AGREEMENT

For

SETTING UP OF LOW TEMPERATURE THERMAL DESALINATION PLANT WITH COMPONENTS OF PROCESS PLANT, SUBMARINE HDPE PIPE AND MARINE STRUCTURES IN AMINI ISLAND OF UT LAKSHADWEEP

BETWEEN

NATIONAL INSTITUTE OF OCEAN TECHNOLOGY, INDIA,

AND

DATED: ____________________________
AGREEMENT

For

SETTING UP OF LOW TEMPERATURE THERMAL DESALINATION PLANT WITH COMPONENTS OF PROCESS PLANT, SUBMARINE HDPE PIPE AND MARINE STRUCTURES IN AMINI ISLAND OF UT LAKSHADWEEP

This Agreement for SETTING UP OF LOW TEMPERATURE THERMAL DESALINATION PLANT WITH COMPONENTS OF PROCESS PLANT, SUBMARINE HDPE PIPE AND MARINE STRUCTURES IN AMINI ISLAND OF UT LAKSHADWEEP ("Agreement") is executed on this [__________2017 ("Effective Date") at Chennai

By and Between

NATIONAL INSTITUTE OF OCEAN TECHNOLOGY, established as an autonomous society under the Ministry of Earth Sciences, Government of India, having its office at NIOT Campus, Velachery – Tambaram Main Road, Narayananapuram, Pallikaranai, Chennai – 600 100, Tamil Nadu, India represented by its Authorized Signatory, Director (hereinafter referred to as “NIOT”, which expression, unless repugnant to the context or meaning thereof, shall mean and include its authorized and legal representatives, employees, officers, successors-in-interest and permitted assigns) of the First Part

And

M/s.________________________ (hereinafter referred to as the First and Lead Member, which expression, unless repugnant to the context or meaning thereof, shall mean and include its Consortium Partners, employees, officers, directors, its contractors, contract workmen, third party consultants, authorized and legal representatives, successors-in-interest and permitted assigns) of the Second part lead member

M/s.__________________________________ (hereinafter referred to as the Third Participant Member, which expression, unless repugnant to the context or meaning thereof, shall mean and include its Consortium Partners, employees, officers, directors, its contractors,
contract workmen, third party consultants, authorized and legal representatives, successors-in-interest and permitted assigns) of the Third participant member.

(This clause to be modified according to the status of the bidder and shall vary if consortium has more consortium partners)

NIOT and the Contractor are hereinafter also referred to individually as “Party” and collectively as “Parties” unless the context requires otherwise.

WHEREAS:

A) NIOT was established as an autonomous society under the Ministry of Earth Sciences, Government of India, for developing and promoting technology for oceanographic research and applications.

B) Whereas as a part of its research activities, NIOT has established Desalination plants that work on the principle of Low Temperature Thermal Desalination (herein after referred to as LTTD) and the working principle of these desalination plants involves flash-evaporation of surface sea water at a low pressure of 26.5 mbar (abs) at about 28°C and liquefaction of resultant vapour in a condenser that is fed by deep sea cold water around 12°C and the coolant water for the condenser is drawn using the thermal gradient available in the ocean, namely using the feature of reduction of ocean water temperature with an increase in depth and a long HDPE pipe is deployed in the ocean to draw the cold water (at about 12°C) from a water depth of about 400m and above.

C) Whereas the above Technology has been field tested and proved by NIOT in a series of working plants built in the Kavaratti, Agatti & Minicoy Islands in the UT Lakshawdeep Islands and

D) Whereas NIOT has proposed to set up Low Temperature Thermal Desalination (LTTD) plants in following six Islands in the Union Territory of Lakshadweep i.e. Amini, Androth, Chetlat, Kadamat, Kalpeni and Kiltan

E) Whereas NIOT and the contractor have decided to reduce the terms and conditions of the contract in writing as follows:
F) For the above-said requirement, NIOT had floated a global tender, inviting bids for SETTING UP OF LOW TEMPERATURE THERMAL DESALINATION PLANT WITH COMPONENTS OF PROCESS PLANT, SUBMARINE HDPE PIPE AND MARINE STRUCTURES IN AMINI ISLAND OF UT LAKSHADWEEP in September 2017, and selected M/s. ______________________( ) as the successful ________

G) The Contractor has represented that they have all requisite resources, expertise, infrastructure and experience and has fully understood the specific needs, timelines and quality standards of NIOT. Based on such representation and relying on claims made, the contractor has been technically qualified to award this contract at the price mutually agreed upon by both the parties.

H) The Contractor has represented to NIOT that it accepts, shall abide by and comply with all the terms and conditions unconditionally issued part of the Notice Inviting Tender (NIT), and subsequent clarification issued through corrigendum as detailed below:

I) The Contractor has also communicated its willingness vide letter no ......... Dated __________ 2017.

J) M/s ____________() The Contractor has, for the purpose of participating in the Tender and execution and performance of this Agreement, entered into a Agreement with ____________ (as per Schedule hereunder) and the same forms a part and parcel of this Agreement.

K) The Parties hereto now wish to record the terms and conditions upon and subject to which, the Contractor shall provide to NIOT, towards the “SETTING UP OF LOW TEMPERATURE THERMAL DESALINATION PLANT WITH COMPONENTS OF PROCESS PLANT, SUBMARINE HDPE PIPE AND MARINE STRUCTURES IN AMINI ISLAND OF UT LAKSHADWEEP” strictly in terms of the specification and quality parameters mentioned in the NIT.

NOW THIS DEED WITNESSETH and it is hereby agreed by and between the Parties hereto as follows:

DEFINITIONS
“Employer” means NIOT, including their successors, representatives and assigns;

“Director” means the Director of NIOT and includes the person appointed to act in his place;

“Contractor” means the person or persons, Firm or Company, Group of Companies or Consortium, whose tender/offer has been accepted by NIOT and named in the Agreement and includes the Contractor’s representatives, heirs, successor and assigns, and consortium as a whole if any, permitted by the Engineer;

“Work” means the Permanent Work to be executed in accordance with the Contract and includes authorised “Extra Works” and ‘Excess Works” and “Temporary Works” if any in writing before undertaking such work by the contractor;

“Engineer” means the Project Leader, Project Group, NIOT or any other person nominated by the “Director” from time to time to act as Engineers;

“Engineer’s Representative” means any official / project management consultant appointed from time to time by the Engineer to act as Engineer’s Representative for the purpose of the Contract;

“LTTD Plant Project” and “LTTD Plant” include, unless the context otherwise requires, pre project investigation / survey, site selection, survey and investigation, design, developing, engineering, procurement, supply / execution / construction of Plant Components, Marine / Civil Structures, Sub marine pipelines, Materials, Equipment, labour, delivery, transportation, installation / deployment, processing, fabrication, testing, commissioning and maintenance of the LTTD Plant including removing of Defects, if any, and other activities incidental to the commissioning of the complete plant;

“Plant Components” include, unless the context otherwise requires, flash chamber and condenser and internals, sea water pumps, vacuum system, piping, electrical systems and panels, sensors and instrumentation, data acquisition system, complete with the necessary spares and other items incidental to the commissioning, operation and troubleshooting of the complete LTTD plant;

“Permanent Work” means permanent works to be executed in accordance with the contract to fulfil the scope of work as stated in section II of NIT (Page numbers)

“Temporary Works” means all temporary works of every kind (except Contractor’s equipment) required in or about the execution, completion or maintenance of the works and includes (without thereby limiting the foregoing definitions) all temporary erections, scaffolding, ladders, timbering, soaking vats, site offices, cement and other godowns, platforms and bins for stacking building materials, gantries, temporary tracks and roads, temporary culverts and mixing platforms, etc that may be necessary from time to time for the successful completion of the scope of work as stated in section II of NIT;

“Extra Works” means those works required by the Engineer for completion of the Contract with the approval of the Employer which were not specifically and separately included in the schedule of items of the works (i.e. Bill of Quantities) of the tender;
“Excess Works” means the required quantities of work in excess of the provision made against any item of the Bill of Quantities;

“Contract” means the GCC, Special Conditions of Contract, Site data, Drawings, Special Conditions of Contract, Technical Specifications, Preamble to Bill of Quantities, Price Bill of Quantities, Bidders data, Price Offered, Negotiated and Agreed up on as the case may be, Letter of Acceptance and the Contract Agreement when completed, and includes the Instruction to Bidders and the Bid as accepted by NIOT including all of its Appendices and amendments;

“Specifications” means as stipulated in the NIT, the relevant and appropriate Bureau of Indian Standard’s specifications (latest revisions) or any other standards agreed upon between both the parties for materials and workmanship unless stated otherwise in the Tender including amendment thereof and addition thereto approved by Engineer;

Any reference to the Codes and Standards in the bid documents shall also refer to the latest revised / amended editions of the mentioned Codes and Standards.

“Drawings” means the drawings referred to in the Tender and specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer;

“Contractor’s Equipment” means barges, vessels, floaters, anchors, chains, floating crafts and other appliances and things of whatsoever nature required for execution and completion of the Works;

“Site” means the land, waterways and other places, on, under, in or through which the works are to be executed, for the purpose of the Contract;

“Cost” shall mean expenditure properly and actually incurred whether on or off the Site, and unless otherwise stipulated, would include overhead and other charges directly allocable thereto, but shall not include any allowance for profit;

“Month” for the purpose of this Contract shall mean the period starting from the date of commencement in any month to the previous date of the following month, as per English Calendar;

‘Day’ shall mean calendar day;

References to any date, period or Project Milestone shall mean and include such date, period as agreed to part of the contract or Project Milestone as may be extended pursuant to this Agreement;

“Contract Price” means the sum named in the letter of acceptance of the Tender/Offer of the Contractor, subject to such additions thereto and deductions there from as may be made by the Engineer under the provisions of the Contract;

“SECTION” or “Sub SECTION” shall mean a part of the work specifically identified in the Contract as such;

“Work Order” or “Order Letter” or “Letter of Acceptance” shall mean intimation by the Employer through a letter/e-mail/ Fax to the successful Bidder that his Bid has been accepted in accordance with the provisions contained in the said letter;
“Tender” means the Contractor’s priced offer to the Employer for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Acceptance;

“The word ‘tender’ is synonymous with ‘bid’, and the words ‘Appendix to Tender’ with ‘Appendix to Bid’, and the words ‘tender documents’ with ‘bidding documents’;

“Include” and “including” are to be construed without limitation and shall be deemed to be followed by “without limitation” or “but not limited to” whether or not they are followed by such phrases;

References to the “winding-up”, “dissolution”, “insolvency”, or “reorganization” of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, reorganization, dissolution, arrangement, protection or relief of debtors;

Save and except as otherwise provided in this Agreement, any reference, at any time, to any agreement, deed, instrument, license or document of any description shall be construed as reference to that agreement, deed, instrument, license or other document as amended, varied, supplemented, modified or suspended at the time of such reference; provided that this Sub clause shall not operate so as to increase liabilities or obligations of the Employer hereunder or pursuant hereto in any manner whatsoever;

The words “Contract” means “Agreement” and vice versa;

Unless specifically mentioned, a reference to a SECTION / CLAUSE / SUB CLAUSE shall mean to the Section / Clause / Sub clause of documents belonging to the tender; to be read with the following clarification: “References to Recitals, Articles, Clauses, Sub-clauses or Schedules in this Agreement shall, except where the context otherwise requires, mean references to Recitals, Articles, Clauses, Sub-clauses and Schedules of or to this Agreement, and references to a Paragraph shall, subject to any contrary indication, be construed as a reference to a Paragraph of this Agreement or of the Schedule in which such reference appears

“Contract” means the General Conditions of Contract, Site data, Drawings, Special Conditions of Contract, pre-bid meeting minutes of meeting, Technical Specifications, Preamble to Bill of Quantities, Priced Bill, Letter of Intent, the letter of acceptance by the contractor and the Contract Agreement when completed, and includes the Instruction to Bidders and the Bid including all of its Appendices and amendments and mail correspondence as agreed to by NIOT shall form the integral part of this contract subject to the condition that only provisions in those documents which are not consistent with the terms of this contract will have no effect.

