design right is the direct result of an order passed by the said Employer or his authorized representative .

13. IN CASE OF DEATH OF CONTRACTOR

Without prejudice to any of the rights or remedies under this contract, if the contractor dies the Employer shall have the option of terminating the contract without compensation to the contractor.

14. COMPLIANCE TO LABOUR LAWS

The contractor shall comply with all the provisions of the Minimum Wages Act, 1948. Contract Labour (Regulation and Abolition) Act, 1970 and rules and orders framed there under and other labour laws affecting contract labour and the rules and orders framed there under that may be in force or brought into force from time to time. NCPOR will not take any responsibilities towards any injury or compensation etc.

As per the GOI enacted the Building & Other Construction Work Act 1996 (BOCW Act), Labour Welfare Cess @ 1% will be deducted before payment if, the Contractor employees 10 or more workers on any day of his work. The Contractor should make necessary registrations with the Labour Department towards fulfilment of the rules & regulations of the BOCW Act & other applicable Acts of the labour Department

15. **STATUTORY VARIATION:** Any statutory increase or decrease in the taxes and duties subsequent to bidder's offer if it takes place within the work completion date will be to the Employers account subject to the claim being supported by documentary evidence. However, if

any decrease in taxation rates takes place within the work completion date the advantage will have to be passed on to the Employer.

- 16. POST TENDER CORRESPONDENCE / ENQUIRIES:** Any correspondence or enquiry subsequent to opening of the bids is not desirable, if the same is indulged into, it will be considered for disqualifying the tender. The Tenderer will be required to abstain from pursuing / canvassing the matter, directly or indirectly with any Officers of NCPOR, as otherwise the same would also amount to disqualification of the tender. However, bidder can ask their queries in writing regarding bidding conditions, bidding process prior to the bid opening and/ or rejection of its bid, reason for rejecting a tender after opening of bids.
- 17. CLARIFICATIONS FROM BIDDERS:** To assist the process of examination, evaluation and comparison of bids, the Employer may ask all the bidders or any bidder individually for clarification, if any, of their bids, including eligibility criteria, experience, breakdown of unit rates and price. The request for clarification and the response should be in writing by email/fax/post, but no change in the price or substance of the bid will be sought, offered or permitted, except as required to confirm the correction of arithmetical errors discovered by the Employer in the course of scrutiny.
- 18. GUARANTEE:** If the goods, stores and equipments found defective due to bad design or workmanship the same should be repaired or replaced by the Contractor free of charge if reported within one year from the date of commissioning of items/equipments whichever. The Contractor will be responsible for the proper performance of the equipments / materials for the respective guarantee period.
- 19. RENEWAL/TERMINATION OF THE CONTRACT**
1. The contract period is Twelve months extendable on yearly basis for a further period of Two years with the same rate & same terms & conditions of the agreement based on the satisfactory performance assessed by NCPOR.
 2. The work performance of the contractors & individuals service providers will be assessed periodically and if the same is found unsatisfactory the contractor should immediately replace the service provider/work force.
 3. If the Contractor is found to be not performing satisfactorily during the course of the contract period, or refuses to do any part of the work or becomes bankrupt then NCPOR shall terminate the contract at any stage with a short notice.
 4. At any point of time during the contract period if any malafide intention of the contractor is observed or if any fake, misleading information is submitted by the contractor then the contract will be terminated immediately & security deposit will be forfeited.
- 20. PENALTY :** (a) For non deployment of Personnel 5 % of the total monthly contract amount would be levied as penalty if full strength of agreed personnel are not present for continuous 03 days in one month. (b) For non performance 5 % of the total monthly contract amount would be levied as penalty. (c) The penalty to be imposed is @5% but not limited to it. The contractor shall replace/return the parts within two working days. Any delay in conducting maintenance/repair/replacement of critical component which leads to malfunctioning/stoppage of any of the functionalities would be dealt seriously & treated as break-down of the entire system and the entire loss incurred due to this will be recovered from the contractor and decision of NCPOR authorities will be final in such matters.
- 21. SETTLEMENT OF DISPUTES/ARBITRATION:** The decision of the Director, NCPOR shall be final and binding for any dispute whatsoever. All questions, disputes or differences whatsoever which may at any time arise between the parties to this agreement touching the agreement or subject matter thereof, arising out of or in relation there to and whether as to construction or otherwise shall be referred to the decision of the Sole Arbitrator, appointed by the Director of NCPOR and the decision of the said Arbitrator shall be final and binding upon the parties.
- 22. RIGHT TO CANCEL TENDER/WORK ORDER:** In case of strike, accident or any other unforeseen conditions causing stoppage of work, NCPOR reserves the right to cancel and/ or modify the tender / work order without any liability for any compensation and / claim or any description.

