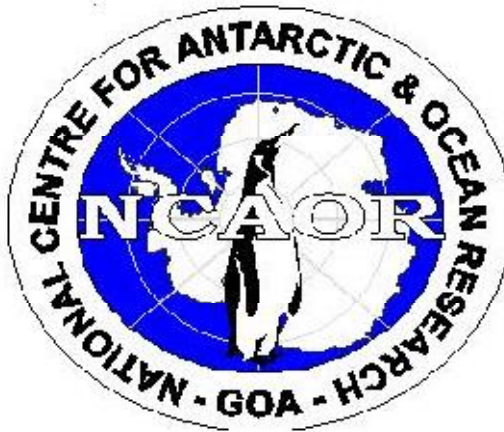


National Centre for Antarctic & Ocean Research
(An Autonomous Society under the Ministry of Earth Sciences)
Headland Sada, Vasco-da-Gama, Goa-403804



Tender Document

Tender No:-NCAOR/EST/EE/01/17-18

**Name of the work: - Renovation of Flood Light System
at NCAOR, Goa**

National Centre for Antarctic & Ocean Research (*Ministry of Earth Sciences*),
Govt. of India, Headland Sada, Vasco-da-Gama, Goa-403804 (Ph: 0832-2525541/578)

Notice Inviting Tender

Tender No: NCAOR/EST/EE/01/17-18

The Director, NCAOR invites sealed Tender for Renovation of Flood Light System at NCAOR, Goa. The eligible contractors may visit NCAOR website www.ncaor.gov.in or www.eprocure.gov.in or contact the above office for detailed tender document. Last Date of tender submission is 22.08.2017

Director

TENDER TERMS AND CONDITIONS

1. The Director, NCAOR, Goa invites sealed tenders in one cover system, for the work of **Renovation of Flood Light System at NCAOR** on turnkey basis, from the registered Electrical Contractors of Goa or other State Government's Electricity Departments, who have carried out at least three similar electrical works of Rs. 4 lakhs or above during last 3 years ending July 2017.
2. Time period for completion of work is **60 days** from the date of work order.
3. Tender document may be obtained from the office of Estate section, NCAOR during the office hours between 10.00 hrs to 16.00 hrs. on or before **21.08.2017**, by a written request and payment of **Rs. 500/-** by DD drawn in favour of NCAOR, payable at Vasco-da-Gama, Goa. Those who are submitting tender by downloading from the website should invariably enclose DD for **Rs. 500/-** as **Tender Fee**, drawn in favour of Director, NCAOR payable at Vasco-Da-Gama, only. Tenders received without Form Fee will be rejected.
4. Entire tender document (signed and Stamped on all pages) should be submitted in a **Single Sealed cover**, superscribed with the name of the work, tender number, date and time of opening. Tenders will be received **upto 11.00 am** on **22.08.2017** and **will be opened at 11.30 am on the same day**. Tenders should be dropped in the tender box kept in the Estate section before the closing date and time indicated. If the tender opening day happens to be a holiday then tenders will be opened on the next working day on the same timings.
5. The Earnest Money Deposit (**EMD**) of **Rs. 33,000/-** (Rupees Thirty Three Thousand Only) in the form of a demand draft from a scheduled bank, drawn in favour of Director, NCAOR, payable at Vasco-da-Gama only, should accompany the tender documents. Tenders received without EMD will be rejected. EMD & Security Deposit are interest free deposits. EMD of successful bidder will be converted into Security Deposit. EMD DDs of unsuccessful bidders will be returned to them as it is.
6. It is mandatory to quote all items of the price bid. If all items are not quoted then tender will be rejected.
7. NCAOR 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.
8. 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.
9. The tenderer shall quote RATES both in figures and words. He shall also workout the amount for each item of work and write in figures. On checking if there are differences between the rates quoted by the tenderer in words and figures or in the amount worked out by him, the following procedure shall be followed:
 - When there is a difference between the rates in figures and in words, the rates, which correspond to the amounts worked out by the tenderer, shall be taken as correct.
 - When the amount of an item is not worked out by the tenderer or it does not correspond with the rate written either in figure or in words, the rate quoted by the tenderer in words shall be taken as correct.
 - When the rate quoted by the tenderer in figure and in words tallies but the amount is not worked out correctly the rate quoted by the tenderer shall be taken as correct and not the amount.