“Amendments” shall mean any documents, correspondence exchanged and agreed to between the parties, confirming modification, alteration, deletion or change in any of the Clauses sub-clauses, paras and other provisions as mentioned in the Contract Document.

“Site” means the land, waterways and other places, on, under, in or through which the works are to be executed, for the purpose of the Contract;
“Cost” shall mean expenditure properly and actually incurred whether on or off the Site, and unless otherwise stipulated, would include overhead and other charges directly allocable thereto, but shall not include any allowance for profit;

**INTERPRETATIONS**

This Agreement shall be interpreted in accordance with the following rules unless the circumstances or contexts require otherwise:

i. References to parties, articles, schedules or clauses are references to parties, articles, schedules or clauses of this Agreement;

ii. The terms, acronyms and phrases utilized in the industry or other pertinent business context shall be interpreted in accordance with their generally understood and accepted meaning in the context of such industry of business.

iii. Words denoting persons shall include individuals, companies, corporations, partnerships, registered society, registered trust, sole proprietorships and unincorporated associations of persons (whether natural or judicial);

iv. Words denoting the singular number only shall include the plural number also and vice versa and references to the masculine include the feminine and the neuter gender;

v. Captions, Headings and References have been included for convenience only and shall not be used in construing any provision herein;

vi. References to any enactment shall be deemed to include references to such enactment as re-enactment, amended or extended from time to time and include all subordinate legislations, notifications, rules, regulations, circulars, instruments or orders made under such enactment;

vii. References to any agreement, instrument or other documents shall include the whole of that agreement, instrument or documents as amended, supplemented, suspended, restated or novated from time to time;

viii. “Days” refers to calendar days, and “business days” refers to any day other than a Saturday, a Sunday, or a national holiday, or any other day when NIOT is authorized or required to be closed;

ix. The provisions of this Agreement shall be interpreted harmoniously with the provisions of the Tender as mentioned above. In case of any conflict between the provisions of this Agreement and the Tender as mentioned above, the provisions of the Tender and all amendments and corrigendum issued to the Tender together shall prevail;
x. Where a word or phrase is defined, other parts of speech and grammatical forms and variation of that word or phrase shall have the corresponding meanings;

**SINGULAR, PLURAL AND GENDER**

Words referring to the singular form also mean the plural form and vice versa unless the context requires otherwise. References to any gender shall include the other and the neutral gender;

**Engineer’s Duties and Authority:**

The Engineer shall carry out the duties specified in the Contract.

The Engineer may exercise the authority specified in or necessarily to be implied from the Contract, provided, however, that the Engineer is required, under, the terms of his appointment by the Employer, to obtain the specific approval of the Employer before exercising any such authority. Except as expressly stated in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract.

The Engineer’s Representative shall be appointed by and be responsible to the Engineer and shall carry out such duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing and shall not take effect until a copy thereof has been delivered to the Employer and the Contractor. The Engineer or the Engineer’s Representative may appoint any number of persons to assist the Engineer's Representative in the carrying out of his duties. He shall notify to the Contractor the names, duties and scope of authority of such persons.

Instructions given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction given by the Engineer, whether before or after the carrying out of the instruction, shall be deemed to be an instruction within the meaning of this Sub Clause. Provided further that if the Contractor, within 7 days, confirms in writing to the Engineer any oral instruction of the Engineer and the Engineer does not contradict such confirmation in writing within 7 days, it shall be deemed to be an instruction of the Engineer.

The Engineer shall have authority to issue to the Contractor, from time to time, such supplementary Drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and completion of the Works and the remedying of any defects therein. The Contractor shall carry out and be bound by the same.

**Contract Documents:**

The contract documents will be in English Language and all further correspondences; drawings, documents and written matter relating to this contract shall be in English only.

The law to which the contract is to be subject and according to which the Contract is to be construed shall be the laws for the time being in force in India. The contractor shall submit to the jurisdiction of the courts situated at Chennai for the purpose of actions and proceedings arising out of the contract and the courts at Chennai only will have the jurisdiction to hear and decide such actions and proceedings.
The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer who shall thereupon issue to the Contractor instructions thereon and in such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows:

1. the Contract Agreement;
2. the Letter of Acceptance;
3. the Preamble and priced Bill of Quantities or the negotiated BoQ rates, if applicable;
4. the Conditions of Contract
5. Special Conditions of Contract
6. Technical Specifications;
7. the Drawings;
8. the General Conditions and;
9. Summary Table of Key Clauses;
10. the bidders data;
11. other documents issued to the bidders.

In case of ambiguities or discrepancies, the Engineer will decide which documents will prevail and his decision will be final and binding upon the contractor and the contractor shall execute the works according to such explanations and without any extra charge or deductions to the rates entered in the Bill of Quantities.

Assignment and Subcontracting:
The Contractor shall not subcontract the whole of the Works. Except where otherwise provided by the Contract, the Contractor shall not subcontract any part of the Works without the prior consent of the Engineer. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Further, the Contractor shall not sub-contract exceeding [30] [thirty] percent of the Contract Price. 

Guaranteed time of delivery- specific performance of contract

Time is the essence of the contract. Total time from conceiving to setting up of LTTD plant and successful completion of production trials in satisfactory condition within 24 months
from the date of signing of the agreement. Successful bidder shall sign the agreement as per model contract and with updated changes based on pre bid clarifications and corrigenda issued. Timely completion of each stage as committed in the project execution schedule part of the tender without any slippage at each and every stage. In the event of part completion, NIOT shall withhold the entire payment until the whole of the work as per the contract is completed either by NIOT or through any other contractor identified by NIOT. All resultant loss shall be recovered from the successful bidder either by encashing all the Bank guarantees submitted by the contractor including the Performance Security BG and to recover any left over loss (or) loss that could not be made good by the contractor on their own through legal remedies to recover entire cost incurred by NIOT towards completion of the left over and incomplete contractual obligations and in public interest

**Extension of delivery period**

If the completion of construction/installation/work is delayed owing to force majeure such as acts of God, Acts of Public enemy, acts of Government, fires, floods, epidemics, quarantine restrictions, illegal strikes and freight embargoes, the Contractor shall within 20 days from the date of such occurrence, give notice to NIOT in writing of his claim for extension of delivery period. NIOT on receipt of such notice may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the contract. Unless the extended delivery period is agreed by NIOT in writing, contractor cannot claim the extension of delivery time as a matter of right. NIOT shall have the right to either cancel/extend the LOI/Contract validity/ levy LD as appropriate.

**Delay in Completion / Liquidated Damage (LD)**

If the Contractor fails to complete the construction/installation/work within the time specified in the Contract, NIOT shall recover from the Contractor as liquidated damages a sum of 1% of the contract price for each calendar week of delay. The total liquidated damages shall not exceed 10% (ten percent) of the contract price. Construction/installation/work will be deemed to have been completed only when all essential works are also completed. If any essential works are not completed in time, the entire construction/installation/work will be considered as delayed until such time the balance works are completed.

**Insurance**

The material and equipment to be used under the Contract shall be fully insured against all risk loss or damage that may be caused during the course of transporting and while supply, construction/Installation/deployment and acceptance within contract price. Contractor shall cover appropriate all risk insurance policy to cover entire risk and until successful handing over of plant in terms of the contract. All risk policy covering entire project activities shall be submitted well before commencement of any work under this contract

**Service contract Insurance**
Contractor shall take out and keep in force adequate insurance to cover all risks. (a) In respect of their personnel deputed to work under the Contract. (b) In respect of their own as well as hired equipment (to the extent of their insurance interest) tools, materials, and operational facilities used during the entire period of their engagement in connection with the Contract to the insurable value of equipment, manpower and other things. NIOT shall have no liability whatsoever in this regard. Such insurance policies of the Contractor shall embody the following clauses

“The Insurers hereby waive their rights of subrogation against National Institute of Ocean Technology, or any of their employees or their subsidiaries, affiliates or assigns

**Logistics and Site Infrastructure facility**

Contractor has considered all factors necessary to submit a workable tender for execution within the period of 24 months from the date of signing the contract and also considered the following factors:

a. The islands are remote and depend on supplies from the mainland for all commodities.

b. The logistic facilities like availability of heavy equipment lifting / carrying machines / vehicles are very poor and even if they are available at a particular time, since the entire island is dependent on them, their availability cannot be taken for granted on a continuous basis. It is not uncommon in these islands that the progress of works may be affected by non-availability of tiller / tractor or its driver, let alone the availability of crane / its operator. Hence critical planning is needed to plan project activities considering above limitation for parallel execution and make use of the weather window in an optimal way to ensure timely completion.

c. The islands are powered by diesel generators that cater to the existing capacity. Any additional load like extensive welding at site need to be planned in consultation with the local authorities on a case to case basis.

d. Most of the marine cargo traffic for these islands is handled through dumb barges that unload from the vessel and bring the cargo to the lagoon from where the cargo can be unloaded using a jetty crane. The capacity of the jetty crane is limited and any cargo movement shall be planned by taking into consideration of these constraints.

e. The road and infrastructure facility in the islands is poor and any oversized cargo to the island needs to be planned after a due study of the facilities on the island.

f. The maximum temperature in the month of April / May reaches around 35°C with a relative humidity of 70-75%.

g. The islands experience south-west monsoon weather between May and September that is accompanied by high winds and waves. The swells and sea wave heights during monsoon season can go up to 5.5 m.

h. The average wind speed is around 5-6m/s that may increase to a maximum of 40m/s during June.

i. During the SW monsoon period, for 5 months, the transportation to and from the islands would be very difficult. The contractor taken note of this weather window where virtually no transportation is possible and also of the NW monsoon period when the conditions would be moderately rough.

j. The total duration for the requirement and subsequently the commissioning of the desalination plants will be governed severely by the weather window and hence
committed to take all precautions and planning required to ensure timely completion of the project within 24 months from the date of signing the contract.