- 23. FORCE MAJEURE :** If any time, during the continuance of this contract, the performance in whole or in part by either party under obligation as per this contract is prevented or delayed by reasons of any war or hostility, act of the public enemy, civil commotion, sabotage, fire, flood, explosion, epidemic, quarantine restrictions, strike, lockout or acts of God (hereinafter referred to as 'eventuality'), provided notice of happening of any such eventuality is given by either party to the other within 21 days of the date of occurrence thereof, neither party shall be reason of such an 'eventuality' be entitled to terminate this contract nor shall either party have any claim or damages against the other in respect of such non-performance or delay in performance and deliveries under the contract. The contract shall be resumed as soon as practicable after such 'eventuality' has come to an end or ceased to exist. In case of any dispute, the decision of Director, NCPOR, shall be final and conclusive, provided further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such eventuality for a period exceeding 60 days, either party may at its option, terminate the contract. Provided also that if the contract is terminated under this clause the Employer shall be at liberty to take over from the Contractor at a price to be fixed by the Employer, which shall be final, all unused, undamaged and acceptable materials, bought out components and other stores in the course of manufacture which may be in the possession of the Contractor at the time of such termination, or such portion thereof as the Employer may deem fit except such material, as the Contractor may, with the concurrence of the Employer, elect to retain.
- 24. JURISDICTION:** All questions, disputes or differences arising under out of or in connection with the Tender / Contract if concluded shall be subject to the exclusive jurisdiction of the court under whose jurisdiction the place from which the tender / Acceptance of tender is issued, is situated i.e. Goa.

I/ We have read all the Terms and Conditions above carefully and agreed to it.

Signature of Tenderer :

Date:

Company's Round Seal

Place:

ANNEXURE – VII

PARTICULARS OF THE TENDERER

1. Name of the Tenderer : _____

2. Main Office Address : _____

3. Goa Office Address : _____

(Pl. enclose copy of Electricity Bill/ Telephone Bill etc. of Goa address as a proof of establishment)

(a) Name of the contact person : _____

(b) Telephone No. (s) : _____

(c) Fax No. : _____

(d) E-mail Address : _____

(E-mail address should be provided which will be used for official correspondence)

(e) Website Address : (if any) : _____

4. Electrical Contractor Licence Number : _____

For kV : _____ Registration Valid up to date : _____

(Please enclose copy)

5. PAN No. of the quoted Firm / Tenderer : _____

(Please enclose copy)

6. Goods and Service Tax (GST) Number : _____

(Please enclose copy of registration number)

7. ESI Registration Number : _____

(Please enclose copy of registration certificate)

8. EPF Registration Number : _____

(Please enclose copy of registration certificate)

9. Have you ever terminated/Black Listed by any organization : YES / NO

Name & Signature of the Tenderer with seal

ANNEXURE – VIII

WORK COMPLETION PROFORMA

Give details of work executed, at least one single AMC of HVAC and Cold Room units amounting not less than Rs. 40 lakh per annum Or two AMC of HVAC and Cold Room units amounting not less than Rs. 30 lakh per annum Or three AMC of HVAC and Cold Room units amounting not less than Rs. 20 lakh per annum, of any Govt/PSU/reputed organization, company during last seven years ending March 2021. Enclose self certified copies of Work Orders & Work Completion Certificates.

Sl. No.	Name of work	Location of Site	Value of work	Date of Completion of work	Name of Organizational Executive under whom work is done

*** Pl. note, Work Order & it's Work Order Completion Certificate together will be considered as a work.**

**Name:
& Signature of the Tenderer with Seal**

ANNEXURE – IX

TENDER SUBMISSION LETTER / OFFER FORWARDING LETTER

(To be submitted on the Bidder’s Letter Head)

Offer Reference No: 0 0 0 0 0 0 .

Date: 0 0 0 0 0

To,
Director,
National Centre For Polar & Ocean Research
Headland Sada, Vasco-Da-Gama,
Goa 403 804.

Dear Sir,

Sub : Submission of Offer against your Tender No: 0 0 0 0 0 0 0 0 0 0

I/We hereby offer to carry out the work detailed in your above Tender described as ‘**Annual Operation and Comprehensive Maintenance Contract of HVAC, Cold room, AHU, Clean room, VRF etc. at NCPOR, Goa**’ in accordance with the terms and conditions thereof.

I/We have carefully perused the Tender documents connected with the above work and agree to abide by the same.

