



CHENNAI PORT TRUST

MECHANICAL & ELECTRICAL ENGINEERING DEPARTMENT

TENDER No.MEE / 22 / 2017 / DY.CME(R&D)

TENDER FOR

“DESIGN, BUILD, TEST & TRIALS, DELIVERY AND COMMISSIONING OF OIL SPILL RESPONSE VESSEL AND SUPPLY OF FLEX BARGES AND SHORE LINE CLEAN-UP EQUIPMENTS FOR CHENNAI PORT TRUST”

INVITATION THROUGH e-TENDER MODE

FOR DETAILS VISIT e-procure.gov.in and www.chennaiport.gov.in

CHENNAI PORT TRUST

TENDER NO: MEE /22 / 2017 / DY.CME(R&D)

INDEX

Notice Inviting Tender		P- 3 to 5
Instructions for Online Bid Submission		P- 6 to 9
Summary		P- 10 to 11
<i>PART 1 – TENDERING PROCEDURES</i>		
Section I	Instruction to Tenderers (ITT)	P- 14 to 31
Section II	Tender Information Sheet (TIS)	P- 32 to 36
Section III	Evaluation & Qualification Criteria	P- 37 to 39
Section IV	Tendering Forms	P- 42 to 49
<i>PART 2 – SUPPLY REQUIREMENTS</i>		
Section V	Schedule of Requirements	P- 54 to 123
<i>PART 3 – CONTRACT</i>		
Section VI	General Condition of Contract (GCC)	P- 127to 167
Section VII	Special Condition of Contract (SCC)	P- 168to 177
Section VIII	Contract Forms	P- 179to 188
Section IX	Integrity Pact	P- 189to 195
Attachment	Declaration Form	P- 196

CHENNAI PORT TRUST

MECHANICAL & ELECTRICAL ENGINEERING DEPARTMENT

R&D DIVISION

NOTICE INVITING TENDER

Tender No.: MEE /22/ 2017 / DY.CME(R&D)

Department Name	Mechanical & Electrical Engineering Department
Division	DY.CME (R&D) Division, Old Administrative Office Building, II Floor, Rajaji Salai, Chennai – 600 001.
Tender No.	MEE/ 22 / 2017 / DY.CME(R&D)
Name of Work	“Design, Build, Test & Trials, Delivery and Commissioning of Oil Spill Response Vessel and supply of Flex Barges and Shoreline Clean-up Equipments for Chennai Port Trust”.
Estimate Cost	Rs.14 Crores
Completion Period	<ol style="list-style-type: none">1. The successful bidder shall submit the entire design drawing of OSRV and get it approved by the IRS within 30 days from the 7th day of issue of LoA.2. The OSRV shall be delivered to Chennai Port after completion of entire formalities as per Tender Conditions within 12 months from the date of issue of work order.
Bidding Type	Open Tender
Qualifying Criteria	PRE-QUALIFICATION CRITERIA / BIDDING CONDITION The Average Annual Financial Turnover during the last Three (3) years ending 31 st March of 2014-15, 2015-16 & 2016-17 should be atleast Rs 4.2 Crores . A copy of Annual Turnover Statement, Profit and Loss Statements and Balance Sheet for the aforesaid three years shall be submitted duly certified by Chartered Accountant. ii) The Tenderer should have experience in ‘Similar Works’ during last 7 years ending last day of month previous to the one in which applications are invited and should fulfill either of the following:- <ol style="list-style-type: none">a) One similar completed work of contract value not less than Rs. 11,20,00,000/-; (OR)b) Two similar completed works of contract

value each not less than **Rs. 7,00,00,000 /-**
;

(OR)

- c) **Three** similar completed works of contract value each not less than **Rs. 5,60,00,000/-**.

‘SIMILAR Works’ – means “ Ship Building/Boat Building works in either of following categories”.

The shipyards / Boat builders should have built minimum 1 No. Vessel of Oil Spill Response or any special type of vessels like dredgers/Ocean going research vessels/fire fighting vessels of not less than the length specified and shall submit documentary evidence from the owners/end users for satisfactory operation of the vessel for a minimum period of 1 year.

(OR)

The shipyards / Boat builders should have built minimum 1 No. Vessel classed under “IRS” or any member of the International Classification Societies with minimum length not less than 17.5m (documentary proof to be submitted) and having a technical collaboration with Shipyard/Boat Builder or engage a Ship Designer/Naval Architect firm (for the purpose of this contract). Which/who have designed/built minimum 1 No. Oil Spill Response Vessel or any special type of vessels like dredger/Ocean going research vessel/fire fighting vessel of not less than the length specified and shall submit documentary evidence from the owners/end users for satisfactory operation of the vessel for a minimum period of 1 year.

(OR)

The shipyards / Boat builders should have built minimum 1 No. Vessel of TUG with dispersant system/Utility vessel with Oil recovery system of length not less than the length specified and shall submit documentary evidence from the owners / end users for satisfactory operation of the vessel for a minimum period of 1 year. The ship yard/ boat builder shall enclose an agreement for collaboration, design and technical know-how valid specifically for this contract to design, build and commission the OSR Vessel as per the broad specifications given in the tender.

The work orders for the Vessel(s) mentioned in similar works and certificate for satisfactory operation of the vessel for a minimum period of 1 year from the owners / end users shall be enclosed.

P1 Note: The Tenderers shall enclose the “Notarised or self attested copies of Work Order copies for similar works, successful completion certificates from the end user indicating the date of completion, value of work done, etc. with Work order Ref.No. and date.

	“In case the successful tenderer submitting the self attested document, the Tenderer has to produce the original for verification before awarding of work”.
Joint Venture	Not Allowed
Rebate	Not Applicable
Bid Security/ EMD Cost:	Rs. 15,00,000/- (Rupees Fifteen lakhs only) Account Payee Demand Draft / Fixed Deposit Receipt/ Bank Cheque or Bank Guarantee from any of the Commercial Banks or payment online in an acceptable form, safeguarding the purchaser’s interest in all respect in favour of “The Chairman, Chennai Port Trust” payable at Chennai.
Tender Sale Start Date	03 .11.2017 onwards
Pre Bid Meeting Date & Time	14 .11/2017 @ 15.00 Hrs.
Last Date & Time of submission of Tenders	28.11. 2017 @ 14:30 Hrs.
Tender Opening Date & Time	29.11.2017 @ 1500 Hrs.
Tender Validity Period	180 Days from the date of Tender opening
Contact Details :	Chief Mechanical Engineer, Chennai Port Trust, VII Floor, Centenary Building, Rajaji Salai, Chennai – 600 001.
	The Dy.CME (R&D), Chennai Port Trust, 2 nd Floor, Old Admn. Office Building, Rajaji Salai, Chennai – 600 001. Phone No: 9444610664 Email: v.thuraipandian.chpt@gov.in

CHIEF MECHANICAL ENGINEER

INSTRUCTIONS FOR ONLINE BID SUBMISSION

- I) Bidders to follow the following procedure to submit the bids online through the e-Procurement site <https://eprocure.gov.in>
 1. Bidder should do the registration in the tender site using the 'Click here to Enroll' option available.
 2. Then the Digital Signature of SIFY/TCS/nCode or any Certifying Authority is to be registered after logging into the site.
 3. Bidder can use 'My Space' area to update standard documents in advance as required for various tenders and use them during bid submission. This will facilitate the bid submission process by reducing time.
 4. Bidder may read the tenders published in the site and download the required documents/tender schedules for the tenders he is interested.
 5. Bidder then logs into the site using the secured log in by giving the user id/password chosen during registration and password of the DSC/e-token.
 6. Only one DSC should be used for a bidder and should not be misused by others.
 7. Bidder should read the tender schedules carefully and submit the documents as asked, otherwise, the bid will be rejected.
 8. If there are any clarifications, this may be obtained using clarifications or during the pre-bid meeting. Bidder should take into account of the corrigendum's published before submitting the bids online.
 9. Bidder must in advance prepare the bid documents to be submitted as indicated in the tender schedule and they should be in required format. If there is more than one document, they can be clubbed together.
 10. Bidder should prepare the EMD as specified in the tender. The original should be posted/couriered/given in person to the specified location as per Tender Document, latest by the date of bid submission.
 11. Bidder selects the tender which he is interested using search option & then moves it to the 'my favorites folder'.

12. From the 'my favorites folder', he selects the tender to view all the details indicated.
13. The Bidder reads the terms & conditions and accepts the same to proceed further to submit the bid.
14. The Bidder has to select the payment option as offline to pay the EMD as applicable.
15. Either soft copy (scanned copy) or Hard copy of EMD (BG) & Tender fee shall be confirmed before opening the Tender. However during the evaluation of bid the hard copy of EMD (BG) / Tender fee should match with soft copy of the e- portal for further evaluation.
16. The Bidder has to enter the password of the DSC/e-token and the required bid documents have to be uploaded one by one as indicated.
17. The rates offered details have to be entered separately in a spread sheet file (xls) in the space allotted and should be updated as BOQ.xls file for each tender after the financial bid. The BOQ file, if found modified by the bidder, his bid will be rejected.
18. The tendering system will give a successful bid updation message & then a bid summary will be shown with the bid no. & the date & time of submission of the bid with all other relevant details. The bidder has to submit the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid will be rejected.
19. The bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid.
20. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening date.
21. For any clarifications with the TIA, the bid number can be used as a reference.
22. Bidder should log into the site well in advance for bid submission so that he submits the bid in time (i.e.) on or before the bid submission time. If there is any delay, due to other issues, bidder only is responsible.
23. Each documents to be uploaded online for the tenders should be less than 2 MB. If any document is more than 2 MB, it can be reduced by scanning at low resolution and the same can be

uploaded. However, if the file size is less than 1 MB the transaction uploading time will be very fast.

24. The time settings fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening, etc., in the e-procurement system. The bidder should follow this time during bid submission.
25. All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not be viewable by unauthorized persons during bid submission & not be viewable by any one until the time of bid opening.
26. The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.
27. Any document that is uploaded to the server is subject to symmetric encryption using a generated symmetric key. Further this key is subjected to asymmetric encryption using buyers' public keys. Overall, the submitted tender documents become readable only after the tender opening by the authorized individual.
28. Tenderer is required to submit their tender through online in the form of Two cover system on or before due date of closing time. The tender received after the due date and time will not be entertained.

Tender Document can be submitted online only in the designated two cover system on the e-tender website eprocure.gov.in on or before the due date and time. However, one Hard copy of the sealed and signed Tender without price bid shall be submitted as specified in the Tender.

Tenderer should submit the tender as per specification indicated in Schedule 'A' and accordance with the instructions to Tenderers, Tender Information Sheet, General Conditions of Contract and Special Conditions of Contract.

29. Technical and Commercial Bid (Cover-I)

The tenderer shall scan and upload the following documents in the e-Portal website:

- i) Account Payee Demand Draft/Fixed Deposit Receipt/Banker's Cheque or Bank Guarantee from any of the Commercial Banks or payment online in an acceptable form, safeguarding the purchaser's interest in all respects in favour of "The Chairman, Chennai Port Trust" payable at Chennai/Micro and Small Enterprises (MSEs) as

defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprise (MSME) (or) are registered with the Central Purchase Organisation or the concerned Ministry or Department for EMD.

- ii) Tender Document Cost – No charge.
- iii) As per Pre-Qualification Criteria – Copies of Annual Turnover, Work Orders and its Completion Certificates/Performance Certificate.

30. **Price Bid (BOQ) – (Cover-II)**

Price should be quoted in Online “Price Schedule – ‘A1’ (as per BOQ). Price should be quoted in a spread sheet file (.xls format) available in e- procurement portal only. Any indication of ‘Quoted price’ in the online technical bid documents shall lead to rejection of the bid outright. For evaluation purpose, the uploaded offer documents will be treated as authentic and final. The price bid submitted through e-procurement mode only will be taken up for the purpose of evaluation.

31. The hard copy of tender document sealed and signed in every page along with original Demand Draft of Tender Fee and EMD shall be submitted in the office on the due date of submission.