**k.** In order to ensure the continuous marine support, it is planned to have a boat / vessel and a dumb barge handy at the island for the duration of the project.

**l.** Contractor also aware that men moving into the island need to obtain the permits from the UT Lakshadweep administration, which has an office at Cochin port and committed to complete the all paper work well in advance to avoid delays in the movement. The movement of men is handled by inter island speed vessels and also by passenger vessels operating out of Cochin. The schedules of the passenger vessels are handled by UT Administration operating out of its Cochin Office. Contractor having understood such limitations including seeking travel permission along with the Island public for the availability of the tickets.

The movement of common materials to the islands is handled by cargo barges operating out of Mangalore / Bepore / Cochin ports. The priority may be given for movement of essential commodities to the islands. Hence the contractor need to plan for material movement in close coordination with such logistics arrangements to ensure timely mobilization of materials and completion of entire scope of contract within 24 months from the date of signing the contract.

Where the Contractor under this contract is required under the Contract to transport the Goods to a specified place of destination within India defined as Project site, transport to such place of destination in India including insurance, shall be arranged by the Contractor, and the related cost shall be within Contract Price. A specific mention thereof for transit insurance, all risk insurance to cover entire risk under this contract shall be covered and policy deposited with NIOT. Payment towards All risk insurance will be released along with the payment to be released after successful installation commissioning and acceptance up to completion of DLP of the plant

**Risk Purchase**

Contractor shall submit a monthly progress report capturing the schedule as planned/committed in the contract and actual progress achieved and bring to the notice of authorities the reason for non achievement of progress if any to review and take remedial measure on time, every time to ensure timely completion of the project.

In spite of giving opportunities for consecutive two occasions (within two months) and if the contractor fails to complete the progress as committed to achieve completion of contractual obligation within the agreed time of 24 months for completion of entire project activities (or) at any time repudiates the contract before expiry of such period, NIOT shall cancel the contract and complete the remaining works by any party at the sole risk and cost of the defaulting contractor. Until entire contractual obligation as per contract, contractor unconditionally agree that they are not entitled to claim any compensation for incomplete works and as covered under clause no: 1.43 as well and that agree for encashment/refeiture of EMD and all the Bank guarantees submitted under this contract.
Defect Liability clause

Any defect shrinkage, settlement or any other faults for plant components etc., which may appear against the set quality or performance characteristics within the Defects Liability period, within 12 months after the virtual completion of the works, arising in the opinion of the NIOT from materials or workmanship not in accordance with the contract, shall on demand which shall be made within the defects liability period, in writing by the NIOT and within such reasonable time as shall be stated therein specifying the work, materials or articles complained of notwithstanding that the same may have been passed or/and certified, paid form be amended and made good by the contractor, at his own proper charge cost and in case of default the NIOT may employ and pay other person or persons to amend and make good such defects, shrinkage settlements or other faults and all damages, losses and expenses consequent thereon or incidental there to shall be made good and borne by the Contractor and such damages, losses and expenses shall upon the NIOT, certificate in writing, be recoverable from the contractor by the NIOT or may be deducted by the NIOT from any moneys due or that may become due to the contractor of the NIOT may in lieu of such amending and making good by the contractor deduct from any moneys equivalent to the cost of amending and making good such work and in the event of the amount retained being insufficient, recover the balance from the contractor, together with any expenses NIOT may have incurred in connection therewith. Should any defective work have been done or materials supplied by the contractor or their associates subcontractor employed in /NIOT the contractor shall be liable to make the same good in the same manner as if such work or materials had been subject to the provisions. Any delay in rectifying the defects within a maximum time of 1 month shall result in automatic extension of DLP within contract price to the extent of delay committed by the contractor for such rectification.

Warranty

The Contractor warrants that the materials and equipment used for completion of work under this Contract are new, unused, of the most recent and those they incorporate all recent improvements in design and materials strictly in terms of the Contract. The Contractor further warrants that all materials used under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Contractor that may develop under normal use of the supplied materials.

This warranty shall remain valid for 12 months acceptance of the plant and taken over by NIOT and its components (i.e. Process Equipment, Marine Structures and Submarine Pipe line) subsequent to the successful completion of the commissioning trials. The warranty certificate should be furnished in the prescribed format in your letterhead. If the Vendors standard warranty is more than 12 months the same shall be extended to NIOT. Wherever the OEM warranty is more than 12 months, same shall be passed on to NIOT along with OEM warranty card and terms.

NIOT shall promptly notify the Contractor in writing of any claims arising under this warranty. Upon receipt of such notice, the Contractor shall, within a maximum period of 30 days, repair or
replace the defective of structure, systems, sub systems or parts thereof, within contract price and without any additional cost to NIOT, towards the cost of the repair or replacement as appropriate to ensure continuous plant operation.

If the Contractor, having been notified, fails to remedy the defect(s) within the above period, NIOT may proceed to encash all bank guarantees submitted under this contract, take such remedial action in public interest as may be necessary, at the Contractor's risk and expense and without prejudice to any other rights to recover such losses which NIOT may have against the Contractor under the Contract. Also such failure shall lead to suspension of vendor from participation in NIOT tenders for 1 year and any further action as per extent rules of GOI and deem fit by NIOT. Any delay in rectifying the defects within a maximum time of 1 month shall result in automatic extension of Warranty period within contract price to the extent of delay in rectification.

**Payment**

Payment will be made within 30 days from the date receipt of bill/ acceptance cum certification of work completion by NIOT authorized official and upon successful completion of obligations stipulated in the LOI / contract.

a) Payment will be made as mentioned table below.

b) Deliverable: Completion of commissioning the plant as per approved specification and conducting trial runs for a fresh water production capacity of 150m³/day of desired quality.

**Payment Schedule**

The progress payment of various components of LTTD Plant Project is as follows:

<table>
<thead>
<tr>
<th>Details</th>
<th>Stage of Payment</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Detailed Engineering</td>
<td>Pre engineering survey and preparation of Detailed drawings, Design, Analysis documents for Marine structures, and Submarine cold water pipe and process plant, their submission and approval</td>
<td>5% of Total contract price</td>
</tr>
<tr>
<td>2 Civil Structures and Marine Construction</td>
<td>A. On Completion of construction of Sump/Caisson as per the specification and approved drawings and ready for final Towing / Transporting and installation at site as per Sl. No. 1.01 to 1.05 in price bid of Marine Structures.</td>
<td>70% payment will be made as per rate / value quoted in the price bid for the executed / completed quantity/ item/ work at site.</td>
</tr>
<tr>
<td></td>
<td>B. On the completion of towing / transportation, installation, positioning and anchoring of the sump/Caisson at its final location as</td>
<td>70% payment will be made as per rate / value quoted in the price bid for the executed / completed quantity/ item/ work</td>
</tr>
</tbody>
</table>
### Split up of Stage Payment limits

<table>
<thead>
<tr>
<th>Details</th>
<th>Stage of Payment</th>
<th>Amount</th>
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<tbody>
<tr>
<td>per Sl. No. 1.06 to 1.09 in price bid of Marine structures</td>
<td>C. On the completion of all the balance / integration works on the sump, required for installation / fixing of mechanical / electrical equipment and accessories as per Sl. No. 1.10 to 1.13 in price bid of Marine structures</td>
<td>90% of the payment will be made as per rate / value quoted in the price bid for the executed / completed quantity/ item/ work at site + 20% of the balance payment of(A) and (B) mentioned above.</td>
</tr>
<tr>
<td></td>
<td>D. Construction of the Bridge and its all components in shore, intertidal zone and beyond breaker zone as per the specification and approved drawings as per the Sl. No. 1.34 to 1.62 in price bid of Marine structures.</td>
<td>80% of the payment will be made as per rate / value quoted in the price bid for the executed / completed quantity/ item/ work at site on running bill basis.</td>
</tr>
<tr>
<td></td>
<td>E. On completion of Bridge and all its components as per the Sl. No. 1.34 to 1.62 in price bid of Marine structures.</td>
<td>Balance 10% of the (D) mentioned above.</td>
</tr>
<tr>
<td></td>
<td>F. Construction of Plant Structure and all its components as per the specification and approved drawings and ready for the erection of the plant / process equipment and its accessories. Also on completion of all balance works post erection of the plant equipment as per Sl. No. 1.14 to 1.33 in price bid of Marine structures</td>
<td>70% of the payment will be made as per rate / value quoted in the price bid for the executed / completed quantity/ item/ work at site on running bill basis.</td>
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<td></td>
<td>G. On Completion of Plant Structure and all its components as per the specification and approved drawings and ready for the erection of the plant / process equipment and its accessories as per Sl. No. 1.14 to 1.33 in price bid of Marine structures.</td>
<td>Balance 20% of the (F) mentioned above.</td>
</tr>
<tr>
<td>H. On supply, receipt and acceptance of all the pipes required for submarine pipeline and the piping on bridge for that island along with all the necessary certificates / documents at site as per Sl.No.1.63 to 1.66 of Submarine pipeline price bid.</td>
<td>I. On completion of Welding and Hydro testing of all the required HDPE lengths described in specification and as per Sl.No. 1.68</td>
<td>70% of the payment will be made as per value quoted in price bid.</td>
</tr>
<tr>
<td>Sub Marine Pipeline</td>
<td></td>
<td>70% of the payment will be made as per value quoted in price bid.</td>
</tr>
<tr>
<td>Details</td>
<td>Stage of Payment</td>
<td>Amount</td>
</tr>
<tr>
<td>---------</td>
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</tr>
<tr>
<td><strong>4</strong> Plant Process equipment</td>
<td>to 1.69 in price bid of Submarine pipeline.</td>
<td>70% of the payment will be made as per value quoted in price bid.</td>
</tr>
<tr>
<td>J. All the other components / accessories required for submarine pipeline, assembly of accessories and the piping on bridge for that island as described in specification and as per Sl.No. 1.70 to 2.05 in price bid of Submarine pipeline.</td>
<td>90% of the payment will be made as per value quoted in price bid + 20% of the balance payment of(H), (I), (J) mentioned above.</td>
<td></td>
</tr>
<tr>
<td>K. On completion of Mobilization of the marine spread for the island, Towing and Deployment of the Submarine Pipeline and after satisfactory completion of its connections, as described in specification, or as directed by the Engineer as per Sl.No. 2.06 to 2.09 in price bid of Submarine pipeline.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L. On Supply of all Fabricated item at site and acceptance Flash Chamber as per Sl.No 2.11, 2.15, and 2.16 in Price bid of Plant components</td>
<td>80% of the payment will be made as per value quoted in price bid.</td>
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</tr>
<tr>
<td>M. On Supply of all Fabricated item at site and acceptance Condenser as per Sl.No 2.12 to 2.16 in Price bid of Plant components</td>
<td>80% of the payment will be made as per value quoted in price bid.</td>
<td></td>
</tr>
<tr>
<td>N. On Supply of all bought out items and all balance items as described in section 5.1 to 5.22, at site and acceptance (Sea Water Pumps Vacuum Systems and any Accessory Pumps, Plant Piping, Fresh Water Pumps, valves, PMCC and all accessories) as per Sl. No. 2.17 to 2.95 in Price bid of Plant components</td>
<td>80% of the payment will be made as per value quoted in price bid.</td>
<td></td>
</tr>
<tr>
<td>O. On completion of Erection and Installation: completion of all the process components in all respects, including the piping and HDPE pipe lengths required on the bridge as per Sl. No. 2.96 to 3.12 in Price bid of Plant components</td>
<td>90% of the payment will be made as per value quoted in price bid.</td>
<td></td>
</tr>
</tbody>
</table>
### Split up of Stage Payment limits

<table>
<thead>
<tr>
<th>Details</th>
<th>Stage of Payment</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>P. After the successful Installation / construction / deployment / integration of all the components of the LTTD Plant Project and after the successful completion of the Commissioning trials of the Plant as described in specification 2.9, as per Sl. No. 3.13 Price bid of Plant components</td>
<td>90% of the payment will be made as per value quoted in price bid + 10% of the balance payment of(L), (M), and (N) mentioned above.</td>
<td></td>
</tr>
</tbody>
</table>

### Operation and Maintenance of LTTD Plant:
The payments towards the Plant Operation shall be made as follows:

25% of the value for one year work shall be released at the end of each quarter for island on receipt of the satisfactory performance report from the Engineer.