10. Before submission of tender, tenderer may 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 (T&P) etc., conditions affecting movement of labour etc. required for the satisfactory execution of work contract. No claim whatsoever on such account shall be entertained by NCAOR under any circumstance.
11. The bidder should have valid PAN/TAN/GST registration numbers.
12. Tenders with conditional prices / discounts will be rejected.
13. Successful bidder should commence the work within one week from the date of work order, failure of which, the earnest money will be forfeited.
14. Except writing rates and amount, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the Price Schedule of tender.
15. All authentic warranty/guarantee cards/papers, operation manuals drawings etc of the supplied and installed instruments/ equipments/ fixtures and fittings should be handed over to NCAOR after completion of defect liability period.
16. In case of termination of contract, the security deposit shall be forfeited and amount necessary to make up this amount shall be recovered from the contractor under this contract, or any other contract with the Employer.
17. The Employer has full right to get technical and price details of every item from the contractor even after the work is awarded, in order to assess the quality and reasonability of the work.

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Standard Terms and Conditions of the Contract**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.

WORK OR WORKS: shall mean all work or works defined in this tender, 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, NCAOR (National Centre for Antarctic & 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. NCAOR shall provide requisite quantity of water, electricity for carrying out the work free of cost, subject to availability in the NCAOR 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 excise and all duties, octroi, toll tax, levies, royalties and all other taxes in respect to this work. GST or any other tax 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 & no claim whatsoever in this respect will be entertained later.

4. MODE OF PAYMENT

Payment to the party will be released within 30 days upon submission of bill in duplicate after satisfactory completion of the entire work as per the actual quantity executed on site, as certified by the engineer after deduction of statutory taxes. No part payment / advance will be made.

5. DEFECTS LIABILITY PERIOD (DLP)

DLP is **Twenty Four Months** from the date of completion of work as certified by the Employer. During the DLP if any defects in the works are observed then the Contractor has to rectify the same immediately at his own cost.

6. SECURITY DEPOSIT (SD)

SD is 10% of the final bill value. EMD of the successful bidder will be converted into SD. The balance SD amount will be deducted from the final bill amount of the contractor. SD is interest free deposit and will be released only after successful completion of Defect Liability Period.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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 unskillful 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.

12. 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.

13. 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 interalia any damage due to causes as aforesaid to work, building(whether immediately adjacent or otherwise) and to roads, streets, footh 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 foresaid 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 .

14. 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.

15. 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. NCAOR will not take any responsibilities towards any injury or compensation etc.

16. EXTENSION OF TIME

- a. If the contractor shall desire an extension of time for the completion of the work on the grounds of his having been unavoidably hindered in its execution or any other ground, he shall apply in writing to the employer max. within seven days of the date of hindrance on account of which he desires extension as aforesaid and the Employer shall if in his opinion (which shall be final) reasonable grounds shown therefore authorize such extension of time if any which may in his opinion be necessary or proper.
- b. In the event the value of work exceeds the value of the Bill of Quantities owing to variations the contractor shall be entitled to ask for extension of time in proportion to the increased value of work.

17. **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.

18. **REPEAT/ADDITIONAL ORDERS:** NCAOR reserves the right to place repeat orders / additional orders on the successful bidder up to 25% of the original value of the Original Work Order at the same prices, terms and conditions stipulated in the original contract.

19. **REPLACEMENTS OF GOODS BROKEN, DAMAGED OR SHORT:** In the event of any stores or part thereof being broken or damaged or received short during transit or during the testing and trial at site before commissioning in service the suppliers shall replace the same free of cost. However, NCAOR will arrange recoveries of amount equivalent to cost of such damaged / broken / short supplied materials before actual replacement is given.

20. **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 NCAOR, 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.

21. **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 breakdown of unit rates and price. The request for clarification and the response should be in writing, 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.

22. **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.

23. **PENALTY & TERMINATION OF CONTRACT:** Time is the essence of the contract. If the contractor fails to maintain the required rate of progress or to complete the work and clear the site on or before the contract or extended date of completion, he shall without prejudice to any other right or remedy available under the law, pay compensation the amount calculated at the rates stipulated below or as the Employer may decide (whose decision in writing shall be final and binding) on the amount of the tendered value of the work for every completed day / week (as applicable) that the progress remains below or that the work remains incomplete.