32. Other conditions:

- a. There are no significant inconsistencies between the proposal and the supporting documents.
- b. The Port Trust reserves the right to reject any tender which in its opinion is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Port Trust in respect of such Tenders.
- c. The Port Trust would have the right to seek clarification on Techno- commercial conditions wherever necessary.
- d. Since the tender involves selection based on pre-qualification criteria and technical specification, the Chief Mechanical Engineer will examine and seek clarification if any and list out the firms, which are found technically suitable and Cover – II Price Bid of such tenders only will be opened and EMD will be returned to the disqualified tenderers.
- e. The date and time will be intimated to tenderers whose offers are found suitable and Cover – II of such tenderers will be opened on the specified time and date.

SUMMARY

PART 1 - TENDERING PROCEDURES

Section I Instructions to Tenderers (ITT)

This Section provides information to help Tenderers prepare their Tenders. Information is also provided on the submission, opening, and evaluation of Tenders and on the award of Contracts.

Section II Tender Information Sheet (TIS)

This Section includes provisions that are specific to each procurement and that supplement Section I, Instructions to Tenderers.

Section III Evaluation and Qualification Criteria

This Section specifies the criteria to be used to determine the lowest evaluated Tender, and the Tenderer's qualification requirements to perform the contract.

Section IV Tendering Forms

This Section includes the forms for the Tender Submission, Price Schedules, Earnest Money Deposit, and the Manufacturer's Authorization to be submitted with the Tender.

PART 2 – SUPPLY REQUIREMENTS

Section V Schedule of Requirements

This Section includes the List of Goods and Related Services, the Delivery and Completion Schedules, the Technical Specifications and the Drawings that describe the Goods and Related Services to be procured.

PART 3 – CONTRACT

Section VI General Conditions of Contract (GCC)

This Section includes the general clauses to be applied in all contracts.

Section VII Special Conditions of Contract (SCC)

This Section includes clauses specific to each contract that modify or supplement Section VI, General Conditions of Contract.

Section VIII Contract Forms

This Section includes the form for the Agreement, which, once completed, incorporates corrections or modifications to the accepted Tender that are permitted under the Instructions to Tenderers, the General Conditions of Contract, and the Special Conditions of Contract.

The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Tenderer after contract award.

Section IX Integrity Pact

Integrity Pact

PART-1

Tendering Procedures

Section-I: Instruction to Tenderers

Table of Clauses

A. General

1. Scope of Tender
2. Name of the Procurement
3. Fraud and Corruption
4. Eligible Tenderers
5. Eligible Goods and Related Services

B. Contents of Tendering Documents

6. Sections of Tendering Documents
7. Clarification of Tendering Documents
8. Amendment of Tendering Documents

C. Preparation of Tenders

9. Cost of Tendering
10. Language of Tender
11. Documents Comprising the Tender
12. Form of Tender and Price Schedules
13. Alternative Proposals
14. Tender Prices and Discounts
15. Currency of Tender
16. Documents Establishing the Eligibility of the Tenderer
17. Documents Establishing the Eligibility of the Goods and Related Services
18. Documents Establishing the Conformity of the Goods and Related Services
19. Documents Establishing the Qualifications of the Tenderer
20. Period of Validity of Tenders
21. Earnest Money Deposit
22. Format and Signing of Tender

D. Submission and Opening of Tenders

23. Deadline for Submission of Tenders

E. Evaluation and Comparison of Tenders

24. Confidentiality
25. Clarification of Tenders
26. Responsiveness of Tenders
27. Non-conformities, Errors, and Omissions
28. Preliminary Examination of Tenders
29. Examination of Terms and Conditions, Technical Evaluations
30. Conversion to Single Currency
31. Domestic Preference
32. Evaluation of Tenders
33. Comparison of Tenders
34. Joint venture
35. Employer/ Port's Right to Accept Any Tender, and to Reject Any or All Tenders

F. Award of Contract

36. Award Criteria
37. Employer/ Port's Right to Vary Quantities at Time of Award
38. Notification of Award
39. Signing of Contract
40. Performance Guarantee
41. Pre-bid Meeting

SECTION – I

INSTRUCTION TO TENDERERS (ITT)

A. GENERAL

1.0 Scope of Tender

The Employer/ Chennai Port Trust indicated in the Tendering Information Sheet (TIS), issues these Tendering Documents for “Design, Build, Test & Trials, Delivery and Commissioning of Oil Spill Response Vessel and supply of Flex Barges and Shoreline Clean-up Equipments for Chennai Port Trust” as specified in Section-V, Schedule of Requirements.

1.1 Throughout these Tendering Documents:

- (a) the term **“in writing”** means communicated in written form by printed and/or neatly typed on computer. Communication means message received by the Employer or received from Employer by mail, e-mail, fax, courier, post with proof of receipt/ delivery;
- (b) if the context so requires, **“singular”** means **“plural”** and vice versa; and
- (c) **“day”** means calendar day.
- (d) **“work”** means the entire scope of work as specified in Section V, Schedule of Requirements

2.0 Name of the Work:-

2.1 “Design, Build, Test & Trials, Delivery and Commissioning of Oil Spill Response Vessel and supply of Flex Barges and Shoreline Clean-up Equipments for Chennai Port Trust”

3.0 Fraud and Corruption

3.1 The Employer/ Port, Tenderers, Contractors, sub contractors, and consultants, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Employer/ Port –

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) **“corrupt practice”** means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value

to influence the action of a public official in the procurement process or in contract execution;

- (ii) **“fraudulent practice”** means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
 - (iii) **“collusive practice”** means a scheme or arrangement between two or more Tenderers, designed to establish Tender prices at artificial, non competitive levels; and
 - (iv) **“coercive practice”** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- (b) will reject a proposal for award if it determines that the Tenderer recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question;
 - (c) will terminate contract if it determines at any time that representatives of the Employer/ Port engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract;
 - (d) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that they have, directly or through an agent, engaged, in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a contract; and
 - (e) will have the right to require that a provision be included in Tendering Documents and in contracts, requiring Tenderers, Contractor’s and consultants to permit the Employer to inspect their accounts and records and other documents relating to the Tender submission and contract performance.

3.2 Furthermore, Tenderers shall be aware of the provision stated in Sub- Clause 34.1(a)(iii) of the General Conditions of Contract.

4.0 Eligible Tenders

4.1 A Tenderer, and all parties constituting the Tenderer, may have the nationality of any country. A Tenderer shall be deemed to have the Indian nationality is a citizen or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed

subcontractors or Contractors for any part of the Contract including Related Services.

4.2. A Tenderer shall not have a conflict of interest. All Tenderers found to have conflict of interest shall be disqualified. Tenderers may be considered to have a conflict of interest with one or more parties in this Tendering process, if they:

- (a) are or have been associated in the past, with a firm or any of its affiliates which have been engaged by the Employer to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under these Tendering Documents ; or
- (b) submit more than one Tender in this Tendering process
However, this does not limit the participation of subcontractors in more than one Tender;

4.3 A Tenderer that is under a declaration of ineligibility by the Employer in accordance with ITT Clause 3, at the date of contract award, shall be disqualified. The list of black-listed firms is available at the Employer's Website as specified in the TIS.

4.4 Tenderers shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.

5.0 **Eligible Equipment and Related Services**

All the equipment and related services to be supplied under the Contract as specified under Section V, Schedule of Requirements.

B. CONTENTS OF TENDERING DOCUMENTS

6.0 **Sections of Tendering Documents**

6.1 The Tendering Documents consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addendum issued in accordance with ITT Clause 8.

PART 1 Tendering Procedures

- Section I - Instructions to Tenderers (ITT)
- Section II - Tender Information Sheet (TIS)
- Section III - Evaluation and Qualification
- Section IV - Tendering Forms

PART 2 Supply Requirements

Section V - Schedule of Requirements

PART 3 Contract

Section VI - General Conditions of Contract (GCC)

Section VII - Special Conditions of Contract (SCC)

Section VIII - Contract Forms

Section IX - Integrity Pact

- 6.2 The Complete Tender document (except drawings) may be downloaded from the Port's web site as specified in **TIS**. Such down loaded documents shall be considered valid for participating in the Tender process. However, the cost of Tender Document shall be payable by separate DD on or before submission of the Tender. The offers of such bidders shall be opened only on proof of submission of payment of cost of tender document as specified in **TIS**.
- 6.3 The Notice Inviting Tenders (NIT) issued by the Employer forms part of the Tendering Documents and Integrity Pact.
- 6.4 The Employer shall make his all out efforts to ensure the correctness of Documents available on the Web site. The Employer is not responsible for the completeness or correctness of the Tendering Documents and their addendum, if they were not obtained directly from the Employer.
- 6.5 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the Tendering Documents. Failure to furnish all information or documentation required by the Tendering Documents may result in the rejection of the Tender.

In case of tender document being downloaded from the web site, at the time of submission of (the hard copy of) the tender document, the Tenderer shall give an undertaking that no changes have been made in the document as per declaration form Section IV, He shall be issued a printed set of the Document under acknowledgement with a condition that the printed version of the Port Tender document will be treated as the authentic tender and if any discrepancy is noticed at any stage between the Port's tender document and the one submitted by the Tenderer, the conditions mentioned in the port's printed document shall prevail. Besides, the Tenderer shall be liable for legal action for the lapses.

7.0 **Clarifications of Tendering Documents**

7.1 A prospective Tenderer requiring any clarification of the Tendering Documents shall contact the Employer in writing at the Employer's address specified in the **TIS**. The Employer will respond in writing to any request for clarification, provided that such request is received not later than three (3) days prior to the date of pre-bid meeting. As Specified in **TIS**, Employer will conduct the Pre bid meeting and prospective Tenderers may attend the Pre-bid meeting. Employer shall issue clarifications during the meeting .The Employer shall forward copies of its response to all those who have purchased the Tendering Documents directly from it, including a description of the inquiry. Should the Employer deem it necessary to amend the Tendering Documents as a result of a clarification, it shall do so following the procedure under ITT Clause 8 and ITT Sub-Clause 23.2. However, the Minutes of Meeting/ Clarifications/ Addenda shall be posted on the Employer's Web site.

7.2 The Tenderer shall be deemed to have thoroughly examined the General and Special Conditions of contract, Various Schedules, drawings and scope of site works and restrictions thereof. If he shall have any issues to be clarified, the same shall be brought to the notice of the Employer in writing as set out in ITT clause 7.1.

7.3 The Tenderer shall be deemed to have thoroughly examined the General and Special Conditions of contract, various schedules, drawings and scope of site works and restrictions thereof. If he shall have any issues to be clarified, the same shall be brought to the notice of the Employer in writing as set out in ITT Clause 7.1.

8.0 **Amendment of Tendering Documents**

8.1 At any time prior to the deadline for submission of Tenders, the Employer may amend the Tendering Documents by issuing addendum.

8.2 Any addendum issued shall be part of the Tendering Documents and shall be communicated in writing to all who have obtained the Tendering Documents directly from the Employer.

To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the Employer may, at its discretion, extend the deadline for the submission of Tenders, pursuant to ITT Sub-Clause 23.2

C. PREPARATION OF TENDERS

9.0 Cost of Tendering

9.1 The Tenderer shall bear all costs associated with the preparation and submission of its Tender, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering process.

10.0 Language of Tender

10.1 The Tender, as well as all correspondence and documents relating to the Tender exchanged by the Tenderer and the Employer, shall be written in the language specified in the **TIS**. Supporting documents and printed literature that are part of the Tender may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language specified in the **TIS**, in which case, for purposes of interpretation of the Tender, such translation shall govern.

11.0 Documents comprising the Tender

11.1 The Tender shall comprise the following:

- (a) Form of Tender and the applicable Price Schedules, in accordance with ITT Clauses 12, 14, and 15;
- (b) Earnest Money Deposit (EMD), in accordance with ITT Clause 21, if required;
- (c) Written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordance with ITT Clause 22;
- (d) Documentary evidence in accordance with ITT Clause 16 establishing the Tenderer's eligibility to Tender;
- (e) Documentary evidence in accordance with ITT Clause 17, that the Goods and Related Services to be supplied by the Tenderer as specified in Section V, Schedule of Requirements;
- (f) Documentary evidence in accordance with ITT Clauses 18 and 30, that the Goods and Related Services conform to the Tendering Documents;
- (g) Documentary evidence in accordance with ITT Clause 19 establishing the Tenderer's qualifications to perform the contract if its Tender is accepted; and
- (h) Any other document required in the TIS.
- (i) The agreement for collaboration, design and technical know how valid specifically for this contract shall be furnished in a

Non Judicial Stamp paper of Rs.100/- signed by the Tenderer and the Shipyard/Boat builder/Ship Designer/Naval Architect mentioned in the prequalification criteria.