<table>
<thead>
<tr>
<th>Payment Schedule for Operation and Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>1 Operation and Maintenance</td>
</tr>
</tbody>
</table>

### See Note below

Note: The payment for all the supply items shall be made after receipt at site with the requisite certificates of inspection / factory acceptance tests, and warranty certificates and all other documents.

If the payment is against delivery of items, the payment will not be made unless the relevant specifications, manuals (installation, operation, and maintenance), and factory acceptance test results / certificates for all the components are delivered in original to NIOT. The amount under the performance guarantee shall be held until the equipment runs successfully under the designed/guaranteed conditions for a period of 1 year.

For works executed the interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements in the format provided by NIOT in triplicate on or before the date of every month fixed for the same by the Engineer-in-Charge. For all procurements made and delivered at Island only 70% of the value of the BOM or the price quoted, whichever is less, will be provided.

All payments shall be made after adjustments for amount deductible as per provisions of IT Act.
10% of balance payments towards DLP may be released:

a) Immediately after the issue of completion certificate for the plant, and on furnishing of a bank guarantee from any scheduled bank for 10% of the contract price valid up to the defect liability period as per the performance bank guarantee format.

The Contractor shall present his bill duly pre-receipted on proper revenue stamp. The date on which the remittance made is electronically to the following account account details shall be taken as the date of payment for all purposes.

All payments up to the final taking over of entire works shall be treated as advance payments. Release of stage payment shall not relieve the contractor from ensuring the completion of the plant as per specification and quality parameters specified in the contract. Contractor shall cease to be relieved from the contractual obligations only after handing over the plant for the rated capacity as per this contract and as per water quality standards until completion of O&M in terms of the contract.

Contract Price:

Taxes and duties

The Price should be net and exclusive of GST. Applicable GST shall be indicated in percentage and shall be paid at prevailing rates. Unconditional acceptance should be made in the price bid that “Price is inclusive of all taxes and duties and excluding GST. TDS will be deducted at prevailing rates and as per Income Tax Act 1961 on all payments made under this contract. Customs Duty at concessional rate is payable based on Notification 51/96 dt.23.7.1996.

Performance Security

The contractor shall deposit 10% of the contract value as Performance Security within 2 weeks from the date of issue of LOI / Work Order. The performance security shall be in one of the following forms:

1. By Demand Draft/Banker’s Cheque drawn in favour of “Director, NIOT, payable at Chennai (or)
2. Bank Guarantee as per prescribed format issued by a nationalized bank and valid for 60 days beyond the scheduled delivery / completion of entire scope of work as per purchase order / contract.

Performance security shall be forfeited in the event of breach of contract by the contractor in terms of the contract. If Performance Security is not paid within the specified time, NIOT reserves its right to cancel the order and forfeit the EMD submitted. The performance security
will be refunded after completion of contractual obligations under stage payment of Commissioning trials

Retention Money (Security Deposit)

The Retention Money/Security deposit shall be deducted @ 10% (Ten per cent only) of the gross value of actual value executed in all running bills, including last stage payment (Trial runs). The security deposit will be refunded after completion of entire scope of work during DLP and warranty related obligations. In the event of any lapses during the warranty period/DLP period interms of contractual responsibilities as per Clause No. ..........., until completion of all defect reported during the DLP no claim shall be made under the O&M payable as per Clause no. ........

Special risks:

All risk insurance till the completion DLP/extended DLP and handing over of plant for routine operations by the Island administration after completion of O&M, should be covered. (Cost towards same shall be included in the Price bid format against Sl.No. 3.17 of the BOQ.

Measurement

The Scope of Work has been set out as detailed in the scope of work/specification and as per Bill of Quantities to be executed by the Contractor in fulfilment of contractual obligations under this Contract. The work will be measured for the purpose of assessing the progress achieved and based on breakdown of price provided in the BoM in the contract price and as per the clause no______

Scope of Work:

The scope of the Project (the “Scope of the Project” or “the LTTD Plant Project”) shall mean and include:

(a) Construction of the LTTD Plant on the Site selected as per Annexure I, Section VII and as specified in Section V together with and in conformity with the Special Conditions and Specifications and Standards set forth in the bidding documents; the design capacity of the plant should be 165m$^3$/day and all plant components should be designed accordingly.

(b) Running, operation and maintenance of the LTTD Plant in accordance with the provisions of this Agreement and in conformity with the requirements set forth in these documents; and

(c) Performance and fulfilment of all other obligations of the Contractor in accordance with the provisions of this Agreement and matters incidental thereto or necessary for the performance of any or all of the obligations of the Contractor under this Agreement

Detailed Scope of work:

The proposals need to cover the scope of works, conforming to the specifications of the bidding documents and Complete in all respects including,
1. Pre project investigations and Site selection,
2. Design and detail engineering, procurement / construction / execution of project components including
   i. Marine structures including Bridge, Sump and Plant building
   ii. Submarine pipeline to carry deep sea cold water,
   iii. Plant with all its components including
       a) Flash chamber, condenser and intermediate ducting;
       b) Sea water pumps;
       c) Vacuum system and piping;
       d) Plant piping to carry water from sump to the plant and then discharge in to the sea with all the pipe fittings, completing; Collection and pumping of the fresh water from the condenser to the PWD tank location situated within the LTTD plant premises.
       e) All the electrical connections;
       f) Equipping transmitters and gauges as specified in the plant to measure various parameters of Cold, warm water streams and also fresh water;
       g) PMCC panels;
       h) Central control room;
       i) Data acquisition systems;
       j) 100% back up capacity for vacuum system with all the accessories and warm water, cold water and fresh water pumps; and,
       k) Piping, connections (electrical / mechanical).
3. Quality assurance, testing, transporting to site, construction / erection / deployment, installation and commissioning of the project components
4. Project management of all the involved activities, including the scheduling and mobilization of men, material, equipment and vessels to each of the work sites with the necessary permits, port / customs clearances, etc.
5. Spare Equipment: The lift tools, tackles, consumables and other general purpose equipment required for the general maintenance of the plant should be supplied as Specified in Clauses Mechanical spares and Electrical spares of Section V, Technical Specifications for Plant Components. The equipment shall be treated as over and above the essential spares that form part of the critical equipment such as Flash Chamber, Condenser, Sea Water Pumps, Vacuum System, Fresh Water Pumps.
6. Maintenance and Operation of all the three components of the project for a period of one year

Design and Execution of the LTTD plant
Design Calculations, Drawings and Documents

Design Documents along with detailed calculations to arrive at the specifications for each of the components, G.A. Drawings, Dimensional drawings, and technical data sheet should be submitted within thirty days from the date of contract for NIOT approval. Any delay on this account shall lead to rejection of price escalation if delay is attributable to vendor to submit
design for the approval of NIOT, NIOT shall review the submitted documentation, and approve accordingly within 15 days.

Three (3) sets of the following shall be supplied along with equipment

- Bought out items Data Sheet;
- Raw material test certificate for metallic components;
- Factory Acceptance Test Certificate;
- Calibration certificates and test certificates for all the electrical sensors and gauges;
- Parts catalogue for Mechanical components, Electrical and Instrumentation items;
- Wiring diagrams, Single line diagrams for the sea water pumps, vacuum system, all the panels, data acquisition systems, connections for various sections of the plant and its components;
- Test certificates for electrical items like Motors, MCBs, switchgears, control panels, etc.
- As Built Drawings for the entire supply.
- Assembly and disassembly procedure for all the equipment / systems.
- Handling procedure.
- GA and Dimensional drawings of the following components.
  a. Sea Water Pumps and other accessory pumps used in the plant;
  b. Vacuum pumps;
  c. Flash chamber and condenser;
  d. Cold water intake pipe assembly, as deployed; and,
  e. Plant Piping;
  f. All the transmitters, gauges, sensors; and,
  g. PMCC Panel.
- Technical manual, Operation / Maintenance manual, trouble-shooting manual and Erection procedure for the following
  a. Desalination plant, along with the general maintenance and troubleshooting information;
  b. Sea Water Pumps and other accessory pumps used in the plant;
  c. Vacuum pumps;
  d. Flash chamber and condenser;
  e. PMCC Panel;
  f. All the transmitters, gauges, sensors; and,
  g. All other accessories that form the desalination plant.
  h. The torque limits for tightening the bolts for all the critical equipment, other tools required for this purpose shall be clearly indicated.
Obligations prior to commencement of Construction work

a) Prior to commencement of Works, the Contractor shall:

(i) appoint its representative (the “Project Manager”) duly authorized to deal with the Employer in respect of all matters under or arising out of or relating to this Agreement, for the Project Duration and one year thereafter;

(ii) undertake, do and perform all such acts, deeds and things as may be necessary or required before commencement of Works under and in accordance with this Agreement, the Applicable Laws and Applicable Permits; and

(iii) make its own arrangements for quarrying of materials needed for the LTTD Plant Project under and in accordance with the Applicable Laws and Applicable Permits.

(b) The Employer shall appoint an engineer (the “Engineer”), as its representative for the LTTD Plant Project within 15 days of the signing of the Agreement by both the Parties. The Employer shall notify the Contractor the name, address and the date of appointment of the Engineer.