I/We hereby declare and confirm that we have visited the Work Site as referred in NCPOR Tender on (date) 0 and acquired full knowledge and information about the Site conditions including geographical location, climate, wage structure, the office law & order and other conditions prevalent at and around the Site. We further confirm that we shall not raise any claim of any nature due to lack of knowledge of Site conditions.

I/We further agree to execute all the works referred to in the said Tender documents upon the terms and conditions contained or referred to therein and as detailed in the appendices annexed thereto.

I/We will submit the requisite Earnest Money Deposit (EMD)/Bid security as per details furnished in EMD Details.

I/We, hereby certify that all the information and data furnished by me with regard to the above Tender Specification are true and complete to the best of my knowledge. I have gone through the specifications, conditions, stipulations and all other pertinent issues till date, and agree to comply with the requirements and Intent of the specification.

I further certify that I am authorized to represent on behalf of my Company/Firm for the above mentioned tender and a valid Power of Attorney to this effect is also enclosed.

I/We, hereby certify that all the documents submitted by us in support of possession of ~~Q~~Qualifying Requirements+ are copies of the original and are fully compliant required for qualifying / applying the bid and shall produce the original of same as and when required by NCPOR.

I / We hereby further confirm that no tampering is done with documents submitted in support of our qualification as bidder. I / We understand that at any stage (during bidding

process or while executing the awarded works) if it is found that fake / false / forged bid qualifying / supporting documents / certificates were submitted, it would lead to summarily rejection of our bid / termination of contract. NCPOR shall be at liberty to initiate other appropriate actions as per the terms of the Tender / Contract.

I/We hereby confirm that we have not changed/ modified/materially altered any of the tender documents as downloaded from the website/ issued by NCPOR and in case of such observance at any stage, it shall be treated as null and void.

We also hereby confirm that we have neither set any Terms and Conditions and nor have we taken any deviation from the Tender conditions together with other references applicable for the above referred Tender Specification.

I/We hereby confirm that my/our firm was never black listed from any office/institute/organization.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

I/We hereby also declare that we will not share any details of our bid for this tender with any other person/company/firm & maintain confidentiality of document & information till the opening of bids.

Yours faithfully,

Name & Signature of the Tenderer/Authorized Signatory with seal :

ANNEXURE - X

DECLARATION IN LIEU OF EMD/BID SECURITY**(To be submitted on the Bidder's Letter Head)**

I/We _____ .(Name and Address of the Bidder) am/are submitting this declaration in lieu of EMD/Bid Security for the Tender _____ .(Name of the Tender), (Tender No. _____ .) and thereby fully accepting that I/We will be suspended and/or black listed and/or shall not be eligible to participate in any Tenders invited by National Centre for Polar and Ocean Research (NCPOR), for a period of Two years from the date of such Suspension, under the following circumstances:-

- a) If after opening of the Tender, I/We withdraw or modify my/our Tender bid during the period of bid validity as specified in the Tender Documents (including extended validity, if any)
- b) If do not accept any Tender Terms & Condition of the Tender Document.
- c) If after the award of work, I/We fail to furnish the required Earnest Money Deposit (EMD) or Bid Security as detailed in the Tender Document within the stipulated time.
- d) If I/We do not provide any information, documents as asked by you for the bid evaluation or contract finalization or contract execution purpose.
- e) If I/We fail to sign the Contract, within the stipulated time as mentioned in the Tender Document/Work Order
- f) If I/We fail or refuse to execute the contract as per the Terms & Conditions of the Tender Document.

Name & Signature of the Tenderer/Authorized Signatory with seal :

ANNEXURE – XI

SCHEDULE OF RATES (PRICE BID)**[A] Repair & Replacement Work :**

Sr.	Particulars of Repairs	Cost of the total work (Rs)	GST %	Total Cost (Rs)
(a)	(b)	(c)	(d)	(e) = (c) + (d)
1.	SITC of Evaporator Complete work as described at Annexure - IV			
<i>Total Cost (e) in words :</i>				
2.	SITC of Scroll Compressor Complete work as described at Annexure ó IV			
<i>Total Cost (e) in words :</i>				
[A]	Total :			
<i>Total Cost [A] in words :</i>				

[B] Comprehensive Annual Maintenance Work :