12.0 Form of Tender

The tenderer shall submit the Form of Tender using the Form furnished in Section-IV Tendering Forms. This form must be completed without any alterations to its format and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

13.0 Alternative Proposal

13.1 Alternative proposals **shall not be considered**, unless otherwise specified in TIS.

14.0 Tender Prices and Discounts

14.1 The price to be quoted in the **Price Schedule - BOQ** shall be the total price of the Tender.

14.2) Taxes:

The firm shall furnish the Tax Invoice as per GST Act/Rules in the name of Chennai Port Trust by mentioning the GSTIN of ChPT and indicating amounts of GST separately. The GSTIN of Chennai Port Trust is 33AAALC0025B1Z9.

The firm shall remit the GST amount in the invoice to the Government within the due dates and also file the returns by mentioning the GSTIN of ChPT to enable ChPT to avail applicable input tax credit.

Chennai Port Trust shall reimburse the GST component mentioned in the invoice to the Contractor/Supplier/Vendor only to the extent and on reflection of the same under the GSTIN of ChPT in the GST Web Portal.

Applicable statutory recoveries including TDS under Income Tax, TDS under GST etc., will be deducted/recovered while accounting for or making payments to the Contractor/Supplier/Vendor as per the applicable laws.)

(ii) Financial Evaluation:

The Financial evaluation of the Tender will be based on the Base price of supply of goods or services or both excluding the applicable GST.

(b) for Related Services, other than inland transportation and other services required to convey the Goods to their final

destination, whenever such Related Services are specified in the Schedule of Requirements:

- (i) the price of each item comprising the Related Services (inclusive of all applicable taxes).

14.6 Prices quoted by the Tenderer shall be fixed during the Tenderer's performance of the Contract and not subject to variation on any account unless otherwise specified in **TIS** and in accordance with GCC clause 30.1. A Tender submitted with an adjustable price quotation shall be treated as non responsive and shall be rejected, pursuant to ITT Clause 30.

15.0 Currency of Tender

The Tenderer shall quote their rate in Indian Currency (INR).

16.0 Documents establishing the Eligibility of the Tender

16.1 To establish their eligibility in accordance with ITT Clause 4, Tenderers shall complete the Form of Tender, included in Section IV, Tendering Forms.

17.0 Documents establishing the Eligibility of the Goods and Related Services

17.1 To establish the eligibility of the Goods and Related Services in accordance with ITT Clause 5, Tenderers shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Tendering Forms.

18. Documents establishing the Conformity of the Goods and Related Services

18.1 To establish the conformity of the Goods and Related Services to the Tendering Documents, the Tenderer shall furnish as part of its Tender the documentary evidence that the Goods conform to the technical specifications and standards specified in Section V, Schedule of Requirements.

18.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Schedule of Requirements.

18.3 The Tenderer shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing

functioning of the Goods during the period specified in the **TIS** following commencement of the use of the goods by the Employer.

18.4 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Employer in the Schedule of Requirements, are intended to be descriptive only and not restrictive.

19.0 Documents establishing the Qualifications of the Tenderer

19.1 The documentary evidence of the Tenderer's qualifications to perform the contract if its Tender is accepted shall establish to the Employer's satisfaction:

- (a) that, if required in the TIS, a Tenderer that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Tendering forms to demonstrate that it has been duly authorized by the manufacture or producer of the Goods to supply these Goods in India;
- (b) that, if required in the TIS, in case of a Tenderer not doing business with in India, the Tenderer is or will be (if awarded the contract) represented by an Agent in the country equipped and able to carry out the Contactor's maintenance, repair and spare parts stocking obligations prescribed in the Conditions of contract and / or Technical specifications; and
- (c) that the Tenderer meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.

20.0 Period of Validity of Tenders

20.1 Tenders shall remain valid for the period specified in the **TIS** after the Tender submission deadline date prescribed by the Employer. A Tender valid for a shorter period shall be rejected by the Employer as non responsive.

20.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Employer may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If an EMD is requested in accordance with ITT Clause 21, it shall also be extended for a corresponding period. A Tenderer may refuse the request without forfeiting its EMD. A Tenderer granting the request shall not be required or permitted to modify its Tender.

21.0 Earnest Money Deposit

- 21.1 The Tenderer shall furnish as part of its Tender, an EMD, as specified in the TIS.
- 21.2 The EMD shall be in the amount specified in the TIS and denominated in the currency of the Employer's Country.
- (a) at the Tenderer's option, be in the form of Account Payee Demand Draft/Fixed Deposit Receipt/banker's Cheque or Bank Guarantee from any of the Commercial Banks or payment online in an acceptable form, safeguarding the Purchaser's interest in all respects, in favour of Chairman, Chennai Port Trust payable in Chennai in accordance with ITT clause 21.1 and as specified in the TIS;
 - (b) EMD not in the form and manner as per ITT clause 21.1(a) shall not be acceptable and bid shall be treated as bid without EMD.
 - (c) be payable promptly upon written demand by the Employer in case the conditions listed in ITT clause 21.5 are invoked:
 - (d) be submitted in its original form: copies will not be accepted.
 - (e) remain valid for a period of 45 days beyond the validity period of the Tenders, as extended, if applicable, in accordance with ITT Clause 20.2;
- 21.3 If an EMD is required in accordance with ITT Sub-Clause 21.1, any Tender not accompanied by EMD in accordance with ITT Sub-Clause 21.1, shall be rejected by the Employer as non-responsive.
- 21.4 The EMD of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's furnishing of the Performance Guarantee pursuant to ITT Clause 40.
- 21.5 The EMD may be forfeited:
- (a) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, except as provided in ITT Sub-Clause 20.2; or
 - (b) if the successful Tenderer fails to:
 - (i) sign the Contract in accordance with ITT Clause 39;

- (ii) furnish a Performance Guarantee in accordance with ITT Clause 40;
- (iii) pursuant to ITT clause 27.4.

21.6 The Tenderer shall note that the no interest is payable on the EMD by the Employer.

22.0 Format and Signing of the Tender

22.1 The Price Bid to be submitted on-line shall be signed digitally by a person or persons duly authorized to sign on behalf the Bidders. However, One Hard copy of the tender shall be sealed & signed and submitted as described in ITT Clause 11 and clearly marks it "ONE HARD COPY OF THE TENDER".

22.2 In case of tender document being downloaded from the web site, at the time of submission of (the hard copy of) the tender document, the Tenderer shall give an undertaking that no changes have been made in the document as per declaration form Section IV, He shall be issued a printed set of the Document under acknowledgement with a condition that the printed version of the Port Tender document will be treated as the authentic tender and if any discrepancy is noticed at any stage between the Port's tender document and the one submitted by the Tenderer, the conditions mentioned in the port's printed document shall prevail. Besides, the Tenderer shall be liable for legal action for the lapses.

D. Submission of One Hard Copy of the offer as specified in the Tender

23.0 Deadline for the submission of the Tenders

23.1 Hard Copy of the Tenders must be received by the Employer at the address and not later than the date and time specified in the **TIS**.

23.2 The Employer may, at its discretion, extend the deadline for the submission of Tenders by amending the Tendering Documents in accordance with ITT Clause 8, in which case all rights and obligations of the Employer and Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

E. Evaluation and Comparison of Tenders

24.0 Confidentiality

24.1 Information relating to the examination, evaluation, comparison and post-qualification of Tenders, and recommendation of contract award, shall not be disclosed to Tenderers or any other persons not officially concerned with such process until publication of the Contract Award.

24.2 Any effort by a Tenderer to influence the Employer in the examination, evaluation, and comparison, of the Tenders or contract award decisions may result in the rejection of its Tender and forfeiture of EMD.

24.3 Notwithstanding ITT Sub-Clause 24.2, from the time of Tender opening to the time of Contract Award, if any Tenderer wishes to contact the Employer on any matter related to the Tendering process, it should do so in writing.

25.0 Clarification of Tenders

25.1 To assist in the examination, evaluation and comparison of the Tenders, the Employer may, at its discretion, ask any Tenderer for a clarification of its Tender. Any clarification submitted by a Tenderer in respect to its Tender and that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the prices or substance of the Tender shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the Evaluation of the Tenders, in accordance with ITT Clause 27.

26.0 Responsiveness of Tenders

Prior to evaluation of Applications, the Authority shall determine whether each Application is responsive to the requirements of the tender. An application shall be considered responsive only if:

- a. It is received by the Application Due date including any extension there of.
- b. It is signed, sealed, bound together in the hard copy of the Tender document.
- c. Auditor's report of Annual turn over for last three years in original and copies of profit and loss statements and balance sheet for last three years with endorsed by CA.
- d. Copies of work order for similar works, successful completion certificate with performance and value of work done.
- e. It is accompanied by the Power of Attorney.
- f. It contains all the information in formats and documents as requested in all respects.
- g. Copy of ESI Registration Number.
- h. Copy of Service Tax Registration Number.

- 26.1 The Employer's determination of a Tender's responsiveness shall be based on the contents of the Tender itself and clarifications in accordance with ITT clause 25.
- 26.2 A substantially responsive Tender is one that conforms to all the terms, conditions, and specifications of the Tendering Documents without material deviation, reservation or omission. A material deviation, reservation or omission is one that:
- (a) affects in any substantial way the scope, quality or performance of the Goods and Related Services specified in the Contract any substantial way, inconsistent with the Tendering Documents, the Employer's rights or the Tenderer's obligations under the Contract; (or)
 - (b) if rectified would unfairly affect the competitive position of other Tenderers presenting substantially responsive Tenders.
- 26.3 Tenders shall not contain the following information/ conditions to consider them responsive:
- (a) Either direct or indirect reference leading to reveal the Prices of the Tenders in the Techno-Commercial Covers;
 - (b) Techno-commercial conditions in the Price Cover;
 - (c) Adjustable prices;
 - (d) Irrelevant information.
- 26.4 If a Tender is not substantially responsive to the Tendering Documents, it shall be rejected by the Employer and may not subsequently be made responsive by the Tenderer by correction of the material deviation, reservation, or omission.
- 27.0 Non-conformities, Errors and Omissions**
- 27.1 Provided that a Tender is substantially responsive, the Employer may waive any non-conformities or omissions in the Tender that do not constitute a material deviation.
- 27.2 Provided that a Tender is substantially responsive, the Employer may request that the Tenderer submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Tender related to documentation requirements. Such omission shall not be related to any aspect of the price of the Tender. Failure of the Tenderer to comply with the request may result in the rejection of its Tender.
- 27.3 Provided that the Tender is substantially responsive, the Employer shall correct arithmetical errors on the following basis:

- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals or arithmetically corrected sub totals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

27.4 If the Tenderer that submitted the lowest evaluated Tender does not accept the correction of arithmetical errors, its Tender shall be rejected and treated in accordance ITT clause 21.5.

28.0 Preliminary Examination of Tenders

28.1 The Employer shall examine the Tenders to confirm that all documents and technical documentation requested in ITT Clause 11 have been provided, and to determine the completeness of each document submitted.

28.2 The Employer shall confirm that the following documents and information have been provided in the Tender. If any of these documents or information is missing, the offer shall be rejected.

- (a) Form of Tender and Price Schedules , in accordance with ITT Sub-Clause 12.
- (b) EMD, in accordance with ITT Clause 21, if applicable.

29.0 Examination of Terms and Conditions, Technical Evaluations

29.1 The Employer shall examine the Tender to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Tenderer without any material deviation or reservation.

29.2 The Employer shall evaluate the technical aspects of the Tender submitted in accordance with ITT Clause 18, to confirm that all requirements specified in Section V, Schedule of Requirements of the Tendering Documents have been met without any material deviation or reservation.

29.3 If, after the examination of the terms and conditions and the technical evaluation, the Employer determines that the Tender is not substantially responsive in accordance with ITT Clause 26, it shall reject the Tender.