(c) Within 14 days of the Start Date, the Contractor shall submit to the Employer and the Engineer a programme (the “Programme”) for the Works, developed using networking techniques giving the following details:

Part I Contractor’s organization for the Project, the general methods and arrangements for design and construction, environmental management plan, quality assurance plan including Design Quality Plan (the “DQP”), safety during execution, Contractor’s personnel and Equipment.

Part II Programme for completion of all major stages and Project Milestones of the Works as specified in Project Completion Schedule to be submitted by the bidder.

Part III Monthly cash flow forecast in support of the project completion schedule submitted by the bidder and also compatible with the payment schedule.

(d) The Contractor shall appoint a design director (the “Design Director”) to head the Contractor’s Units, responsible for surveys, investigations, collection of data, and preparation of preliminary and detailed designs.

(e) Design shall be developed in conformity with the specifications and standards set forth in these documents.

(e) The Contractor shall appoint an independent design quality manager (the “Design Quality Manager”) who shall not be associated with the preparation of the design or execution of the LTTD Plant Project. The Design Quality Manager shall certify the fulfilment of design quality requirements.

(f) The Contractor shall appoint proof check consultant (the “Proof Check Consultant”) with the consent of the Employer. The Proof Check Consultants shall:
(i) proof check the detailed designs, approved and signed by the Design Director, supported with calculations, drawings and certificate from the Contractor's Design Quality Manager in accordance with the provisions of this Sub-clause 2.5.2 of SECTION II; and

(ii) evolve a system approach with the Design Director so as to minimize the time required for final designs and construction drawings.

(g) The Contractor shall submit design, duly certified by Proof Check Consultant, to the Employer in three distinct stages as indicated below:

Stage I Preliminary Design;
Stage II Final Design; and
Stage III Working Drawings.

These stages shall form the basis for releasing stage payments and for review of the progress.

**Design and Drawings:**

In respect of the Contractor’s obligations with respect to the Design and Drawings of the LTDD Plant Project, the following shall apply:

(i) The Contractor shall prepare and submit, with reasonable promptness and in such sequence as is consistent with the Project Completion Schedule, three copies each of all Drawings, to the Engineer for review;

(ii) The Contractor shall compute, and supply to the Engineer, the quantities of various items of works and stages described in Section V.

(b) By submitting the Drawings for review to the Engineer, the Contractor shall be deemed to have represented that it has determined and verified that the design and engineering, including field execution criteria related thereto, are in conformity with the Scope of the Project, the Specifications and Standards and the Applicable Laws;

(d) Within 15 (fifteen) days of the receipt of the Drawings, the Engineer shall review the same and convey its observations to the Contractor with particular reference to their conformity or otherwise with the Scope of the Project and the Specifications and Standards. The Contractor shall not be obliged to await the observations of the Engineer on the Drawings submitted pursuant hereto beyond the said 15 (fifteen) days period and may begin or continue Works at its own discretion and risk;

(e) If the aforesaid observations of the Engineer indicate that the Drawings are not in conformity with the Scope of the Project or the Specifications and Standards, such Drawings shall be revised by the Contractor and resubmitted to the Engineer for review. The Engineer shall give its observations, if any, within 7 (seven) days of receipt of the revised Drawings;

(f) No review and/or observation of the Engineer and/or its failure to review and/or convey its observations on any Drawings shall relieve the Contractor of its obligations and liabilities under this Agreement in any manner nor shall the Engineer or the Employer be liable for the same in any manner; and if errors, omissions, ambiguities, inconsistencies, inadequacies or
other Defects are found in the Drawings, they and the works shall be corrected at the Contractor's cost, notwithstanding any review under this section;

(g) Without prejudice to the foregoing provisions of this Clause 2.5.3, the Contractor shall submit to the Employer for review and comments its Drawings relating to alignment of the LTTD Plant Project and general arrangement drawings of all the components, and the Employer shall have the right but not the obligation to undertake such review and provide its comments, if any, within 30 (thirty) days of the receipt of such Drawings. The provisions of this Clause 2.5.3 shall apply mutatis mutandis to the review and comments hereunder;

(h) The Contractor shall be responsible for delays in submitting the Drawing caused by reason of delays in surveys and field investigations, and shall not be entitled to seek any relief in that regard from the Employer.

(i) Within 90 (ninety) days of the Project Completion Date, the Contractor shall furnish to the Employer and the Engineer a complete set of as-built Drawings, in 2 (two) hard copies and in micro film form or in such other medium as may be acceptable to the Employer, reflecting the LTTD Plant Project as actually designed, engineered and constructed, including an as-built survey illustrating the layout of the LTTD Plant Project and setback lines, if any, of the buildings and structures forming part of Project Facilities.

(j) The Contractor’s time and cost impacts of revisions arising from Employer’s review of designs caused by the Contractor’s non-compliance with the requirements of the Agreement shall be borne by the Contractor, unless there is a Change in the Scope of the Works.

(k) The Works shall be executed in accordance with the Design reviewed by the Engineer in accordance with the provisions of this Clause 2.5.3, and shall not be thereafter amended or altered without the prior written approval of the Employer.

Execution of the Project:

(a) The Contractor shall set out and undertake execution of the LTTD Plant Project as specified in SECTION II and Section IV, and in conformity with the Specifications and Standards set forth in Section V. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

(b) The Contractor shall construct the LTTD Plant Project in accordance with the Project Completion Schedule provided by him. In the event that the Contractor fails to achieve any Project Milestone within a period of 30 (thirty) days from the date set forth for such Milestone in Project Completion Schedule, unless such failure has occurred due to Force Majeure or for reasons solely attributable to the Contractor, it shall pay Damages to the Employer in a sum calculated as per 1.45, SECTION I until such Milestone is achieved; provided that if the execution Period for any or all Project Milestones is extended in accordance with the provisions of this Agreement, the dates set forth in Project Schedule shall be deemed to be modified accordingly and the provisions of this Agreement shall apply as if Project Completion Schedule has been amended as above; provided further that in the event
Project is completed within the execution Period, the Damages paid under this Sub-clause 2.5.4(b) shall be refunded by the Employer to the Contractor, but without any interest thereon. For the avoidance of doubt, it is agreed that recovery of Damages under this Sub-clause 2.5.4 shall be without prejudice to the rights of the Employer under this Agreement including the right of Termination thereof and forfeiture of Bank Guarantees.

(c) The Parties hereby accept that delays cause loss to the public and the national economy for whose benefit the Project is meant, and that the loss is not susceptible to precise measurement. The Parties hereby agree that the rate of Damages agreed as per SECTION 2 is a reasonable pre-determined amount, and that the Damages are not by way of penalty and employer is under no obligation to justify the bases for providing any proof thereof.

(d) The Employer shall notify the Contractor of its decision to impose Damages in pursuance with the provisions of this Clause 2.5.4 (d). Further, the total amount of Damages under Sub-clause 2.5.4 (b) shall not exceed ten percent of the Contract Price. LD for overall delay of the project is independent remedy as this clause is intended to ensure timely completion at each and every stage of the project.

Installation commissioning, type tests and pre commissioning trials:

The contractor has to install and commission the components at the island site. It would be the supplier’s responsibility to operationalize the equipment after erection. Bidder needs to ensure the availability of all the tools and tackles required for the commissioning. The contractor shall demonstrate cleaning and other maintenance procedures for all the critical components / works / equipment,

Tools: All tools required for assembly / disassembly including special tools if any, need to be provided by the contractor. The torque limits for tightening the bolts, other tools required for this purpose shall be clearly indicated.

The following tests shall be conducted as per the laid out procedures:

1. Vacuum Test for shell side of the condenser, flash chamber and the Warm water piping and Vacuum piping with the system maintained at a pressure of 18mbar abs with the vacuum system in the switch off condition (switched off after bringing the system vacuum to the desired pressure) and with no warm water flow to the flash chamber and no cold water flow to the condenser. This vacuum condition shall be demonstrated for a minimum of 6 hours, to obtain the starting system pressure and the ending system pressure and thereby determine the leak rate. The leak rate for the equipment shall be demonstrated to be within the permissible limits as per relevant HEI standards based on the system volume under the test and the pressure that is maintained.

2. With the piping for the cold water fully completed, the cold water pump shall be operated will all other accessories turned off and the cold water flow at the designed temperature shall be maintained for a period of 3 hours flow to demonstrate the following:
   i) The leak proof quality of the sump by maintaining a constant temperature while the cold water pump is under operation;
   ii) Ability of the sump to withstand the local conditions created due to the drawdown;
iii) Capability of the LTTD system to draw the deep sea cold water at the specified design temperature;
iv) Capability of the pump to deliver the cold water up to the condenser at the required flow rate; and,
v) Leak proof quality of the pipeline: Any leaks shall be plugged.

3. With the piping for the warm water fully completed, the warm water pump shall be operated and the warm water flow at the designed temperature shall be maintained for a period of 3 hours flow to demonstrate the following:
i) The leak proof quality of the sump by maintaining a constant temperature while the warm water pump is under operation;
ii) Capability of the LTTD system to draw the warm sea surface water at the specified design temperature;
iii) Capability of the pump to deliver the warm water up to the condenser at the required flow rate; and,
iv) Leak proof quality of the pipeline: Any leaks shall be plugged.

4. With each of the above three tests, the instrumentation that is fixed within each of the equipment / pipelines shall be validated to demonstrate the functionality of the following
   i) Temperature / Flow / Pressure / Vacuum Sensors fixed in the respective equipment / pipelines;
   ii) Data Acquisition System; and,
   iii) PMCC and different panels associated with the respective equipment;
   iv) Functionality of the sea water pumps, fresh water pump and vacuum system and any other accessories including the water circulation pumps for the vacuum system, etc.

5. All the components that are under the scope of work of the bidder shall be integrated with the LTTD Plant to provide its full functionality and performance in terms of the contract specified deliverables. All the works involved shall be completed in all respects. And the site shall be cleaned to be rid of the bidder's material, scrap, debris, unwanted material in sea and land, etc.

6. The water produced from the plant shall achieve the quoted Drinking water standard, IS: 10500 as amended with the latest revisions.

**Rescheduling tests:** If the Engineer certifies to the Employer and the Contractor that it is unable to issue the Completion Certificate because of events or circumstances on account of which the Tests could not be held or had to be suspended, the Contractor shall be entitled to reschedule the Tests and hold the same as soon as reasonably practicable.

**Quality of Product:** The quality of product water from the LTTD plant, and all other accessories shall conform to IS: 10500 as amended with the latest revisions.

**Quality of materials and workmanship:** The Contractor shall ensure that the Project Assets and workmanship are in accordance with the requirements specified in the Agreement, Specifications and Standards and Good Industry Practice.