Sr.	Particular	No. of person / Quantity	Amount per Person Per MONTH	Total	GST %	GST Amount (Rs)	Total (Rs)
(a)	(b)	(c)	(d)	(e) =(c)x(d)	(f)	(g)	(h) =(e)+(g)
1	Supervisor (Highly Skilled)	01					
<i>Only Amount (d) in words –</i>							
2	Senior Technician (Skilled)	03					
<i>Only Amount (d) in words –</i>							
3	Junior Technician (Semi Skilled)	03					
<i>Only Amount (d) in words –</i>							
4	Total MONTHLY charges for Comprehensive Maintenance of HVAC, Cold room, clean room, AHU, VRF/VRV, Reefer container etc as per Tender requirement & activity chart for repair/ replacement of components, consumables, all spares etc. accessories, equipment for maintenance, tools, safety equipments, cost of uniforms, shoes etc. as mentioned in Annexure ó II.			Per month			
<i>Only Amount (e) in words –</i>							

5	Service Charges of the Contractor	Per month			
<i>Only Amount (e) in words –</i>					
6	Other Charges if any :	Per month			
<i>Only Amount (e) in words –</i>					
(m)	Total Amount Per Month :				
[B]	Total Amount Per Year (m x 12) :				

[A] Total Amount of Repair & Replacement Work :

[B] Total Amount of Comprehensive Annual Maintenance Work :

[C] GRAND TOTAL [A] + [B] :

Grand Total [C] in words, Rupees í

í ..

Pl. note :

- Re-writing, use of whitener is not allowed. The price bid should neatly handwritten/typed/printed & submitted in original with signature & stamp on all pages. Tender will be rejected if scanned copy or Xerox copy is submitted.
- The Rates for the contractor's personnel from Sr. B,1 to 3 should be inclusive of his monthly wages, EPF, ESI, bonus & other benefits as directed by Labour Dept. The wages should be strictly as per the minimum wages act and as per the existing rates of the Labour Department of Govt of India.
- If the rate quoted for each personnel is less than the existing minimum rates of wages including Variable Dearness Allowance then the bid is liable for rejection.
- The cost of Sr. no. 4 above may be derived as a total cost for a year & then divide by twelve to quote as a lump sum per month.
- Other than the above if any cost factor which bidder wish to quote may be quoted as Other Charges at Sr. No. 6.
- Discount offered if any, should be included in the quoted rates & should not be shown separately.
- Contractor should quote all items given in the price bid. Tender will be rejected if all items are not quoted.
- The current GST rate is considered as 18% on all items. In case of any changes in GST prior to bid submission or even if bidders quoted GST other than 18% in price bid, GST rate @ 18% will be considered for all bids for all items for bids evaluation purpose. However, payment will be made to the Contractor with the prevailing GST rate against submission of documentary evidence.
- Price Evaluation Criteria - The Lowest Evaluated Bidder (L1) would be arrived from the Grand Total (C) above.

DECLARATION

- 1) I/We have read and understood the terms & conditions of the tender and comply to all Terms & Conditions of the Tender. There is no deviation in any part of the tender from my/ our side.*(In case of any deviation the Bidder must attach a separate sheet clearly stating the clause no. of the Tender and Deviation thereto)*
- 2) The undersigned is an authorized signatory and authorized to submit this bid and also certifies that the information mentioned above is true and correct.
- 3) If the work is awarded, I/we assure that the entire work will be completed satisfactorily within the stipulated time as per the tender terms & conditions.
- 4) I/We agree to accept payment through Public Financial Management System (PFMS).

Name:

Signature of Authorised Signatory:

Date:

Place:

Seal:

ANNEXURE- XII

INSTRUCTIONS TO THE TENDERERS

Tenderers are advised to submit tender strictly as per conditions stipulated in the tender document. Please enclose the following with the tender & submit all in a **Single Sealed Cover**.

Cover (Sealed):

1. Tender Submission Letter (Annex ó IX) from the Tenderer **on his firm's letterhead**.
2. Documents of Eligibility Criteria as mentioned in Annexure ó I
3. Declaration in lieu of EMD/Bid Security (Annexure ó X)
4. Particulars of the Tenderer with the documents mentioned to enclose therein (Annexure - VII)
5. Work Completion Proforma (Annexure ó VIII) along with self attested copies of Work Orders & Work Completion Certificates.
6. Price Bid (Annexure ó XI, with signature & stamp on all pages)

All above document should be submitted in one sealed envelope (SINGLE BID SYSTEM) superscribing **Name of the Tender, Tender Number, date and time of tender opening** and address to **Director, National Centre for Polar & Ocean Research, Headland Sada, Vasco-Da-Gama, Goa**. Tender duly completed in all respect should be dropped in the tender box kept in the office of Estate section well before the due date & time.