30.0 Conversion to Single Currency

30.1 For evaluation and comparison will be in Indian Currency only.

31.0 Domestic/ Price/Purchase Preference

31.1 No Domestic/ Purchase/ Price preference is envisaged unless otherwise stated in TIS.

32.0 Evaluation of Tenders

The Employer shall evaluate each Tender that has been determined, up to this stage of the evaluation, to be substantially responsive. The Employer shall evaluate the Techno Commercial cover as following :

- (a) Evaluation in accordance with ITT clause 28 and 29;
- (b) Evaluation in accordance with Section III;

32.2 To evaluate a Tender, the Employer shall only use all the factors, methodologies and criteria defined in ITT Clause 32. No other criteria or methodology shall be permitted.

32.3 To evaluate a Tender of those Tenderers whose tenders are evaluated in accordance with ITT clause 32.1 and found responsive in accordance with ITT clause 26, the Employer shall consider the following:

- (a) evaluation will be done for as specified in the TIS; and the Tender Price as quoted in accordance with clause 14;
- (b) price adjustment for correction of arithmetic errors in accordance with ITT Sub-Clause 27.3;
- (c) price adjustment due to discounts offered in accordance with ITT Sub-Clause 14.4;
- (d) due to the application of the evaluation criteria specified in the **TIS** from amongst those set out in Section III, Evaluation and Qualification Criteria;

33.0 Comparison of Tenders

33.1 The Employer shall compare all substantially responsive Tenders to determine the lowest-evaluated Tender, in accordance with ITT Clause 32.

34.0 Joint Venture (JV)

34.1 JV is not permitted in this tender.

35.0 Employer's Right to Accept any Tender and to Reject any or all Tenders

35.1. The Employer reserves the right to accept or reject any tender, and to annul the Tendering process and reject all Tenders at any time prior to contract award, without thereby incurring any liability to Tenderers.

F. Award of Contract

36.0 Award Criteria

36.1 The Employer shall award the Contract to the Tenderer whose offer has been determined to be the lowest evaluated Tender and is substantially responsive to the Tendering Documents, based on the "FINAL COST" to the Employer.

37.0 Employer's Right to Vary Quantities at Time of Award

At the time the Contract is awarded, the Employer reserves the right to increase or decrease i.e., 30% the quantity of Goods and Related Services originally specified in Section V, Schedule of Requirements, provided this does not exceed the percentages specified in the **TIS**, and without any change in the unit prices or other terms and conditions of the Tender and the Tendering Documents.

38.0 Notification of Award

38.1 Prior to the expiration of the period of Tender validity or extended validity in accordance with ITT clause 20.2, the Employer shall notify the successful Tenderer, in writing, that its Tender has been accepted.

38.2 Until a formal Contract is prepared and executed, the notification of award and Form of Tender shall constitute a binding Contract.

38.3 The Employer shall publish in its Website the Notification of Award detailing the following information:

- i. Tender No.
- ii. Item/ Nature of work
- iii. Mode of Tender Enquiry
- iv. Date of Publication of NIT
- v. Type of Bidding (Single/ Two Bid System)

- vi. Last date of receipt of tender
- vii. Nos. of tenders recd.
- viii. Nos. and names of parties qualified after technical evaluation
- ix. Nos. and names of parties not qualified after technical evaluation
- x. Whether contract awarded to lowest Tenderer/ Evaluated L1
- xi. Contract No. & Date
- xii. Name of Contractor
- xiii. Value of Contract
- xiv. Scheduled date of completion of supplies.

38.4 Upon the successful Tenderer's furnishing of the signed Agreement Form and performance guarantee pursuant to ITT Clause 40, the Employer will promptly notify each unsuccessful Tenderer and will discharge its EMD, pursuant to ITT Clause 21.4.

39.0 Signing of Contract

39.1 Promptly after notification, the Employer shall send to the successful Tenderer the draft agreement and the Special Conditions of Contract.

39.2 Within specified period, as specified in **TIS**, the successful Tenderer shall sign, date, and return the Agreement Form to the Employer from the date of Receipt of Notification of Award issued by the Employer in accordance with ITT Clause 37

39.3 All Costs, charges and expenses of drafting the Contract Agreement including Stamp Duty shall be borne by the Successful Tenderer.

39.4 Successful tenderer shall forfeit EMD pursuant to ITT clause No. 21.5 (b)(ii).

40.0 Performance Guarantee

40.1 Within specified period, as specified in **TIS**, of the receipt of notification of award from the Employer, the successful Tenderer, if required, shall furnish the Performance Guarantee in accordance with the GCC, using for that purpose the Performance Guarantee Form included in Section VIII, Contract forms, or another Form acceptable to the Employer. The Employer shall promptly notify the discharge of EMD to each of the unsuccessful Tenderers pursuant to ITT Sub-Clause 21.1. from the date of Receipt of Notification of Award issued by the Employer in accordance with ITT Clause 37

- 40.2 Failure of the successful Tenderer to submit the above-mentioned Performance Guarantee or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD in accordance with ITT clause 21.
- 40.3 All Costs, charges and Expenses including drafting and/or approving drafts and stamp duty and as well as Bank Guarantee or any other Form in accordance with GCC clause 17, shall be borne by the Successful Tenderer.
- 40.4. No interest shall be payable by the Employer on Performance Guarantee Amounts.

41.0 PRE-BID MEETING:

A pre-bid meeting with prospective tenderers will be held at CMEs Office, 7th Floor, Conference Hall, Centenary Building, Chennai Port Trust on 14.11.2017 at 3.00 pm in which tenderer may take the opportunity of seeking clarification if any. Tenderers are advised to attend the pre-bid meeting. Non attendance of pre-bid meeting shall not be a cause for disqualification of the tender. Based on the discussion the technical specifications and conditions will be frozen as necessary. Tenderers are advised to seek clarification in writing and forward the same to The Chief Mechanical Engineer, Chennai Port Trust, Rajaji Salai, Chennai-600 001 at least 7 days before the date fixed for pre-bid meeting. No queries will be entertained after pre-bid meeting. The text of questions raised and response of the Trust will be sent to all tenderers within 5 days after the pre-bid meeting and the same will be displayed in the Trust website.

- 42.** The Employer shall conduct the Tender opening in public at the address, date and time specified in NIT.

CHIEF MECHANICAL ENGINEER

Section II

Tender Information Sheet (TIS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Tenderers (ITT) whenever there is a conflict, the provisions herein shall prevail over those in ITT:

ITT Clause Reference	A. General
ITT 1.1	The Employer is: Chennai Port Trust, Chennai. Tender No. MEE / 22 / 2017 /DY.CME(R&D) Name of the Work: “ e-Tender For Design, Build, Test & Trials, Delivery and commissioning of Oil Spill Response Vessel and supply of Flex Barges and Shoreline Clean-up Equipments for Chennai Port Trust” under Two Cover System.
ITT 2.1	The title of the Project is: “Design, Build, Test & Trials, Delivery and commissioning of Oil Spill Response Vessel and supply of Flex Barges and Shoreline Clean-up Equipments for Chennai Port Trust”
ITT 4.3	A list of Black Listed firms is available at http://www.chennaiport.gov.in .
ITT 6.2	Complete Tender document is available at http://www.eprocure.gov.in & www.chennaiport.gov.in The document may be downloaded. Tender Document Cost – No charges.
	B. Contents of Tendering Documents
ITT 7.1	For <u>Purchase & Clarification of Tendering Document</u> , The Employer’s address is: The DY.CME (R&D), Chennai Port Trust, 2nd Floor, Old Admn. Office Building, Rajaji Salai, Chennai – 600 001. Phone No: 9444610664 Email – v.thuraipandian.chpt@gov.in

	<p>Pre bid meeting shall be conducted at</p> <p>CME's Conference Hall, Office of the Chief Mechanical Engineer, 7th Floor, Centenary Building, Chennai Port Trust on 14 .11.2017 at 15.00 Hrs. Prospective Tenderers may attend the same.</p>
	C. Preparation of Tenders
ITT 10.1	<p>The language of the Tender is: <i>"English"</i>.</p> <p>Tenderers shall not submit Tenders in ANY OTHER language. The Contract to be signed with the Successful Tenderer shall be written in the language in which the Tender was submitted, which will be the language that shall govern the contractual relations between the Employer and the SUCCESSFUL Tenderer. A Tenderer shall not sign a translated version of its Contract".</p>
ITT 11.1 (h)	<p>The Tenderer shall submit the following additional documents in its Tender:</p> <ol style="list-style-type: none"> a. Reports on financial standing of the Tenderer including annual turn over, Profit and loss statements, balance sheet, and auditor's report for the last three years i.e., 2014-15, 2015-16 & 2016-17 duly certified by Chartered Accountant b. Details of work completed in past. c. Experience of having successfully completed similar Works during last 7 years ending last day of month previous to the one in which tender invited along with Contract value and other related details (copies of the work orders placed on them by the parties). d. Arrangement for importing spare parts, tie up with local firms for supply of spare parts, if any and arrangement for after sales service. e. The Tenderer shall enclose the "Notorised or Self attested copies of work order for similar works, successful completion certificate/Performance Report from the end user indicating the date of completion, value of work done etc., with work order Ref. No. and date. <p>"The Trust reserves the right to verify the original documents before awarding of work to the successful tenderer".</p>
ITT 13.1	Alternative proposals <i>shall not be</i> considered.
ITT 14.5	Insurance and Transport shall be arranged in

	accordance with GCC clause 23 and 24 respectively.
ITT 14.5 (a) (iii)	Chennai Port Trust.
ITT 14.6	The prices quoted by the Tenderer <i>shall not</i> be adjustable except on account of statutory taxes and duties payable in INDIA and in accordance with GCC clause 16
ITT 15.0	The Tenderer is required to quote in only Indian Rupees (INR).
ITT 19.1.(a)	Manufacturer's authorization is mandatory.
ITT 19.1.(b)	The Tenderer shall submit his/manufacture's details of service agent / representative's address in India along with Tel/ Fax/ Mail addresses for the use of Employer.
ITT 20.1	The Tender validity period shall be 180 days.
ITT 21.1 and 21.2 (a)	<p>EMD (Bid Security) to be submitted along with the bids in the form of Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any of the Commercial Banks or payment online in an acceptable form in favour of Chairman, Chennai Port Trust payable at Chennai.</p> <p>EMD shall be refunded to all other tenderers except for L1 and L2, immediately after ranking of bids based on price bids. However, EMD of L1 & L2 shall be refunded immediately after entering into an agreement with the successful bidder and upon submission of Bank guarantee towards Performance Guarantee by L1.</p> <p>EMD shall be valid for 45 days beyond the validity of bids in accordance with ITT clause 20.1.</p> <p>The EMD shall be retained until finalization of Tenders. If any statements /documents/information submitted by the Tenderer is found false cum incorrect. Willful misrepresentation or omission of facts or fake cum forged documents, the EMD shall be forfeited.</p> <p>Exemption of EMD shall be allowed with validity in case of</p> <ol style="list-style-type: none"> a. Micro and Small Enterprise (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprise (MSME) (or) b. Are registered with the Central Purchase Organisation or the Concerned Ministry or Department.

ITT 21.2	The amount of the Earnest Money Deposit (EMD) shall be: Rs. 15,00,000/- (Rupees Fifteen lakhs only) in the form of Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any of the Commercial Banks or payment online in an acceptable form in favour of Chairman, Chennai Port Trust payable at Chennai.
ITT 22.1	In addition to the Online Tender, one Hard Copy of the tender is required as specified in the Tender.
	D. Submission of Hard Copy Tender
ITT 23.1	Tenderers <i>shall</i> submit their Tenders electronically only i.e., e-Tendering mode. However, One Hard Copy of the tender shall be submitted as specified in the Tender.
ITT 23.1	For the purpose of submission of One Hard copy to Employer's address is: The Chief Mechanical Engineer, 7 th floor, Centenary Building Chennai Port Trust, Rajaji Salai, Chennai – 600 001. Country: <i>India</i> Telephone: (044) – 25362070 Facsimile number: (044) – 25360955
ITT 27.1	The Tender opening at: Chief Mechanical Engineer Chennai Port Trust, Chennai, Tamilnadu. Time:15.00 Hrs. and Date: 29/11/ 2017
	E. Evaluation and Comparison of Tenders
ITT 30.1	Not applicable to this tender, since the quoted price is in Indian National Rupees only.
ITT 31.1	Not applicable for this tender.
ITT 32.3(a)	The Final Evaluation of the tender will be based on the Base Price of supply of goods or services or both excluding the applicable GST.
ITT 32.3(d)	The contract price shall be determined using the criteria set out in Section III, Evaluation and Qualification Criteria.
ITT 34.1	JVs/Consortium is not applicable to this tender.
	F. Award of Contract
ITT 36.1	Contract will be awarded to the lowest tenderer based

	on the total cost
ITT 37	Variation of quantities shall be as per clause no GCC 41.
ITT 39.2 and 40.1	Contract Agreement shall be executed by the successful bidder 21 days from the date of issue of Letter of Award(LOA) Security Deposit/ Performance Guarantee shall be submitted by the successful bidder within 21 days after receipt of order.
ITT 41.0	Pre-Bid Meeting - 14 .11.2017 at 15.00 Hrs. Venue - CME's office Conference Hall, 7 th Floor, Centenary Building, Chennai Port Trust, Chennai - 600 001.