**Quality control system:**

(a) The Contractor shall establish a suitable quality control mechanism to ensure compliance with the requirements of the Specifications and Standards in accordance with the provisions of this Agreement (the “Quality Assurance Plan” or “QAP”).
(b) The Contractor shall, within 30 days of the Appointed Date, submit to the Engineer for approval, the proposed Quality Assurance Plan which shall include the following:

(i) organization, duties and responsibilities, procedures, inspections, documentation;

(ii) quality control mechanism including sampling and testing of Materials, Plant, Project Assets, test frequencies, standards, acceptance criteria, testing facilities, reporting, recording and interpretation of test results, approvals, check list for Site activities, proformas for testing and calibration; and

(iii) internal quality audit system.

(c) The Contractor shall provide and procure all reasonable assistance, documents, apparatus and instruments, fuel, consumables, water, electricity, labour, Material, samples, and qualified personnel as are necessary for examining and testing the Project Assets and workmanship in accordance with the Quality Assurance Plan.

(d) The cost of supplying samples and testing of Project Assets and workmanship for the tests provided for in the Quality Assurance Plan or in the Agreement shall be borne by the Contractor.

(e) It is hereby expressly agreed by the Parties that the Contractor shall on the directions issued by the Engineer carry out such tests including those not provided for in the Agreement that are in accordance with the Good Industry Practice to assess the quality of the Project Assets or workmanship. The Contractor shall bear the cost of the tests and samples if the quality of the Project Assets or workmanship is not in compliance with the Specifications and Standards. In any other case, the cost of test shall be determined by the Engineer and shall be payable by the Employer.

**Inspection:**

a) The Engineer and his authorized agents shall at all reasonable times:

(i) have full access to all parts of the Site and to all places from which natural Materials are being obtained; and

(ii) during production, manufacture and execution (at the Site and, to the extent specified in the Agreement elsewhere), be entitled to examine, inspect, measure and test the Materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

(b) The Contractor shall give the Engineer and his authorized agents full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

(c) The Contractor shall bear the cost of carrying out tests in accordance with the provisions of the Agreement.

(d) The Engineer shall submit a monthly inspection report (the “Inspection Report”) to the Employer and the Contractor bringing out the results of inspections and the remedial action taken by the Contractor in respect of Defects. The Contractor shall rectify and remedy the Defects or deficiencies, if any, stated in the Inspection Report. Such inspection or
submission of Inspection Report by the Engineer shall not relieve or absolve the Contractor of its obligations and liabilities under the Agreement in any manner whatsoever.

(e) The contractor should maintain site order book at the site for issuing instructions by the Engineer.

**Samples:** The Contractor shall submit the following samples of Materials and relevant information to the Engineer for pre-execution review in accordance with the procedure for review of design and drawings:

(a) manufacturer's test reports and standard samples of Materials; and

(b) Each sample shall be labelled as to origin and intended use in the Project and submitted at the Contractor's cost.

(c) The testing procedure should follow relevant IS codes and standards, unless otherwise specified by the Engineer.

**Tests:** (a) For determining that the Works conform to the Specifications and Standards, the Engineer shall require the Contractor to carry out or cause to be carried out tests, at such time and frequency and in such manner as may be specified by the Engineer from time to time, in accordance with Good Industry Practice for quality assurance.

(b) In the event that results of any tests conducted under this clause establish any Defects or deficiencies in the Works, the Contractor shall carry out remedial measures and furnish a report to the Engineer in this behalf. The Engineer shall require the Contractor to carry out or cause to be carried out tests to determine that such remedial measures have brought the Works into compliance with the Specifications and Standards, and the procedure shall be repeated until such Works conform to the Specifications and Standards. For the avoidance of doubt, the cost of such tests and remedial measures in pursuance thereof shall be solely borne by the Contractor.

(c) All the necessary test equipment required for the site works shall be maintained at site by the contractor. The test equipment to be provided at site should be indicated in the bid.

**Examination before cover-up:** In respect of the work which Engineer is entitled to examine, inspect, measure and/or test before it is covered up or put out of view or any part of the work is placed thereon, the Contractor shall give notice to the Engineer whenever any such work is ready and before it is covered up. The Engineer shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Engineer does not require to do so.

**Remedial work:**

a) Notwithstanding any previous test or certification, the Employer may instruct the Contractor to:

   (i) remove from the Site and replace any Plant or Materials which are not in accordance with the provisions of this Agreement;
(ii) remove and re-execute any other work which is not in accordance with the provisions of this Agreement and the Specification and Standards; and

(b) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

(c) If the Contractor fails to comply with the instructions issued by the Engineer under Sub-clause 2.13.5(a) hereinabove or fails to correct a Defect within the time specified in the Engineer’s notice, the Engineer may assess the cost of having the Defect repaired and carry out the said repair work. The cost so incurred by the Engineer for the repair work shall be recoverable as debt due from the Contractor by the Employer, and may be deducted by the Employer from any monies due to be paid to the Contractor. Continuous failure to rectify shall result in forfeiture of performance security and other remedial action detailed in clause no 1.49, 1.51, 1.52 and other provision of this tender / contract.

Delays during execution:

Without prejudice to the provisions of SCOPE OF WORK, in the event the Contractor does not achieve any of the Project Milestones or the Engineer shall have reasonably determined that the rate of progress of Works is such that Completion of the Scope of Work is not likely to be achieved by the end of the stipulated Period, it shall notify the same to the Contractor, and the Contractor shall, within 15 (fifteen) days of such notice, by a communication inform the Engineer in reasonable detail about the steps it proposes to take to expedite progress and the period within which it shall achieve the Project Completion Date.

The Contractor shall hand over to the Engineer all its quality control records and the documents for the Works before the Completion Certificate pursuant to Clause 2.11 of SECTION II is issued to the Contractor.

During the execution Period, the Contractor shall provide to the Employer for every alternate month, a video recording, which will be compiled into a 3 (three)-hour compact disc or digital video disc, as the case may be, covering the status and progress of Works in that quarter. All the critical activities shall also be covered in this video recording. The video recording shall be provided to the Employer no later than 15 (fifteen) days after the close of that 60 day period.

Operation and Maintenance:

The supplier has to indicate the cost of operation and maintenance for a period of 1 year. The scope for this period would be to keep all the equipment under insurance and also maintain the equipment in running condition. The 12 month warranty of the works shall include this comprehensive maintenance.

The repair of any back up capacity provided in the plant should be taken up and completed immediately. A minimum technical staff of 1 person with a diploma in Electrical / Civil / Mechanical discipline should be maintained at site in all the shifts.

A total of 5 persons, of which at least 3 are skilled technicians, one each with ITI in Electrical / Civil / Mechanical Engineering shall be maintained at the site in each of the shifts.
It is the sole responsibility of the contractor to ensure compliance of all applicable labour laws like Minimum Wages, ESI, EPF, Bonus etc., for the personnel employed under this contract. Contractor shall provide proof of electronic fund transfer for wages ESI, EPF etc., along with each stage payment and O&M payments. The plant shall be operated for all the 24 hours a day basis and 7 days a week.

**Power of Employer to undertake works:**

(a) Notwithstanding anything to the contrary contained in Clauses 2.15.1 and 2.15.4 of this section, the Employer may, after giving notice to the Contractor and considering its reply thereto, award such works or services to any person on the basis of open competitive bidding; provided that the Contractor shall have the option of matching the first ranked bid in terms of the selection criteria, subject to payment of 2% (two per cent) of the bid amount to the Employer, and thereupon securing the award of such works or services. For the avoidance of doubt, it is agreed that the Contractor shall be entitled to exercise such option only if it has participated in the bidding process and its bid does not exceed the first ranked bid by more than 10% (ten percent) thereof. It is also agreed that the Contractor shall provide assistance and cooperation to the person who undertakes the works or services hereunder.

(b) The works undertaken in accordance with this Clause 2.15.5 shall conform to the Specifications and Standards and shall be carried out in a manner that minimises the disruption in operation of the LTTD Plant. The provisions of this Agreement, insofar as they relate to Works and Tests, shall apply *mutatis mutandis* to the works carried out under this Clause 2.15.5.

**Safety and Accidents:**

The Contractor shall ensure safe conditions for the workers, and in the event of unsafe conditions, it shall follow the relevant operating procedures for remedial actions without delay. Such procedures shall conform to the provisions of this Agreement, Applicable Laws, Applicable Permits and Good Industry Practice.

**Reduction of Payment for non-performance maintenance obligations:**

a) In the event that the Contractor fails to repair or rectify any Defect or deficiency within the specified period, it shall be deemed failure of performance of Maintenance obligations by the Contractor and the Employer shall be entitled to effect reduction in monthly lump sum payment for maintenance, without prejudice to the rights of the Employer under the Agreement, including Termination thereof.

(b) If the nature and extent of any Defect or deficiency justifies more time for its repair or rectification than the specified time, the Contractor shall be entitled to additional time in conformity with Good Industry Practice. Such additional time shall be determined by the Engineer and conveyed to the Contractor and the Employer with reasons thereof.

**Employer’s right to take remedial measures:**

In the event the Contractor does not maintain and/or repair the LTTD Plant or any part thereof in conformity with the Maintenance Requirements, the Maintenance Manual or the Maintenance
Programme, as the case may be, and fails to commence remedial works within 15 (fifteen) days of receipt of the Maintenance Inspection Report or a notice in this behalf from the Employer or the Engineer, as the case may be, the Employer shall, without prejudice to its rights under this Agreement including Termination thereof, be entitled to undertake such remedial measures at the risk and cost of the Contractor, and to recover its cost from the Contractor. In addition to recovery of the aforesaid cost, a sum equal to 20% (twenty per cent) of such cost shall be paid by the Contractor to the Employer as Damages.

Restoration of loss or Damage to LTTD plant:

Save and except as otherwise expressly provided in this Agreement, in the event that the LTTD Plant or any part thereof suffers any loss or damage during the Maintenance Period from any cause whatsoever, the Contractor shall, at its cost and expense, rectify and remedy such loss or damage forthwith so that the LTTD Plant conforms to the provisions of this Agreement.

Extension of Time for Completion:

a) In the event the Contractor is entitled to any extension of time (the “EOT”) for Completion if and to the extent that completion for the purposes of - Clause 2.5.4, SECTION II is or will be delayed by any of the following causes:

   (i) Change of Scope (unless an adjustment to the Time for Completion has been agreed under Sub-clause 2.15, SECTION II [Change of Scope];

   (ii) a cause of delay giving an entitlement to EOT under the Agreement; or

   (iii) any delay, impediment or prevention caused by or attributable to the Employer, the Employer’s Personnel, or the Employer’s other contractors on the Site;

the Contractor shall, not later than 28 days from the occurrence of such an event or circumstance, inform the Engineer by notice in writing stating in reasonable detail the event or circumstances giving rise to the claim. Provided that, the period of 28 days shall be calculated from the date on which the Contractor became aware, or should have become aware, of the occurrence of such an event or circumstance.

(b) In the event of the failure of the Contractor to submit to the Engineer the notice in accordance with the provisions of Sub-clause 2.5.5 (a) within the time specified therein, the Contractor shall not be entitled to any EOT in Time for Completion and shall forfeit its right for any such claims in future. For the avoidance of doubt, in the event of failure of the Contractor as mentioned above, the Employer shall be discharged from all liability in connection with the claim.