In case, the work is delayed/not completed within the period stipulated in the contract, penalty shall be levied @ 0.5% per week on the total contract cost subject to maximum of 10% of the total contract cost. The Engineer may without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and / or any other provisions of this contract or otherwise, and whether the state of completion has or has not elapsed, can take decision & inform the Contractor by notice in writing in any of the following cases.

- i. If the Contractor fails to rectify/replace the defects in spite of written notice by Engineer.
- ii. If the Contractor suspends the progress of work so that in the opinion of the Engineer he will be unable to secure completion of the work by the date of completion and do not improve performance even after written notice.
- iii. If the Contractor neglects to carry out his obligation under the contract and / or commits defaults in complying with any of the terms and conditions and does not remedy if even after written notice.

When the Contractor makes himself liable for action under any of the aforesaid cases, fails to complete the work even after six weeks after the completion period or in case the work is found not in accordance with the prescribed specification, drawings, Employer shall exercise its discretionary power either:

- a. To recover, from the Contractor as agreed by way of penalty clause above, OR
- b. To terminate the contract. Upon such termination, the full security deposit recoverable under the contract shall be liable to be forfeited/recovered and shall be absolutely at the disposal of the Employer, OR
- c. After giving notice to the contractor to measure up the work done by him, get the balance work done by another contractor. Any expenses which may be incurred in excess of the sum which would have been executed by the another contractor, shall be borne and paid by the original Contractor and may be deducted from any of his dues.

Due consideration will be given for waiver / levy of penalty only for the reasons absolutely beyond Contractor's control for which documentary evidence will have to be provided. The request for extension of time in writing giving reasons for delay with supporting documents shall have to be made immediately.

24. **SETTLEMENT OF DISPUTES/ARBITRATION:** The decision of the Director, NCAOR 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 NCAOR and the decision of the said Arbitrator shall be final and binding upon the parties.

25. **RIGHT TO CANCEL TENDER/WORK ORDER:** In case of strike, accident or any other unforeseen conditions causing stoppage of work, NCAOR reserves the right to cancel and/ or modify the tender / work order without any liability for any compensation and / claim or any description.

26. **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:

Place:

Company's Round Seal

GENERAL TERMS AND CONDITIONS

1. All materials used shall be as per specifications and ISI marked where ever applicable. ISI marking referred to latest BIS code as published by Bureau of Indian Standards.
2. All measurements shall be at actuals and as per site condition. No allowances shall be permitted for rough cast surfaces or for any aesthetical paintings, design bands, etc. Deductions shall be at actuals and as per site conditions. Joint measurement shall be recorded with the Engineer.
3. The safe custody and upkeep of various items/equipments/tools & plants of various categories of works brought to site is the sole responsibility of the Contractor and he shall employ sufficient supervisory personnel to ensure the safety of these items.
4. While executing/ assembly of the work the contractor shall ensure that existing cables/pipe lines/structures/fittings are not damaged and if due to his negligence, these are damaged, the same shall be set right with no extra cost to the employer.
5. The contractor shall co-ordinate his work with other agencies employed by the employer and ensure that the works of other agencies are not hampered in any way during the duration of the contract.
6. After the work is completed, the contractor shall clean external surroundings, premise etc. to the satisfaction of the Engineer In-charge.
7. Paint and other accessories and materials shall be brought to the site in sealed Containers as supplied by the manufacturer and got approved before being used on the work and the work of painting shall be started only after the cleaned and prepared surface is inspected and approved by engineer.
10. Time is the essence of the contract and the contractor has to perform as such the entire work shall be completed within the stipulated time.
11. The tenderer may visit the site and study the work involved vis-à-vis the quantity and specification before tendering the work. If any discrepancy is observed the same should be brought to the notice of the engineer.
12. Contractor shall provide all necessary tools and plants and safety devices etc. to the workmen as required.
13. The Contractor shall submit, at the expense of the Contractor, to the Engineer following samples and relevant information, found satisfactory by the Contractor as per the Contract, for pre-construction review and approval:
 - (a) Manufacturer's standard samples of Materials,
 - (b) Samples (if any) specified in the Contract, and
 - (c) Additional samples instructed by the Engineer.