Section III

Evaluation and Qualification Criteria

This Section complements the Instructions to Tenderers. It contains the criteria that the Employer may use to evaluate a Tender and determine whether a Tenderer has the required qualifications. No other criteria shall be used.

Contents

Venture Joint (ITT 34.1)

Evaluation Criteria (ITT 32.3 {d})

Pre Qualification Criteria

1. VENTURE JOINT (ITT 34.1) - Not applicable to this tender.

2. EVALUATION CRITERIA (ITT 32.3 (d))

The Employer's evaluation of a Tender may take into account, in addition to the Tender Price quoted in accordance with ITT Clause 14.5, one or more of the following factors as specified in ITT Sub-Clause 32.1 and in **TIS** referring to ITT 32.3(d), using the following criteria and methodologies.

(a) Completion schedule (as specified in the TIS)

(b) Deviation in payment schedule:

Tenderers shall state their Tender price for the payment schedule outlined in accordance with clause of **GCC** read with **SCC** Tenders shall be evaluated on the basis of **Final Price to the Employer. Tenderer shall not be permitted to state an alternative payment schedule.**

(c) The cost towards supply of items shall include the cost incurred during guarantee period for carrying out maintenance and servicing as per the schedule and any breakdown inclusive of spares (critical, mandatory, consumables, replacement, etc., as the case may be) required for preventive and breakdown maintenance.

2. PRE-QUALIFICATION CRITERIA

i) PRE-QUALIFICATION CRITERIA / BIDDING CONDITION

The **Average Annual Financial Turnover** during the last Three (3) years ending 31st March of 2014-15, 2015-16 & 2016-17 should be at least **Rs.4.2 crores**. A copy of Annual Turnover Statement, Profit and Loss Statements and Balance Sheet for the aforesaid three years shall be submitted duly certified by Chartered Accountant.

ii) The Tenderer should have experience in 'Similar Works' during last 7 years ending last day of month previous to the one in which applications are invited which should fulfill either of the following:-

- a) **One** similar completed work of contract value not less than **Rs.11,20,00,000/-**;
(OR)
- b) **Two** similar completed works of contract value each not less than **Rs. 7,00,00,000 /-** ;
(OR)
- c) **Three** similar completed works of contract value each not less than **Rs.5,60,00,000/-**.

'SIMILAR Works" – means " Ship Building/Boat Building works in either of following categories".

The shipyards / Boat builders should have built minimum 1 No. Vessel of Oil Spill Response or any special type of vessels like dredgers/Ocean going research vessels/fire fighting vessels of not less than the length specified and shall submit documentary evidence from the owners/end users for satisfactory operation of the vessel for a minimum period of 1 year.

(OR)

The shipyards / Boat builders should have built minimum 1 No. Vessel classed under "IRS" or any member of the International Classification Societies with minimum length not less than 17.5m (documentary proof to be submitted) and having a technical collaboration with Shipyard/Boat Builder or engage a Ship Designer/Naval Architect firm (for the purpose of this contract). Which/who have designed/built minimum 1 No. Oil Spill Response Vessel or any special type of vessels like dredger/Ocean going research vessel/fire fighting vessel of not less than the length specified and shall submit documentary evidence from the owners/end users for satisfactory operation of the vessel for a minimum period of 1 year.

(OR)

The shipyards / Boat builders should have built minimum 1 No. Vessel of TUG with dispersant system/Utility vessel with Oil recovery system of length not less than the length specified and shall submit documentary evidence from the owners / end users for satisfactory operation of the vessel for a minimum period of 1 year.The ship yard/boat builder shall enclose an agreement for collaboration, design and technical know-how valid specifically for this contract to design, build and commission the OSR Vessel as per the broad specifications given in the tender.

The work orders for the Vessel(s) mentioned in similar works and certificate for satisfactory operation of the vessel for a minimum period of 1 year from the owners / end users shall be enclosed.

Pl Note: The Tenderers shall enclose the “Notarised or self attested copies of Work Order copies for similar works, successful completion certificates from the end user indicating the date of completion, value of work done, etc. with Work order Ref.No. and date.

“In case the successful tenderer submitting the self attested document, the Tenderer has to produce the original for verification before awarding of work”.

CHIEF MECHANICAL ENGINEER

Specimen Pre-QUALIFICATION OF BIDDERS

The information to be filled in by the Bidder in the following pages will be used for purposes of Pre-Qualification as provided for in the Instructions to Tenderers.

1. Only for Individual Bidders

1.1. Constitution or legal status of Bidder (*Attach copy*)

- Place of registration:
- Principal place of business
- Power of attorney of signatory of Bid (Attach)

2. Turnover of the Firm

Year LAST THREE FINANCIAL YEARS ENDING 31ST MARCH	Turnover
2014-15	
2015-16	
2016-17	

Attachments: Attested copies of Financial reports for the last **three** years: Balance sheets, profit and loss statements, auditor’s reports (in case of companies/corporation) etc., List them below and attach copies.

3. Similar Works during last seven years

Particulars	Year	No. of Works	Value
Total value of completed similar work as defined in the tender document during last 7 years ending August 2016.			

Attachments: Supporting documents, viz., successful completion certificate indicating the work order reference and value for which the work order was executed from clients, other documentations to substantiate the similarity of work as per definition of ‘Similar work’ employer reserves the right to verify the information:

4. Information on litigation history in which the Bidder is involved.

Other parties	Port	Cause of dispute	Amount	Remarks involved showing present status

5. Additional Information Bidder may like to submit

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Tenderer]*

Dated on _____ day of _____, _____ *[insert date of signing]*

SECTION- IV
TENDERING FORMS
Table of Forms

1.	Declaration Form	-	(Form-1)
2.	Authority letter	-	(Form-2)
3.	Tender Submission Form	-	(Form-3)
4.	Tenderer Information Form	-	(Form-4)
5.	BG authorization	-	(Form-5)
6.	Price Schedule	-	(Form-6)

SPECIMEN FORMAT FOR DECLARATION

(To be executed on bidder's letter head)

To:

The Chief Mechanical Engineer,
Chennai Port Trust,
Chennai 600 001.

(Project Title) : "Design, Build, Test & Trials, Delivery and Commissioning of Oil Spill Response Vessel and supply of Flex Barges and Shoreline Clean-up Equipments for Chennai Port Trust"

Ref: MEE / 22 / 2017 / Dy.CME(R&D)

The undersigned, having studied the pre-qualification submission for the abovementioned project, hereby states:

- (a) The information furnished in our bid is true and accurate to the best of my knowledge.
- (b) That in case of being pre-qualified, we acknowledge that the Employer may invite us to participate in due time for the opening of Price cover of the tender on the basis of provisions made in the tender documents to follow.
- (c) When the call for tenders is issued, if the legal, technical or financial conditions, or the contractual capacity of the firm or joint venture changes, we commit ourselves to inform you and acknowledge your sole right to review the pre-qualification made.
- (d) We enclose all the required pre-qualification data format and all other documents and supplementary information required for the pre-qualification evaluation.
- (e) We also state that no changes have been made by us in the downloaded tender documents and also understand that in the event of any discrepancies observed, the printed tender document No.MEE/22/2017/Dy.CME(R&D) is full and final for all legal/contractual obligations (delete if not required).

Date:

Place:

Name of the Applicant : _____

Represented by (Name & capacity)

SPECIMEN LETTER OF AUTHORITY FOR SUBMISSION OF BID

(To be executed on Rs.100/- non-judicial Stamp Paper)

To

The Chief Mechanical Engineer,
Chennai Port Trust,
Chennai - 600 001.

Dear Sir,

We-----
----- do hereby confirm that Shri ----- (Name, designation
and Address) is/ are authorized to represent us to bid, negotiate and
conclude the agreement on our behalf with you against Tender No. -----
--- and his specimen signature is appended here to..

We confirm that we shall be bound by all and whatsoever our said
signatory shall commit.

We understand that the communication made with him by the
Employer/ Board shall be deemed to have been done with us in respect
of this Tender.

[specimen signature]

Yours faithfully,

Signature:

Name & Designation:

For & on behalf of:

SPECIMEN FOR FORM OF BID
(To be executed on bidder's letter head)

*[The Tenderer shall fill in this Form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted. The Form shall be submitted in both the **Techno- Commercial and Price Bids separately.**]*

Date: *[insert date (as day, month and year) of Tender Submission]*
Tender No.: *[insert Tender number and Title]*

To:
The Chief Mechanical Engineer
Chennai Port Trust,
Chennai – 600 001.

We, the undersigned, declare that:

We have examined and have no reservations to the Tendering Documents, including Addenda No.: *[insert the number and issuing date of each Addenda, Clarifications issued after Pre-bid meeting along with Minutes];*

We offer to execute the work in conformity with the Tendering Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements *in accordance with the tender document bearing no. {insert Tender no.};*

The total price of our Tender, excluding any discounts offered in item (d) below, is: *[insert the total Tender price in words and figures, indicating the various amounts and the respective currencies]; [in case of Techno- Commercial offer it shall be mentioned that “as filled in the Price Bid”]* and like to avail/ not to avail (**delete whichever not applicable**) the advance in accordance with GCC 15.1;

The discounts offered and the methodology for their application are:

Discounts. If our Tender is accepted, the following discounts shall apply. *[Specify in detail each discount offered and the specific item of the Schedule of Requirements to which it applies.] [in case of Techno- Commercial offer it shall be mentioned that “ as filled in the Price Bid”]*

Methodology of Application of the Discounts. The discounts shall be applied using the following method: *[Specify in detail the method that shall be used to apply the discounts]; [in case of Techno- Commercial offer it shall be mentioned that “as filled in the Price Bid”]*

Our tender shall be valid for the period of time specified in **ITT Sub-Clause 20.1**, from the date fixed for the Tender submission deadline in accordance with **ITT Sub-Clause 24.1**, and it shall remain binding upon us and may be accepted at any time before the expiration of that period or any extended period in accordance with **ITT Sub-Clause 20.2**;

If our tender is accepted, we commit to obtain a performance guarantee in accordance with **ITT Sub-Clause 40 and GCC clause 17** for the due performance of the Contract, as specified in specimen form for the purpose;

We, including any subcontractors or Contractors for any part of the contract, *[insert the nationality of the Tenderer, including that of all parties that comprise the Tenderer]*.

We have no conflict of interest in accordance with **ITT Sub-Clause 4.2**;

Our firm, its affiliates or subsidiaries—including any subcontractors or Contractor s for any part of the contract—has not been declared ineligible by the Port, under laws of India or official regulations, in accordance with **ITT Sub-Clause 4.3**;

We understand that this Tender, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract Agreement is prepared and executed in accordance with **ITT Clause 39** and as per specimen form the purpose;

We understand that you are not bound to accept the lowest evaluated Tender or any other Tender that you may receive.

We also make specific note clauses of **GCC, SCC, ITT and TIS** under which the Contract is governed.

In case of Out Station Firms, having a branch in India for liaison purposes, please mention the Name of the Contact person and Tel. No., Fax No., and mail- Id and also the Complete Postal Address of the Firm.

We understand that the Communication made with the Firm at (m), by the Port shall be deemed to have been done with us.