(c) The Engineer shall, on the receipt of claim notice in accordance with the provisions of Sub-clause 2.5.5 (a), examine the claim and make his determination of Extension of Time within 30 (Thirty) of the date of receipt of the claim notice. In the event the Engineer requires any clarifications to examine the claim, the Engineer shall seek the same within 14 (fourteen) days from the date of receiving the claim notice. The Contractor shall, on the receipt of the
Engineers’ communication requesting for clarification, furnish the same within 14 days to the Engineer. The Engineer shall, within a period of 15 [Fifteen] days from the receipt of Contractor’s clarifications, in consultation with the Employer and the Contractor, notify the Contractor and the Employer in writing his determination.

Packing and Transportation:

The items should be transported in proper seaworthy packing and proper slings and lifting points for easy handling has to be provided. The details provided with the site logistics and infrastructure facilities in SECTION 5 should be considered thoroughly. For loading, unloading, transportation to and within the island and all other related activities for these items. To provide the ease of transportation and also to avoid complexities in the installation, all the critical items should be skid mounted. Hooks for connecting the slings shall be provided for the items.

Project Schedule:

A detailed project schedule that ensures the realization of the entire project within the stipulated time needs to be submitted along with the bid. At the time of signing the contract, the approved project schedule forms a part of the contract, based on which any subsequent LD shall be levied on any significant deviation from such mutually agreed schedule, depending on the circumstances of each such deviation.

Performance / Commissioning Trials:

At least 30 (thirty) days prior to the likely completion of the LTTD Plant Project in any Island, the Contractor shall notify the Engineer of its intent to subject the LTTD Plant Project, to Tests. The date and time of each of the Tests shall be determined by the Engineer in consultation with the Contractor, and notified to the Employer who may designate its representative to witness the Tests. The Contractor shall provide such assistance as the Engineer may reasonably require for conducting the Tests. Hourly logs of all the critical parameters shall be maintained by the contractor during this period of the Commissioning trials.

The execution of performance trials for the plant shall mark the successful completion of the activities. The LTTD plant shall be run continuously for a minimum period of 30 days to demonstrate the following capabilities of the plant:

a) Continuous, round the clock operation of the plant;

b) Production of the designed minimum capacity of 150m$^3$/day of potable drinking water;

c) Demonstration of the power consumed by various systems of the plant;

d) Demonstration of the quality of the drinking water with the basic levels as indicated in Clause 2.12 (Quality section) of SECTION II;

e) Demonstration of the functionality of all the components of the LTTD Plant Project, including the Flash Chamber, Condenser, Sea Water Pumps, Vacuum System, Plant piping and Fittings, Electrical Systems, Motors, Panels and Instrumentation, Civil and Marine Structures, as per the relevant standards and specifications set forth in the technical specifications Section V and, Handing over the fully functional LTTD Plant Project.
The Engineer shall observe, monitor and review the results of the Tests to determine compliance of the LTTD Plant Project or a Section thereof, with Specifications and Standards and if it is reasonably anticipated or determined by the Engineer during the course of any Test that the performance of the LTTD Plant Project or Section or any part thereof, does not meet the Specifications and Standards, it shall have the right to suspend or delay such Test and require the Contractor to remedy and rectify the Defects or deficiencies. Upon completion of each Test, the Engineer shall provide to the Contractor and the Employer copies of all Test data including detailed Test results. For the avoidance of doubt, it is expressly agreed that the Engineer may require the Contractor to carry out or cause to be carried out additional Tests, in accordance with Good Industry Practice, for determining the compliance of the LTTD Plant Project or Section thereof with the Specifications and Standards.

Completion certificate:

Upon completion of Works and the Engineer determining the Tests to be successful, it shall forthwith issue to the Contractor and the Employer a certificate substantially for completion (the “Completion Certificate”). However, before the Completion Certificate is issued, the Contractor shall hand over to the Engineer all its quality control documents for the Works, including as built drawings.

Certificate of Performance:

The Contractor shall request the Engineer, within 28 days after the completion of the Running and Maintenance Period of One year, to issue a Certificate of Performance (the “Certificate of Performance”) of completion of all the maintenance obligations in accordance with the Agreement. The Engineer shall do so upon deciding that the maintenance works were completed and Defects, if any, brought to the notice of the Contractor under the Defect Liability Period have been remedied.

Handing over: The Contractor shall hand over the LTTD Plant Project, within 7 [seven] days of the Engineer issuing the Certificate of performance in accordance with the provisions of Clause 2.11, SECTION II. The Employer shall also issue a Taking over certificate (the “Taking Over Certificate”) to the Contractor specifying the details of the Project taken over from the Contractor. In case of time over run in handing over the LTTD Plant accordingly the DLP period should be extended.

Methodology: The Contractor shall, at least 14 days prior to the commencement of the Work in accordance with the Programme or any part thereof, submit to the Engineer for approval the methodology proposed to be adopted for executing the Scope of Work, giving details of the method of working, equipment to be deployed (capacity and number), detailed schedules for each of the activities, schedules for men and material deployment for critical activities, and measures for ensuring quality of work and safety.

Inspection: The Employer or any representative authorized by the Employer in this behalf shall have the right to inspect and review the progress of the Scope of Work and issue appropriate
directions to the Engineer for taking necessary action in the event the Works are not in accordance with the Programme, provisions of this Agreement, the Specifications and Standards, the Quality Assurance Plan and/or the Good Industry Practice. The Employer or any authorized representative in his behalf shall also have the right to assess the quality and quantity of the Materials brought to the Site for incorporation in the Project and the workmanship of the Works executed. Provided that, the Employer shall give at least [7] days prior notice to the Engineer and the Contractor of its intention to carry out such tests and that such tests shall be carried out in the presence of the representatives of the Engineer and the Contractor.

**Progress reports:** During the execution Period, the Contractor shall, not later than 7 (seven) days after the close of every Fortnight, starting with 1st and 16th of each calendar month, furnish to the Employer and the Engineer a monthly report on progress of the Works in terms of expected and achieved performance with shortfalls if any and remedial measures planned to overcome the shortfall to still achieve the project within 24 months from the date of signing contract. Contractor shall also promptly give such other relevant information as may be required by the Engineer. Failure to provide such progress report shall forfeit the right of the contractor to claim any EOT or price revision as contemplated under this contract.

**Rejection:** If, as a result of an examination, inspection, measurement or testing, any Plant, Materials, design or workmanship is found to be defective or otherwise not in accordance with the provisions of this Agreement, the Engineer may reject the Plant, Materials, Design or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the Defect and ensure that the rejected item(s) complies with the requirements of the Agreement. If the Engineer requires the Plant, Materials, Design or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Employer to incur any additional costs, such cost shall be recovered from the Contractor from any payment payable by NIOT. It is made very clear that interim inspection and clearance shall not relieve the successful bidder for overall plant performance as an integrated plant. Hence to avoid rejection at the final integration, vendor shall put all efforts to have sufficient safety margins to ensure optimal performance of the integrated plant. In the event of such rejection vendor shall ensure replacement as required to achieve the overall performance within contract price and without any additional cost.

**Delays during execution:**

Without prejudice to the provisions of **SCOPE OF WORK**, in the event the Contractor does not achieve any of the Project Milestones or the Engineer shall have reasonably determined that the rate of progress of Works is such that Completion of the Scope of Work is not likely to be achieved by the end of the stipulated Period, it shall notify the same to the Contractor, and the Contractor shall, within 15 (fifteen) days of such notice, by a communication inform the Engineer in reasonable detail about the steps it proposes to take to expedite progress and the period within which it shall achieve the Project Completion Date.

**Operation and Maintenance:**
The supplier has to indicate the cost of operation and maintenance for a period of 1 year. The scope for this period would be to keep all the equipment under insurance and also maintain the equipment in running condition. The 12 month warranty of the works shall include this comprehensive maintenance.

The repair of any back up capacity provided in the plant should be taken up and completed immediately. A minimum technical staff of 1 person with a diploma in Electrical / Civil / Mechanical discipline should be maintained at site in all the shifts.

A total of 5 persons, of which at least 3 are skilled technicians, one each with ITI in Electrical / Civil / Mechanical Engineering shall be maintained at the site in each of the shifts.

It is the sole responsibility of the contractor to ensure compliance of all applicable labour laws like Minimum Wages, ESI, EPF, Bonus etc., for the personnel employed under this contract. Contractor shall provide proof of electronic fund transfer for wages ESI, EPF etc., along with each stage payment and O&M payments. The plant shall be operated for all the 24 hours a day basis and 7 days a week.

**New Items:**

New items during the contract period, Any change from the provisions in the drawings issued by the Contractor that becomes necessary during the execution of the work due to any practical difficulty, shall be brought to the notice of the Engineer-in-charge/NIOT, and their approval obtained. Contractor shall submit estimates as per CPWD rates for analysis and appropriate decision on reasonableness of rate. Any new items not covered under schedule of rate shall be supported by Budgetary quotes from the sources on supply of material and labour based on labour rates as applicable at the project sites. Without written approval from the employer contractor should not execute any new or additional work/items.

**Maintenance:**

**Maintenance obligation of Contractor:**

(a) The Contractor shall appoint its representative hereafter called (“Maintenance Engineer”), one month before the end of the term of the Project Manager specified in Sub-clause 2.5.2, duly authorised to deal with the Employer in respect of all matters under or arising out of or relating to this Agreement, for the remaining Maintenance Period.

(b) During the Maintenance Period, the Contractor shall maintain the LTTD Plant in accordance with this Agreement and carry out necessary works to comply with the provisions of this Agreement, Applicable Laws and Applicable Permits, and conform to Specifications, Standards and Good Industry Practice. The obligations of Contractor hereunder shall include:
(i) permitting safe, smooth and uninterrupted operation of the LTTD Plant Project during Maintenance Period;

(ii) minimising disruption to the operation in the event of plant shut down or other incidents affecting the operation of the LTTD Plant by providing a rapid and effective response and maintaining liaison with the local authorities;

(iii) undertaking routine maintenance including repairs as felt necessary;

(iv) complying with Safety Requirements in accordance with Article 2.12.

(v) protection of the environment during maintenance and provision of equipment and materials therefor;

(c) The Contractor shall remove promptly from the LTTD Plant all surplus construction machinery and Material, waste materials (including hazardous materials and waste water), rubbish and other debris (including, without limitation, accident debris) and keep the LTTD Plant in a clean, tidy and orderly condition, and in conformity with the Applicable Laws, Applicable Permits and Good Industry Practice.