Each sample shall be labeled showing Contractor's name, Project name, name of the item, manufacturer's name, brand name, model number, supplier's name and reference to the appropriate drawing number, technical specification section and paragraph number, intended use in the Works, all as applicable.

14. The Engineer shall make any variation of the form as specified below, be necessary and for that purpose, he shall have the authority to instruct the Contractor to do after taking necessary approval of the Employer and the Contractor shall do any of the following:
 - (a) Increase or decrease the quantity of any work included in the Contract,
 - (b) Omit any such work,
 - (c) Change the character or quality or kind of any such work,
 - (d) Change the levels, lines, position and dimensions of any part of the Works,
 - (e) Execute additional work of any kind necessary for the completion of the Works, or
 - (f) Change any specified sequence or timing of construction of any part of the Works.

However, that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such defaults shall be borne by the Contractor.

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SCOPE OF WORK & TECHNICAL SPECIFICATIONS**Annexure - IV**

- 1) Scope of work includes supply, installation, testing and commissioning of 150W LED flood lights, 6000k, confirming to IP65/IP66 to be installed on the new GI angular frame (50mmX50mmX5mm) to be fitted at 8 - 9 meter height on the existing concrete poles complete with proper SS nut bolt arrangement including accessories, such that two LED fittings to be installed on either side of a single frame. LED light fittings should conform to IP65/IP66 protection rating of International Standard.
- 2) Flexible copper cable of size 2.5 sqmm 3core to be laid on surface along the pole through flexible pipe using saddles from junction DB at the bottom of the pole to both the LED fittings at the top of the pole, including making end termination with copper lugs at both the ends.
- 3) 4 module SPN DB should confirm to EN 60439-3, IP 65/IP66, weather proof ,water proof, double door, to be mounted firmly on pole with necessary GI frame/clamps arrangement using SS nut bolts with 20amps FP MCB(C-curve10 KA,01 No), with cable termination, etc as required for completing the job. The clamps should be of good quality capable of withstanding load of light fittings & frame in all weather conditions.
- 4) All the GI frames to be painted with one coat of red oxide and 2 coats aluminum paint.
- 5) All electrical items used should have ISI mark and as per specifications, Contractor shall bring sample of materials for approval of the Engineer-in-charge. Sample of approved materials must be kept at sight for inspection/comparison with materials to be used in work.
- 6) The interested bidders should visit the site well in advance to get themselves acquainted with the site and technical information before quoting.
- 7) Contractor shall have to submit detailed step by step Method Statement indicating procedure of electrical work to be carried out for the completion of the project, and should arrange all required tools/machinery /ladders/ equipment , with skilled technical staff etc.
- 8) Contractors shall take all precautions to see that the work is done in such a sequence and manner as to prevent all avoidable damage to the existing electrical setup or injury to life. Any damage to nearby property or structure shall be made good by the contractor without extra claims.
- 9) The Contractor shall provide all necessary safety gadgets & equipments to his technicians/workmen/labours such as safety shoes, gloves, safety harness, helmets etc. to work safely at any height, depth, weather for high tension Electrical Cable related Work.

Warranty:

1. Vender should extend warranty of the LED Fittings for at least **02 year** against any fault observed
2. The supplier shall give warranty on all material, the equipment furnished under this contract shall be new and free from all defects and faults in and shall be of highest grade and consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the specifications.
3. Replacement of any part, lights etc. during the warranty period is at the cost of the Contractor & no charges will be paid by NCAOR.

List of Recommended Makes/Brands :

LED fittings:- Crompton Pluto LFLN-150-CDL/60, Philips Tempo BVP410 LED 144 CW HE NB FG S3XT, Havells Jeta Neo 150W LED 6000K LHEPCZU7P46J150, Jaquar LFLD02S150XC.

Cable Glands and lugs - Siemens / Comet / Jainson / Polycab.

Electrical cables and wires - Finolex, Polycab, havells.

DB- Legrand Plexo boxes(cat ref:6019 94) or equivalent make of Anchor, havells, Hager, Indoasian

GI Frame-Zindal, Hindalco, Tata, SAIL

Paint:-Asian, Berger, Nerolac.