Signed: *[insert signature of person whose name and capacity are shown]*
In the capacity of *[insert legal capacity of person signing the Form of Tender]*

Name: *[insert complete name of person signing the Form of Tender]*

Duly authorized to sign the Tender for and on behalf of: *[insert complete name of Tenderer]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Tenderer Information Form

[The Tenderer shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Tender Submission]*

Tender No.: *[insert number of Tendering process]*

Page _____ of _____ pages

1. Tenderer's Legal Name <i>[insert Tenderer's legal name]</i>
2. In case of JV, legal name of each party: [Not applicable]
3. Tenderer's actual or intended Country of Registration: <i>[insert actual or intended Country of Registration along with Registration Details]</i>
4. Tenderer's Year of Registration: <i>[insert Tenderer's year of registration]</i>
5. Tenderer's Legal Address in Country of Registration: <i>[insert Tenderer's legal address in country of registration]</i>
6. Tenderer's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
7. Attached are copies of original documents of: <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITT Sub-Clauses 4.1 and 4.2. <input type="checkbox"/> In case of government owned entity from India, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITT Sub-Clause 4.4 <input type="checkbox"/> <u>PAN NUMBER</u> <input type="checkbox"/> <u>Service Tax Number</u> <input type="checkbox"/> <u>VAT/ Sale Tax Registration Numbers</u>

(This format is required to be utilized for giving confirmation of Bank Guarantees)

SPECIMEN LETTER OF AUTHORITY FROM BANK FOR ALL BGs
(To be executed on Bank's Letter Head)

Date :

To,
The Board of Trustees,
Chennai Port Trust,
Chennai – 600 001.

Dear Sir,

Sub: Our Bank Guarantee No. _____ dated
_____ for Rs. _____ favouring yourselves
issued on _____ a/c of
M/s. _____.
(Name of contractor)

.....

We confirm having issued the above mentioned guarantee favouring yourselves, issued on account of M/s. _____ validity for expiry upto date _____ and claim expiry date upto _____.

We also confirm 1) _____
2) _____ is/are empowered to sign such Bank Guarantee on behalf of the Bank and his/their signatures is/are binding on the Bank.

Name of Signature of Bank Officer

BOQ

PART - 2

Supply Requirements

TECHNICAL SPECIFICATION

OF

OIL SPILL RESPONSE VESSEL

FOR

CHENNAI PORT TRUST

Section V

Schedule of Requirements

INDEX

1. GENERAL
 2. HULL STRUCTURE
 3. MACHINERY
 4. SHIP OUTFIT
 5. GENERAL LAYOUT OF WHEELHOUSE
 6. ELECTRICAL SPECIFICATION
 7. OIL SPILL RESPONSE SHORE CLEAN-UP EQUIPMENT
- APPENDIX-1 INVENTORY, TOOLS AND SPARE PARTS

CONTENTS

1. GENERAL

- 1.1 INTENT & DEFINITION
- 1.2 OBJECTIVES
- 1.3 GENERAL DESCRIPTION
- 1.4 PRINCIPAL DIMENSIONS
- 1.5 CAPACITIES
- 1.6 SPEED AND ENDURANCE
- 1.7 COMPLEMENT
- 1.8 PROPULSION SYSTEM
- 1.9 TRIM & STABILITY
- 1.10 RULES, REGULATIONS & CERTIFICATES
- 1.11 INSPECTION AND SUPERVISION
- 1.12 MATERIALS AND WORKMANSHIP
- 1.13 TESTS AND TRIALS
- 1.14 LOGISTICS
- 1.15 DOCUMENTATION
- 1.16 SAFETY PRECAUTIONS
- 1.17 STANDARDS
- 1.18 CORROSION PROTECTION AND SURFACE
PREPARATION WORK DURING FITTING OUT
PHASE
- 1.19 CLEANLINESS
- 1.20 TIME SCHEDULE
- 1.21 DISMANTLING WAYS, INSPECTION OPENINGS
- 1.22 LAUNCHING OR EQUIVALENT ACTIVITY
- 1.23 PHOTOGRAPHS
- 1.24 SPARES
- 1.25 TRAINING/FAMILIARIZATION ON USE OF OIL SPILL
EQUIPMENT
- 1.26 DELIVERY
- 1.27 GUARANTEE / WARRANTY

2. HULL STRUCTURE

- 2.1 GENERAL
- 2.2 SCANTLINGS
- 2.3 BLASTING/PRIMING
- 2.4 TESTING OF TANKS, BULKHEADS, ETC
- 2.5 NON-DESTRUCTIVE EXAMINATION OF HULL PARTS
- 2.6 SHELL PLATING
- 2.7 EYE PLATES & LIFTING EYES
- 2.8 STEERING GEAR COMPARTMENT
- 2.9 MAIN DECK
- 2.10 CHAIN LOCKER
- 2.11 WHEELHOUSE
- 2.12 LOOSE TANKS
- 2.13 RUDDER
- 2.14 RUDDER STOCK
- 2.15 DRAFT MARKS
- 2.16 PROPELLER SHAFT BRACKETS
- 2.17 SURFACE PROTECTION
- 2.18 CATHODIC PROTECTION
- 2.19 PROPELLER PROTECTION
- 2.20 HOSE REEL
- 2.21 STORAGE CONTAINER CUM WORK BENCH
- 2.22 OPEN DECK SPACE

3. MACHINERY

- 3.1 MAIN AND AUXILIARY MACHINERY
- 3.2 STERN GEAR AND PROPELLER
- 3.3 STEERING GEAR
- 3.4 PIPING SYSTEM
- 3.5 MACHINERY PIPING SYSTEM
- 3.6 HULL PIPING SYSTEM
- 3.7 FIRE FIGHTING SYSTEM

4. SHIP OUTFITS

- 4.1 ANCHORS & CHAINS
- 4.2 BOLLARDS & BITTS
- 4.3 BULWARK, GUARD RAILS & STANCHIONS
- 4.4 LIFE SAVING APPLIANCES

- 4.5 DOORS
- 4.6 HATCHES
- 4.7 MANHOLES
- 4.8 WINDOWS

5. GENERAL LAYOUT OF WHEELHOUSE

- 5.1 GENERAL
- 5.2 VENTILATION
- 5.3 TOILETS

6. ELECTRICAL SPECIFICATION

- 6.1 GENERAL
- 6.2 ELECTRICAL SUPPLY
- 6.3 AC SUPPLY
- 6.4 DC SUPPLY
- 6.5 BATTERY SYSTEM
- 6.6 SHORE SUPPLY
- 6.7 CABLES AND CABLE INSTALLATIONS
- 6.8 CIRCUIT BREAKERS AND SWITCHES
- 6.9 IDENTIFICATION AND MARKING
- 6.10 LIGHTINGS
- 6.11 NAVIGATIONAL LIGHTS
- 6.12 RADIO COMMUNICATION EQUIPMENT
- 6.13 NAVIGATIONA EQUIPMENT
- 6.14 DECKHOUSE TOP
- 6.15 SWITCHES AND SOCKETS

APPENDIX-1 INVENTORIES, TOOLS AND SPARE PARTS.

1 GENERAL

1.1 INTENT & DEFINITION

This specification is intended to describe the construction of a **Oil spill response vessel** completely outfitted and equipped with **Shoreline Clean-up Equipments** along with **Flex Barges and a 4 m steel work boat** as detailed in this specification. The vessel shall be built in accordance with good shipbuilding practice and comply with the requirements of classification society and other Statutory Authorities.

The Builder shall ensure that the design offered is based on a proven hull form and vessels of similar designs operating successfully elsewhere in the world. Documentary evidence is to be submitted in this regard.

The responsibility for the design and performance of the vessel is with the Builder. All technical data for the ship and power rating, size etc. of machinery, outfit and equipment given in this document are indicative. Therefore the requirements are to be computed by the Builder in due course of detailed design, but Owner's essential requirements on max. draught, speed and endurance, etc. would remain applicable.

Any items not specifically mentioned in this specification but functionally or statutorily necessary for the type, size and intended operation of the vessel shall be furnished by the Builder.

Any modification or alteration to this specification shall be executed under mutual agreement of the Owner and the Builder. Owner shall have the right to suggest modifications and alterations in the specifications and drawings during construction. Cost and time implications, if any, shall be mutually agreed. All modifications shall be proposed and agreed to in writing

1.2 OBJECTIVES

The vessel shall be designed for operation at the Chennai harbour and at anchorage within the Port limits ; and equipped for registration as Indian River-Sea Vessel Type-1.

The proposed Oil Spill Response Vessel is a specialized vessel for operation at the Chennai harbour and at anchorage within the Port limits for the recovering spilled oil, clean up operations, debris collection and all pollution related activities. This shall be a multi role craft capable of carrying out many functions including transportation of men and materials, maintenance of crafts and structures, harbour and inshore duties of a Work Boat.

1.3 GENERAL DESCRIPTION

The Oil Spill Response Vessel shall be of latest, versatile and proven design with large working deck space and a raised wheelhouse to maximise working deck space and positioned suitable for unimpaired navigation.

The Oil Spill Response vessel shall be of design having a forward hull with good water flow guide agglomeration effect – allowing the oil to flow into the vessel for collection and the solid debris and floating waste to move towards the debris collector . The basic design shall have a good sealing function to effectively collect floating oil, debris and capable of emergency operations quickly with reasonable speed in swells and wind.

The vessel shall have

- (a) storage facilities for the collected oil,
- (b) a hydraulically operated crane for easy deployment of booms, skimmers etc. and
- (3) suitable for towing flex barges, booms and other operations

The vessel shall be designed principally to provide dynamic oil recovery with a large stable working deck for oil pollution control activities. The vessel shall have a superior stability even if the work is concentrated on one side of the vessel and also have good

maneuverability characteristics in all conditions of loading over the full range from 1 knot to maximum speed

The vessel shall be fitted with standard machineries- main engines, DG sets to meet the power requirements, power steering, oil transfer pumps, hydraulic pump, general service and fire pump, bilge pump etc.

The major spill response equipment shall consist of the following:

1. sweeping arm with heavy duty booms,
2. the ship side vacuum skimmer system,
3. dispersant system with spray arms,
4. marine type compact floating garbage collecting system,
5. crane,
6. hydraulic power pack
7. air inflatable booms for quick deployment as a first aid in case of oil spill,
8. booms for large spills.

In addition it is proposed to store a complete set of beach cleaning equipment in a suitable container(s) which can be loaded on board the vessel easily in an emergency for beach/ shore line clean up requirements and the details are furnished in a separate section.

The details of flex barges, booms along with 4 m steel support boat and a 0.5metre Vane are also given in separate sections.

The vessel to be divided by min. three bulkheads into the following spaces and compartments:

- **Aft area - steering gear room**

The aft body of the ship with transom stern is to be used for steering gear compartment

- **Propulsion engine room**

The area forward of steering gear room shall be propulsion engine room.

- **Recovery oil tanks & forward machinery space**

The area between Propulsion machinery space and collision bulkhead shall be used for recovery oil tank and other machinery spaces .

- **Fore peak area**

Forward of collision bulkheads shall be fore peak space.

All penetrations through decks or bulkheads for pipes or cables will be through appropriate watertight bulkhead fittings.

MULTI FUNCTIONS OF THE OIL SPILL RESPONSE VESSEL

The vessel shall be capable of skimming spilled oils of different viscosities with an efficient Oil skimming system integrated with a sweep system consisting of heavy duty containment booms and sweeping arms on both sides, for collecting and transferring oil. Recovered Oil will be retained in the vessel's designated tanks and pumped ashore or to other storage facility whenever required. This dedicated Oil Spill Response Vessel shall be fitted with an Oil Spill Dispersant system of 12m length on either side. In addition, the vessel can be capable of recovering solid debris from the water in a highly efficient manner of debris collection and disposal ashore with minimum manpower.

The major functions of the vessel are listed below.

1. Oil skimming dynamically
2. Operation of oil skimmers
3. Debris collection
4. Dispersant spraying
5. Oil boom deployment
6. Oily water storing
7. Command centre duties
8. General workboat duties
9. Floating craft/ buoy
and harbour structures maintenance.

OIL SPILL RESPONSE EQUIPMENT/SYSTEMS:

OIL RECOVERY SYSTEM

The Oil Recovery System may combine features of dynamic incline and oil skimming with control system and the skimming equipments or a combination shall be capable of operating in rough conditions featuring wide range of oil viscosity and low density water surface floating liquid. The skimmer shall be equipped to block garbage and recover thoroughly spilled oil including oil combined with dirt and solid oil. The

compound/Vacuum Skimming system shall have 12m length jib (and if necessary floating buoy) and Heavy Duty Booms deployed on both sides for sweeping arrangement with suitable transfer pumps, hoses and Quick Fix Couplings. The control system shall have both automatic and manual controls.