Tender Opening : Tender will be opened on the scheduled date & time. An authorized representative of the bidding firm/company can only attend the bid opening (only one person is allowed). Owner/Proprietor/Director of the bidding firm should provide his/her visiting card, copy of photo ID proof. Bidder's representative should submit authorization letter, copy of photo ID to the Tender Opening Committee. Persons attending bid opening must use face masks, maintain social distancing, use sanitizer/wash hands & strictly follow guidelines of MoHFW, Govt. of India for COVID pandemic situation.

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Estate In-Charge

ANNEXURE – XIII

List of Installations, Equipments at NCPOR –Goa

1. Cooling Tower (Paharpur) Model 3831
2. Cooling Tower (Paharpur) Model 3842
3. Voltas Chiller Unit 1 With Motor capacity 60HP Make-ABB, Compressor unit of Voltas. Model WCDRO500MNSRPZ
4. Voltas Chiller 2 With Motor capacity 60HP Make-ABB ,Compressor unit of Voltas.Model WCDRO500MNSRPZ
5. Voltas Chiller Unit for Clean Room with Copeland Scroll compressor Model WCDSO36MN600006
6. AHU 4 Saveair 1200 cfm ,AHU 6 Saveair 2000 cfm
7. AHU 3 Saveair 2750 cfm ,AHU 5 Saveair 7000 cfm
8. AHU 2 Saveair 12000 cfm ,AHU 1 Saveair 16000 cfm
9. Pump Motor- 3 HP Make-Kirloskar Monoblock, Model No. KDS -335 (4 nos.)
10. Pump Motor-5 HP Make-Kirloskar Monoblock, Model No. KDS -527 (2 nos.)
11. Pump Motor - 7 HP Make-Kirloskar Monoblock, Model No. KDS -844 (2 nos.)
12. Pump Motor - 2 HP Make-Kirloskar Monoblock, Model No. KDS -225 (2 nos.)
13. Humidifier -Sant Industrial Controls 6KW
14. Hot Water Generator- Type Vertical Capacity 21 KW
15. GM Balancing Valve TAG-A-02000842(20 mm)
16. GM Balancing Valve TAG-A-0200972 (20 mm)
17. GM Balancing Valve TAG-A-0201961 (20 mm)
18. GM Balancing Valve TAG-A-0401373(32 mm)
19. GM Balancing Valve TAG-A-0603243 (50mm)
20. CI Balancing Valve size NB- 100 mm -2 Nos.
21. CI Balancing Valve size NB-125 mm - 2 Nos.
22. GM Balancing Valve size NB -50 mm TAGA 602593
23. GM Balancing Valve size NB- 65 mm TAG -0701393
24. GM Balancing Valve Tag No.A0200642- 20mm
25. Dual plate check valve
26. Dual plate check valve
27. Dual plate check valve
28. Butterfly valve
29. Cold Rooms ó Evaporators/Condensing units(Indoor & outdoor- 8 sets) -5°C , -15 °C & -20°C (2 nos)
Indoor Units :PASURUAH 67154 (PT. GUNTNER INDONESIA)
CR-1: Fan type-Z.A. FANFB045-VSK.4C.6L (107123) (2 nos.)
CR-2: Fan type-EBMFAN S4E350-AA06-34 (2 nos.)
CR-3 : Fan type-EBMFAN S4E315-AA05-14 (2 nos.)
CR-4 :Fan type-Z.A. FANFB045-VSK.4C.6L (107123) (2 nos.)
Outdoor Units : Compressor type-Semi-Hermetic (Make-Bitzer)
CR-1 : Capacity 4.31 KW (2 nos.), CR-2 : Capacity 3.15 KW (2 nos.)
CR-3 : Capacity 2.14 KW (2 nos.), CR-4 : Capacity 4.13 KW (2 nos.)
30. VRF/VRV VRF / VRV airconditioning system , comprising of modular type high efficiency scroll compressors system suitable for R410a / R407c refrigerant Outdoor Unit(ODU) Capacity :16 HP X 2 + 12 HP configuration totalling 44HP (Cooling capacity 106190 KCal/Hr), Make: Toshiba (01 SET)
31. 4TR Capacity (12037 KCal/Hr) Ceiling Mounted VRF connected Cassette type Indoor Unit,T make :Toshiba MMUAP0094HP-E,(09 NOS)
32. Central remote controller for units mentioned for item no 33 & 34. Make: Toshiba (01 SET)
33. Reefer container -20degree (Make:Carrier transicold,model no:69NT40-641-503) usig R-134a refrigerant.
34. Compressor of reefer container (Make:Carrier transicold,model no:06DR241BCC06C0)

Tender No : NCPOR/EST/EE/02/20-21

Tender Name: AMC of HVAC, Cold room, Clean room and other air conditioning installations at NCPOR