Compliance with statutory requirements/Permits/Licenses

It is contractor’s responsibility to obtain approvals from statutory bodies for his marine spread and operations. The Contractor shall operate as per the rules and regulations of Island Coastal Zone Management Authority (ICZMA) during the execution of this Contract. At no point of time the Contractor shall violate the rules set by ICZMA and other environmental laws governing India’s territorial water. The Contractor shall keep ICZMA informed of their activities in relation to this Contract. Except as expressly stated otherwise elsewhere, the Contractor at its own cost shall obtain all permits and licenses required for execution and completion of the activities which includes, inter alia, material transportation as well

Incentive for Early completion

Considering the need of early and time bound completion of the project, In case, the contractor completes the work ahead of schedule completion time, a bonus @1% (one percent) of the tendered value per month computed on per day basis, shall be payable to the contractor, subject to a maximum limit of 5% (five percent) of the tendered value. The incentive scheme shall not apply if extension to the original completion period is given irrespective of on whose account. Period less than a month will not be reckoned for the incentive bonus calculation.

Escalation for Material and Labour wages for Marine structures

The price escalation is applicable only for the Marine structures as per LPWD guidelines and price index beyond 24 months. Price variation shall be applicable on genuine reason such as Force Majeure or any other site difficulties provided the contractor has strictly followed the work schedule approved by NIOT. The contribution of various components within marine structures such as cement, steel, material, POL and labour required for Sump, Bridge and Plant building
has to be provided by the contractor while bidding as per the Section III, 3.9. The variations will be paid/adjusted in accordance with given percentages and changes in price index.

In the event of basis of costing found to be grossly deviated from NIOT estimates, NIOT will seek the confirmation and acceptance as part of technical qualification process to ensure uniform basis of costing and evaluation. Once the basis is accepted, same shall be remain fixed and firm without any variation whatsoever.

**Arbitration / Disputes**

In the event of any dispute, difference, interpretation or application relating to this agreement arises, the same shall be settled amicably by the parties. In case the dispute or differences could not be settled amicably, the same shall be referred for adjudication through Arbitration by an Arbitrator to be appointed by the Director, NIOT.

The Arbitration shall be concluded in accordance with the provisions of Arbitration & Conciliation Act, 1996 or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings. Venue of such arbitration shall be at Chennai in India. The language of arbitration proceedings shall be English. The Arbitrator shall make a reasoned award (the “award”), which shall be final and binding on the parties. The cost of the arbitration shall be shared equally by the parties to the contract. However, expenses incurred by each party in connection with the preparation, presentation etc., shall be borne by each party.

**Termination of contract**

NIOT retain the right to terminate the contract in case of violations of any of the terms of the contract by giving 15 days’ notice to the contractor. Upon such termination the contractor shall not be entitled for any payment of consideration apart from NIOT’s right to take any lawful action to protect public interest. The LOI/Contract placed will be cancelled and the security deposit or any other bank guarantee amount will be forfeited.

**CHANGE OF CONTROL AND LEGAL STATUS**

a. The Contractor shall not alter their composition or legal status without the prior consent of NIOT after the execution of this Agreement.

b. NIOT shall have the option to terminate this Agreement and the relationship between the Parties in the event there has been a change in the composition, management, shareholding or legal status of the Contractor, which affects the interest of NIOT in timely execution of this contract within the consideration agreed to at the time of signing this contract.

**NON-EXCLUSIVITY**

It is expressly agreed that NIOT shall, at all times, be at liberty to engage any other person or entity in addition to or in place of the Contractor for performing any Scope of Work contemplated under this Agreement without reference to the Contractor. However, in the event such an engagement is due to the default of any provision of this Agreement or any written notice or communication served by NIOT, on the part of the Contractor, the costs and expenses
incurred/as assessed by NIOT as a consequence of such an engagement shall be to the account of the Contractor.

NOTICES / COMMUNICATION

All notices, Change Orders, Supplements and other communications required or permitted under this Agreement shall be in writing (in English) and shall be deemed effectively delivered upon receipt by personal delivery and / or overnight courier service, or if by facsimile or through email as confirmed by transmission receipt. Any Party may change its address for such communications by giving an appropriate written notice to the other Parties conforming to this Clause. All notices under this Agreement shall be delivered.

All certificates, notices or instructions to be given to the Contractor by the Employer or the Engineer under the terms of the Contract shall be sent by post, cable, telex, e-mail or facsimile transmission to or left at the Contractor's principal place of business or such other address as the Contractor shall nominate for that purpose.

Either party may change a nominated address to another address in the country where the Works are being executed by prior notice to the other party, with a copy to the Engineer / Contractor by prior notice to both parties.

AMENDMENT

This Agreement may be amended only by a written agreement between the Parties duly signed by their authorized signatories. The amendment(s) approved by the Parties hereto shall be appended into the text of this Agreement within three (3) days from the date of such approval.

Force Majeure

For purposes of this Clause, "Force Majeure" means an event beyond the control of the Contractor and not involving the Contractor's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of god, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the Contractor shall promptly notify NIOT in writing of such conditions and the cause thereof. Unless otherwise directed by NIOT in writing, the Contractor shall continue to perform its obligations under the Contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

PUBLICITY

The Parties acknowledge that this Agreement and all of its provisions are confidential. None of the Parties shall disclose the existence or the transactions contemplated herein or any of the terms of this Agreement to any person, except to its authorized representatives, employees, directors, officers, accounting and legal advisors, potential investors, shareholders, contract labour, sub-contractors and sub-contract labour. Any press release, public statement, including the statements issued to their shareholder (oral or in writing), or any other disclosure about the
existence or the transactions contemplated herein or any of the terms of this Agreement to any person shall be made by the Contractor only after a prior approval is given, in writing, by NIOT.

COUNTERPARTS
This Agreement is executed in two counterparts, each of which will be an original as against any Party whose signature appears thereon and all of which together will constitute one and the same instrument.

TECHNICAL SPECIFICATION:
The technical specification will be as per NIT
Integrity Pact.

General

This pre-bid pre-contract Agreement (herein after called the Integrity Pact) is made on ------day of the month of 2017, between on one hand, the President of India acting through Shri------ Designation of the Officer, Ministry/Department, Government of India (hereinafter called the "BUYER", which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First part and M/s-------represented by Shri----, Chief Executive Officer (hereinafter called the "BIDDER/Seller" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure (Name of the Stores/Equipment/Item) and the BIDDER/Seller is willing to offer/has offered the stores and WHEREAS the BIDDER is a private company/public company/ Government undertaking/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Ministry/Department of the Government of India/PSU performing its functions on behalf of the President of India.

NOWHEREFORE,

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

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and Enabling BIDDERs to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties here to here by agree to enter in to this Integrity Pact and agree as follows:

Commitments of the BUYER

1.1 The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
1.2 The BUYER will, during the pre-contract stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.

1.3 All the officials of the BUYER will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the BUYER with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

**Commitments of BIDDERS**

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contractor post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-

3.1. The BIDDER will not offer directly or through intermediaries, any bribe, gift, consideration, reward favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

3.2. The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward favour, any material or immaterial benefit or any other advantage, commission, fees, brokerage or inducement to any official of the BUYER, or otherwise in procuring the Contractor for bearing to do or having done any act in relation to the obtaining or execution of the contractor any other contract with the Government for showing or for bearing to show favour or disfavor to any person in relation to the contractor any other contract with the Government.

3.3. BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principles or associates.

3.4. BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary in connection with this bid/contract.
3.5. The BIDDER further confirms and declares to the BUYER that the BIDDER is the original manufacturer/integrator/authorized government sponsored export entity of the defence stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER or any of its functionaries whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.

3.6. The BIDDER, either while presenting the bid or during pre contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

3.7. The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

3.8. The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

3.9. The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.

3.10. The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

3.11. The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

3.12. If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the BUYER, or alternatively, if any relative of an officer of the BUYER has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of tender. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act1956.

3.13. The Bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the BUYER.

4. Previous Transgression
4.1. The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER’s exclusion from the tender process.

4.2. The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

5. Earnest Money (Security Deposit)

5.1. While submitting commercial bid, the BIDDER shall deposit an amount------- (to be specified in RFP) as Earnest Money/ Security Deposit, with the BUYER through any of the following instruments:

i) Bank Draft or a Pay Order in favour of-------

ii) A confirmed guarantee by an Indian Nationalized bank, promising payment of the guaranteed sum to the BUYER on demand within three working days without any demur what so ever and without seeking any reasons what so ever. The demand for payment by the BUYER shall be treated as conclusive proof of payment.

iii) Any other mode or through any other instrument (to be specified in the RFP).

5.2 The Earnest Money/Security Deposit shall be valid up to a period of five years or the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and the BUYER, including warranty period, whichever is later.

5.3 In case of the successful BIDDER a clause would also be incorporated in the Article pertaining to Performance Bond in the Purchase Contract that the provisions of Sanctions for Violation shall be applicable for forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing an action for violation of this pact.

5.4 No interest shall be payable by the BUYER to the BIDDER on Earnest Money/Security Deposit for the period of its currency.

6. Sanctions for Violations

6.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the BUYER to take all or any one of the following actions, wherever required:-
i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.

ii) The Earnest Money Deposit (in pre – contract stage) and/or Security Deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.

iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.

iv) To recover all sums already paid by the BUYER and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the afore said sum and interest.

v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.

vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation/rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.

vii) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the BUYER.

viii) To recover all sums paid in violation of this Pact by BIDDER(s) to any middle man or agent or broker with a view to securing the contract.

ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.

x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this pact.

6.2 The BUYER will be entitled to take all or any of the actions mentioned at para 6.1 (i) to (x) of this Pact at soon the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) of an offence as defined in
Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

6.3 The decision of the BUYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor(s) appointed for the purposes of this Pact.

7. Fall Clause

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

8. Independent Monitors

8.1 The BUYER has appointed Independent Monitors (here in after referred to as Monitors) for this Pact in consultation with the Central Vigilance Commission

Shri. Arun Kumar
Ex. Secretary
Oil Industry Development Board (OIDB)

Shri. Sushil Gupta
Ex. Chairman
Central Ground Water Board (CGWB) & Central Ground Water Authority (CGWA)

8.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.

8.3 The Monitors shall not be subject to instructions by the representatives of the
8.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings.

8.5 As soon as the Monitor notices, or has reason to believe, a violation of this pact, he will so inform the Authority designated by the BUYER.

8.6 The BIDDER(s) accepts that the Monitor has the right to Access without restriction to all Project documentation of the BUYER including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.

8.7 The BUYER will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.

8.8 The Monitor will submit a written report to the designated Authority of BUYER/Secretary in the Department/within 8 to 10 weeks from the date of reference or intimation to him by the BUYER/BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

9. Facilitation of Investigation

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

10. Law and Place of Jurisdiction

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

11. Other Legal Actions

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

12. Validity

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

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

13. The parties here by sign this Integrity Pact at----on-----

DIRECTOR
NATIONAL INSTITUTE OF OCEAN TECHNOLOGY
MINISTRY OF EARTH SCIENCES

BIDDER
CHIEF EXECUTIVE OFFICER

Witness
1. ------------------------

Witness
1. ------------------------