RECOVERED OIL TANKS

Recovery Oil shall be of flash point above 60 degree C.

Recovery oil tanks shall be located forward of the fuel tanks and shall have a flush fitting access hatch in the deck with filling and emptying pipes terminating in a deck manifold. Oil transfer pump can be used for transfer or suction to boat or shore.

Access to each recovery Oil Tank is by flush watertight hatches. The coaming will be approximately 150mm high to bring hatch flush with deck grating. A lifting handle will be provided on each hatch lid and the hatches will be operable from both sides. A label will be sited adjacent to each hatch reading "NOT TO BE OPENED AT SEA".

OIL TRANSFER PUMP

A hydraulically driven diaphragm pump together with flexible hoses is located on deck at the forward end of the working deck, capable of delivering up to 50 cubic metres per hour @ a head of 20 m (min) ; the pump is used for the following duties.

Tank to tank

Tanks to overboard

Overboard to tank

Other, general pump duties

DISPERSANT SPRAYING SYSTEM

The vessel is to be fitted with twin 12 m aluminium dispersant spray arms mounted on the forward quarter port and starboard. Each arm shall have nozzles from which a controllable ratio mix of dispersant and sea water is supplied from a self-contained dispersant set. The dispersant set is mounted with a valve arrangement on the set which allows the setting of the dilution ratio of dispersant and sea water. The dispersant storage space of minimum 5000ltr capacity & initially filled with NIO approved OSD

(by contractor) to provide a dedicated sea water riser which has a shut off valve is fitted on deck for use with a dispersant system.

DEBRIS REMOVAL SYSTEM

The debris/trash collecting arrangement at the bow of the vessel shall be highly efficient to collect all types of debris floating in harbor waters. This debris collection system and the hull design shall be such that debris collection is enhanced by the surface flow created. The debris collecting screen may be secured in the raised position clear of the water when not in use or when full. The screen may be emptied on deck or ashore using the crane and lifting chains provided or equally effective mechanized system. Alternatively the screen can also be used over the side of the vessel, suspended from the hydraulic crane. The debris basket is normally stowed in the raised position clear of the water when not in use and covered with portable deck gratings.

The debris collection of the vessel shall be suitable for cleaning/clearing any floating objects at all jetties and corners and eliminate the requirement to clean the harbor waters manually. The arrangement shall be such that except for the operator there shall be no manual interference from picking up to dumping of garbage on to the jetty.

CRANE

A crane is to be provided at the deck for general duties providing following lift of approximately 0.75 tonne at min. 6 metres with 360 degrees swivel and Jib hoist and wire hoist capability and a maximum capacity of 5 metric tones at maximum outreach of 0.9 m

HYDRAULIC POWER PACK

The Hydraulic System Power Pack to meet the various hydraulic drive requirements on board shall be provided and powered either from DG Set Engine PTO or from the Power pack consisting of a suitable diesel engine with hydraulic pump mounted on a base frame.

1.4 PRINCIPAL DIMENSIONS

Length Overall	-	17.5 m (min)
Breadth (moulded)	-	proportionate and as per design requirement
Depth (moulded)	-	proportionate and as per design requirement
Design Draft	-	1.0 m (preferably) to 1.5 m (max) in lightship
	-	1.5 m (preferably) to 2.0 m (max) in fully loaded condition
Speed	-	10 knots plus

1.5 CAPACITIES

Fuel Oil	-	2.5 m ³ (min)
Recovery Oil (flash point above 60 deg C) in 2 tanks	-	15 m ³ (min)(total)
Dispersant tank	-	5 m ³ (min)
		To be filled initially with NIO approved OSD by Contractor)
Fresh Water	-	0.5 m ³ (min)
Hydraulic oil tank	-	0.3 m ³ (min)

PUMPS:

Oil Transfer pump	-50 m ³ /hr @ 20 m head (min)
Hydraulic Pump	- *
Fire pump	- *
Bilge pump	-15 m ³ /hr @ head of 1 bar
General Service pump	- *

*As per the requirement

Pumps

Centrifugal pumps for pumping raw water shall have a sea water resistant bronze casing, aluminum bronze impeller and wear rings, stainless steel shaft and standard stuffing box.

Centrifugal pumps for other liquids may have cast iron casing and bronze impeller. They shall have a mechanical type shaft seal.

Pressure gauges shall be provided on inlet and outlet side.

Pumps shall be free of cavitations.

The contractor shall submit prior to purchasing OH curves, NPSH values and power characteristics of all pumps. The information to be based on the specified liquid.

1.6 SPEED AND ENDURANCE

The vessel shall have a cruising speed of 10 knots plus at 85% MCR at the design draught.

The vessel shall have an endurance of about 100 nautical miles.

1.7 COMPLEMENT

Day Crew - 12 (Crew shall be as per RSV notification 2013)

1.8 PROPULSION SYSTEM

The propulsion system shall comprise of twin propulsion, diesel engine powered with good stability and maneuverability

1.9 TRIM AND STABILITY

Preliminary trim and stability calculation shall be submitted to the Owner to demonstrate that the vessel will have suitable trim and stability in normal service conditions.

Based on the results of the inclining experiment, final Trim and Stability Booklet shall be prepared incorporating all normal and expected loading/working conditions.

The OSR shall have minimal trim by aft/stern , with adequate propeller immersion.

Intact stability criteria shall be as per RSV notification 2013.

1.10 RULES, REGULATIONS & CERTIFICATES

Classification & Flag

The vessel with the machinery and equipment shall be constructed in accordance with the IRS Rules

Flag: INDIAN

Rules & Regulations

The following Rules and Regulations (editions and amendments thereto being in effect as of the date of keel laid & date of delivery of the vessel), as applicable, shall be complied with:

- (a) Notification for Construction, Survey, Certification and Operation of Indian River-Sea Vessels as per DG Shipping Order No.18 of 2013.
- (b) IRS Rules and Regulations for classification of steel ships, July 2015 .

Any other rule/ regulation/ resolution applicable to this type of vessel

Certificates & Documents:

The Contractor shall furnish all Statutory and Class certificates and also the following certificates each six (6) copies at the time of delivery of the vessel.

- Builders Certificate (Builder)
- Certificate of Registry (Statutory) shall be furnished by the contractor at his expenses. However the Port will facilitate the contractor to obtain registration.
- Certificate of Class (Class)
- Indian River-Sea Vessel Safety Certificate (Class)
- Indian Tonnage Certificate (Class)
- Makers certificate and type approvals of all materials and equipment
- Certificate of Marine equipment issued by notified body
- Cargo gear certificate/register issued by Competent Authority
- Trial (speed) report
- Certificate of LSA, FFA, navigation aids, crane, wire ropes, winches, mooring ropes & other mooring equipment, castings and forging etc. (Class/Statutory authority)

All machinery, electrical, communication and navigation equipment; anchors and chain cables; life saving and fire fighting appliances shall be certified by the Indian Administration or an Administration acceptable to them.

1.11 INSPECTION AND SUPERVISION

The Owner will appoint their own representative for monitoring the construction of the vessel in accordance with the accepted tender.

The Owner's Representative shall at any time have free access to the vessel, to the building yard and to the workshops of the

Contractor and of its sub-contractors. The Contractor and sub-contractor will give full co-operation in order to enable the Owner's Representative to carry out the intended inspections efficiently.

The Contractor will put at the disposal of the Owner's Representative one office room with chairs, writing desk, lockers for drawings and clothes, light, telephone, air conditioning, refrigerator etc.

No construction or manufacturing of any part of the vessel shall be commenced before the drawings or the order to any sub-contractor relating to the particular part has been approved by the Owner's Representative.

Within 4 weeks after signing of the Contract a program of the complete building period, fitting-out and testing of the vessel, with dates of the delivery of the principal parts, will be furnished by the Contractor to the Owner's Representative for approval. As soon as a delay occurs in the progress according to this program, the Contractor will inform the Owner's Representative immediately and will take all necessary measures to correct this delay, to the satisfaction of the Owner's Representative.

The Owner's Representative has full power to inspect the work at any stage and to satisfy himself by every means, including testing of material, trials at manufacturer's test beds, X- raying of welds and similar tests he may deem fit, that the materials and workmanship employed are of the highest standards and according to the requirements of the Specification.

The Owner's Representative is entitled to reject or to refuse materials, machinery or its components, equipment and outfit where they are considered not to comply with the Specification or with the standard of good workmanship. The Contractor shall repair or replace entirely at its own cost the rejected part, work, materials etc. to the satisfaction of the Owner's Representative.

Sufficient notice shall be given before conducting trials for the Owner to inspect or witness trials at Manufacturer's Works. Any defective work pointed out during inspection by the Surveyors or the Owner shall be rectified.

1.12 MATERIALS AND WORKMANSHIP

All materials and equipment to be used for the construction of the vessel shall be brand new, of the latest design, intended for marine purposes and approved by Classification Society and Owner's Representative.

All steel materials used for the structure of the hull shall have a good welding quality and shall be certified by the Classification Society. Before steel material is used in construction, rust and mill scale must be removed by means of grit blasting up to Swedish Standard SA 2 1/2 where after directly a coat of approved shop primer with a thickness of 20-25 microns shall be applied as a temporary protection. Steel quality shall be of IRS Grade A

All timber used, shall be well-seasoned and free from rot, taps, hakes and reasonably free from knots.

All wood used in the vessel shall be well seasoned and treated to prevent pest attacks, free from sap, shakes, warps and other defects.

WORKMANSHIP

All workmanship used for the construction of the vessel shall be of good quality and in accordance with the highest standard of normal shipbuilding practice for this type of vessel. The workmanship shall be such as to assure reasonable fair lines and smooth surfaces.

Electric arc welding shall be applied to all connections of structural members. Portions of members where welding is to be applied shall be properly prepared prior to welding in order to obtain good results.

Welding shall be executed in accordance with and under the approval of the Classification Society. A regular check of the quality of welds by X-rays or ultrasonic methods shall be carried out to the satisfaction of the Owner's Representative and the Classification Society.

Manual welding shall be executed only by qualified welders and in accordance with proper welding procedures with Class approved electrodes. The materials and the procedures of welding shall comply with the Class requirements.

All construction-, outfitting- and painting-work shall be carried out indoors. To ensure the highest quality of protection, the total paint system shall be applied under the optimum painting conditions and shall be completed prior to launching of the vessel.

STANDARDS

The construction and outfitting of the vessel shall be carried out in accordance with good marine practice, using materials, outfit, machinery, equipment and high standard of workmanship produced in compliance with internationally recognized marine standards provided that these standards are approved by the Owner's Representative.

The Contractor's and or Manufacturer's standard can be applied after approval of The Owner's Representative of those items which are not covered by the requirements of the Classification Society or other Bodies.

Building methods shall be in agreement with good marine practice and are to be approved by the Owner's Representative.

The vessel to be built under cover at a yard with a high standard of workmanship.

During the building period the Contractor has to take effective precautions to prevent damage by fire or water.

1.13 TESTS AND TRIALS

1.13.1 General

All tests and trials shall be performed in accordance with the requirements of the Classification Society and other regulatory bodies concerned and as stipulated in the specifications. The trials shall be conducted in the presence of the Ch.P.T. Officials/Owner's representatives as per the agreed tests and trials plan.

Test and trials, including repeated tests and trials , if required, shall be carried out to the satisfaction of the Owner's representative / Class Surveyor and regulatory bodies.

All costs related to tests and trials. Including costs for crew, fuel oil, lubrication oil, etc. are considered as included in the Contract price.

The Contractor shall inform the Owner's Representative timely about programmes and time tables for events and tests.

All instruments required for the tests shall be duly calibrated and arranged by the Contractor.

Upon completion of each test and trial, protocol of trials shall be submitted to the Owner's Representative.

All defects shall be corrected by the Contractor and repeated tests shall be carried out to the satisfaction of the Owner's Representative before sea trials.

1.13.2 TRIALS

Programme for trials shall be submitted to the Owner at least one month before the trials. Yard shall provide fuel oil, lube oil, fresh water, etc. for the trials. Grades of fuel and lube oil used shall be equivalent to Manufacturer's recommendations. Left over stocks of fuel and lube oil shall be taken over by Owner as per contract.