**In case of non-availability of the recommended brands, suitable substitution may be made with prior approval*

**National Centre for Antarctic & Ocean Research
Headland ,Sada, Vasco-da-Gama, Goa 403 804**

EMD & Tender Cost details

I /we have enclosed,

1. A crossed DD Noí í í í í í í í í í í í dated í í í í í í í í í í í ..
Of **Rs. 33,000/-** drawn in favour of Director, NCAOR payable at Vasco-da-Gama, Goa
towards **EMD.**

2. A crossed DD Noí í í í í í í í í í .. dated í í í í í í í í í í í
Of **Rs. 500/-** drawn in favour of Director, NCAOR, payable at Vasco-da-Gama, Goa
towards **TENDER COST.**

Name & Signature of the Tenderer with seal:

Date:

Particulars of The Tenderer

Name of the Contractor : _____

Name of the Firm : _____

Telephone No. (Office) : _____

Telephone No. (Residence) : _____

E-mail ID / website : _____

Permanent office Address : _____

: _____

: _____

Residential Address : _____

: _____

Cell Phone / Landline No. : _____

*Electrical Contractors Licence Number : _____

Contractor's Licence valid up to: (Date) : _____

*PAN/TAN No. of the firm : _____

* GST Regn. Number : _____

Whether the Contractor/ above Firm is ever black listed/barred/prosecuted by any organization? YES / NO

(*pl. enclose self certified copies)

Name, Signature of the Tenderer with seal:

Work Completion Proforma

Give details of at least three Similar Electrical Works of **Rs. 4 lakhs or above** which were completed satisfactorily during last three years ending July 2017.

Enclose self certified copies of Work Orders & Work Completion Certificates.

Sr. No.	Name of work	Location of site	Value of work	Date of completion of work	Name of the Organization who awarded the work. Contact Person and contact numbers

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

Schedule of Rates (Price Bid)*(Only RATE in words and figures. Amount in figures)*

Sr.	Description	Unit	Qty	Rate (Rs)	Amount (Rs)
1	Supply, installation, testing and commissioning of 150W, 6000k LED Flood Lights. Confirming to IP65/IP66. <i>Pl. mention the quoted brand -</i> <i>Make :</i> <i>Model :</i>	NOS.	28		
	<i>RATE in words:</i>				
2	Supply & installation of new GI angular frame (50mmX50mmX5mm) at 8-9 meter height on the existing concrete pole complete with proper thickness Stain Steel clamps, Stainless Steel nut bolts arrangement, painted with one coat of red oxide and two coats aluminium paint. Such that two LED fittings to be installed on either side of single frame, with removal of the existing older frame from the pole.	NOS.	14		
	<i>RATE in words:</i>				
3	Supplying & laying of 2.5 Sq.mm 3 core FR PVC insulated flexible copper conductor, through 32 mm dia. CPVC pipe using Stainless Steel clamps including cable termination with copper lugs from the DB at the bottom of the pole to the electrical fittings at top of the pole etc for completing the job.	RMT	350		
	<i>RATE in words:</i>				
4	Supplying , fixing ,testing and commissioning of 4 module SPN DB similar to Legrand Plexo boxes(cat ref:6019 94)or equivalent make of Anchor, Havels, Hager, Indoasian. It should confirm to EN 60439-3,IP 65, weather proof ,water proof, double door, with interconnections, to be mounted firmly on pole with necessary GI frame/clamps arrangement using SS nut bolts GI frame to be painted with	NOS.	14		

	one coat of red oxide and 2 coats aluminium paint with 20amps FP MCB(C-curve10 KA,01 No),with cable termination, etc as required for completing the job.				
	RATE in words:				
A	SUB TOTAL				
B	GST@.....%				
C	Other Charges if any:				
D	GRAND TOTAL(Rs.)				

(D) Grand Total: Rs. _____

Grand Total in words: _____.

1. Discount offered if any, should be included in the quoted rates & should not be shown separately.
2. Price Evaluation Criteria-Contractor should quote all items given in the price bid. The Lowest Evaluated Bidder (L1) would be arrived from the Grand Total (D) above.

Certificate:

It is certified that I/We _____ am/are

authorised to submit this bid on behalf of M/s. _____

I/We have read the tender document carefully, accept all the terms & conditions of the tender and submitting the duly filled Price Bid within the due date and time. It is indemnified that if the work is awarded to me/us, It will be completed as per the rates quoted, within the time & as per the terms & conditions of the Tender.

Name & Signature of the tenderer :

Date & Seal :