Machinery and equipment shall be tested at the Manufacturer's premises as per normal procedure. These tests shall be witnessed by Class Surveyors as required.

During sea trials the vessel shall be under the command of a Master nominated by the Builder, who shall also provide the necessary crew.

Official trials shall be carried out by the Contractor in accordance with a program approved by the Owner's Representative and in the presence of the Owner's Representative. All defects shall be corrected by the Contractor and repeated trial shall be carried out to the satisfaction of the Owner's Representative before transport to Chennai-India.

The equivalent power of propulsion engines during speed trials to be verified by measurements of torque and r.p.m. of shafts.

The sailing trials shall at least comprise the following tests:

- speed trials to be carried out over an approved certified measured mile and consisting of:

- 2 double runs at 90 % total output main engines.

- 2 double runs at 100 % total output main engines.

Where after the engines will be finally blocked at maximum 90 % MCR.

- Endurance trials and measurement of fuel oil consumption -

the endurance trial shall be carried out with a minimum of two hours continuous running with the main engines developing 90 % MCR. During the endurance trial, the fuel oil consumption of the main engines shall be recorded.

- crash stop tests.

- astern sailing test.

- maneuvering tests (turning / steering) -

the turning test shall be carried out with the main engines developing 90% MCR.

- acceleration tests.

During the sailing trials, the necessary data shall be recorded and a complete report shall be forwarded to the Owner.

1.13.3 Inclining Experiment

When the vessel has reached a sufficiently advanced stage of construction and only minor work remains to be completed, the lightweight and center of gravity of the vessel shall be determined by means of an inclining experiment.

Inclining experiment shall be carried out as per IS Code 2008 As amended.

The inclining test to be carried out in the presence of the Owner's representative and the Classification Society surveyor.

1.14 LOGISTICS

Every attempt shall be made by the Builder to achieve a minimum demand of types and sizes of spares, equipment and consumables. As far as possible unified electric motors, valves, pumps, starting devices, control instruments etc. are to be adopted. The shipyard is responsible to arrange this also with their subcontractors.

Unified lubrication oils, lubricants and hydraulic oils to be adopted. Lubricating and greasing plan for all machinery and equipment to be submitted for Owner's approval.

1.15 DOCUMENTATION

All documents shall be in English language.

1.15.1 Instruction Books, Maintenance Manuals

Five (5) copies of manuals and instruction booklets containing installation, testing, operation, maintenance, spare parts lists, repair instructions and circuit diagrams for all machinery and equipment shall be supplied at the time of delivery of the vessel. One soft copy of the manuals shall be supplied in CDs.

PMS schedule for all the machineries shall be prepared and provided by the builder.

In addition to above at least three different handbooks shall be provided in 5 copies each.

- **Book A** for all systems and installations used and maintained by the deck and nautical crew
- **Book B** for all systems and installations used and maintained by the engineers and electricians.
- **Book C** as fitted machinery and equipment handbook

Min. Content of Handbook A

- Brief ship description
- G.A. Plan
- Arrangement of deck equipment
- Description of radio communication, nautical and navigation system, including schematic arrangement
- Description and installation drawings of wheelhouse
- Description and schematic arrangement of internal communication systems

Min. Content of Handbook B

- Brief ship description
- G.A.Plan
- Engine room arrangement
- Main cable and wire list
- Description of all machinery and electrical installations including winches, air conditioning etc.
- Diagrams of all piping systems including lists of pipes and fittings
- Description of all control panels and switchboards
- Description of the engine control system

Min. Content of Handbook C

Yard shall supply as fitted machinery and equipment handbook indicating all machinery nomenclature, maker's details, type, model number and address of manufacturer.

SCHEDULE 'M30'
LIST OF VENDORS (MECHANICAL)

S.No	ITEMS	NAME OF MANUFACTURERS
1.	Main Pumps / Jockey Pump	KIRLOSKAR, MATHER & PLATT, FAIR Banks VOLTAS, ROYSON PUMPS or equivalent brand from reputed manufacturers with external bearing provided with certificate from IRS .
2.a	Main Foam pump	EMI UL / FM approved make / Model
2.b	Foam Filling Pump	KSB, ROTOPUMP, TUSHACO, KISHOR
3.	Diesel engine	CUMMINS, GREAVES/LEYLAND/KIRLOSKAR OIL ENGINE/MOLVOPENTA
4.	Foam/water monitor remote operated and foam Proportionator	ANGUS/ ANSULI SKUM/ACRON BRASS (U.S.A)
5.	Hydrant valve	NEWAGE, VENUS, SHAH BOGILAI, SUKAN.
6.	Hose Pipe	CRL, JAYASREE, NEWAGE
7.	Pipe	TATA , INDUS, SAW, SAIL, WELSPUN , ROSHNI, GSL, MUKUND, ZINDA, ISMT, MAHARASHTRA , SEAMLESS LTD.
8.	SS Pipe	CHOKSHI, SWASTIK
9.	Butterfly Valve	INTERVALVE, L&T, FOURESSVALVES, KEYSTONE, AJAY, MALHAR VALVES or equivalent brand with IRS approval.
10.	Ball valve	L&T, CRESCENT, KEYSTONE, STEEL STRONG VALVES
11.	Globe / Gate valve	TYCO, SANMAR, BDK, AUDCO-INDIA AJAY, MALHAR VALVES or equivalent brand with IRS approval.
12.	Motorized valve	TYCO, SANMAR, BDK, AUDCO -INDIA, ROTORK, AJAY, MALHAR VALVES or equivalent brand with IRS approval.
13.	Non Return Valve	L&T, CRESCENT, UPADHYA , KEYSTONE, AJAY, MALHAR VALVES or equivalent brand with IRS
14.	Fire extinguisher	MINIMAX, VIJAY, ZENITH FIRE SERVICES
15.	Pressure gauge manometer .	AN, H-GURU, FIBEG, GENERAL INSTRUMENTAL
16.	Jumbo curtain nozzle.	HD Fire/FIRETECH
17.	Strainer	GREAVES, JAYPEE, GRANDPIX
18.	AFFF	ULIFMAPPROVED. (FOAM CONCENTRATE)
19.	Foam water monitor (ground monitor)	ANGUS/ ANSUL/ SKUM/ACRON BRASS (U.S.A)

1.15.2 Approval of drawings

The drawings and technical specifications (orders to sub-contractors] including those prepared and delivered by sub-contractors shall be submitted to the Owner's Representative in such order as to enable the Owner's Representative to judge and consider simultaneously the characteristics and design of related elements. The Owner's Representative will have the right to extend the approval time in case the above requirement has not been fulfilled by the Contractor. Further details of the approval procedures are governed by the contract.

Before commencement of the work, Builder shall submit major basic drawings , calculations, results/protocols of tests and trials shall be submitted to the Classification Society and/or to Statutory Authority for their approval in due course of design and construction schedule. All these drawings shall be forwarded to Owner for their concurrence. Non-Class drawings shall be approved by Owner or their nominated representatives.

Scope of plans for approval shall be as follows: -

Hull Drawings

- General Arrangement
- General arrangement of Oil spill recovery equipment
- All Structural plans
- Lines Plan
- Offset Table / Hydrostatic Curves / Cross Curves of Stability
- Tank Capacity Plan
- Trim & Stability Booklet
- Tonnage Plan & Computation
- Rudder and Rudder Stock
- A-Brackets
- Welding Schedule
- Tank Testing Plan

- Seating for Major Deck Equipment
- Draft Mark
- Ship's Name
- Docking Plan
- Wheelhouse layout
- LSA, FFA, L&SS, FCP Plans
- Lifting Beam and Eye Plates Arrangement / hoisting plan

Machinery Drawings

- Machinery Room Layout
- Oil recovery system
- Debris removal system
- Dispersant spraying system
- Air, Filling, Sounding Pipes
- Scupper and Discharges
- Cooling System
- Fuel Oil System including purifier
- Lube Oil System including purifier
- Bilge & Fire Fighting System
- Steering Gear System
- Exhaust System
- Hydraulic System
- Control Systems
- Torsional Vibration Calculations for main engines and auxiliary engines (if applicable)

Electrical Drawings

- Electrical load schedule for main power system
- Single line diagram of main power system
- GA & Circuit diagram of main switchboard
- Electrical load schedule for emergency power system
- Single line diagram of emergency power system
- GA & Circuit diagram of emergency switchboard
- Calculation of short circuit currents at main busbars
- Single line diagram of lighting system

- Single line diagram of navigation lighting system
- Circuit diagrams of control and alarms for essential services
- Circuit diagrams of internal communication system
- Single line diagram and plans for generators and motors of propulsion system (if electrical)
- Construction details of generators and motors rated 100 kW and above
- Fire Detection & Fire and General Alarm
- Wheel house arrangement showing details of equipment for Radio communications & Safety Navigation.

All other plans as required by the class shall be submitted to Classification society for approval.

1.15.3 AS FITTED PLANS

On completion of the vessel as fitted plans shall be made and handed over to Owner in six sets of hard copies and two sets in CDs.

All drawings shall be of standard DIN-format IOA/A1 etc.

1.16 SAFETY PRECAUTIONS

During all stages of construction the Builder shall provide stages, railings, stairs, gangways, covering of openings as well as provisional lighting and ventilation ensuring safe access, inspection and working conditions necessary to prevent accidents during construction, testing and acceptance. If Owner's representatives claim unsafe or dangerous working conditions the Builder shall be obliged to arrange necessary safety precautions. Adequate safety precautions shall be taken to avoid fire, explosions etc.

1.17 STANDARDS

The following standards shall be applied to the construction of the vessel, as far as practicable.

- IACS Recommendation No.47
- ISO Standard
- Builder's Engineering Standard and Builder's Standard Practice
- Any other National / International Standards

1.18 CORROSION PROTECTION AND SURFACE PREPARATION WORK

DURING FITTING OUT PHASE

After launching, special consideration shall be taken to prevent corrosion and fouling during the fitting out phase. Especially the flow of electric currents between ship, surrounding waters and quay or vice versa shall be kept under control to avoid electrolytic corrosion. Earthing connections for welding work shall be provided. The electric potential of electrical current flow in the surrounding water shall be measured and respective protocols to be submitted. Temporary zinc or magnesium anodes shall be arranged around the ship and checked in regular intervals.

De-scaling and shot blasting work during the fitting out phase shall be finished before sensitive equipments are installed. For all other machinery, equipment and systems already installed, efficient temporary canvassing shall be provided during de-scaling ensuring that no rust, dust or other blasting material shall enter the respective installation. All pipes, etc. shall be fitted with temporary closures. All blasting residues shall be immediately removed.

1.19 CLEANLINESS

1.19.1 *Cleanliness during construction*

The vessel shall be kept clean during the entire period of construction, during sea trials and up to the date of delivery. Special care shall be taken to remove all waste etc. from spaces, which later will not be accessible due to covering, lining or installation of equipment.

For acceptance, the vessel shall be offered in a clean condition.

1.19.2 *Cleaning up before delivery*

Before delivery of the vessel the complete hull and spaces shall be thoroughly cleaned and touched up with paint where necessary.

All F.W. tanks shall be filled.

All machinery, equipment and outfits shall be in good working condition.

The vessel shall be thoroughly cleaned and ready to sail out for the intended service.

1.20 TIME SCHEDULE

A preliminary time schedule showing the beginning and end of the main design, construction, testing and trials activities shall be submitted with the offer. The time schedule shall be updated during the design and construction phase separately for design and construction activities. Any possible delay shall be immediately notified in writing to the Owner's representative. This information shall include details about the reasons of deviation from time schedule, the expected time of delay and steps taken to reschedule in order to meet the agreed date of delivery.

1.21 DISMANTLING WAYS, INSPECTION OPENINGS

Dismantling ways shall be provided for machinery and other heavy equipment, which may become necessary during the lifetime of the vessel to be removed and/or reinstalled. As far as this is not possible for larger components, dismantling ways shall be provided which permit dismantling by temporary openings adequately strengthened cut into hull or deck without the necessity of dismantling wiring, insulation, ducting or other systems.

Every component or system needing maintenance, repair or inspection during the lifetime of the vessel shall be accessible by respective access or maintenance openings, ensuring suitable working conditions for above mentioned work. Inspection openings, which are necessary mainly during the construction phase only, for instance in large air ducts may be closed and lined permanently in agreement with the Owner's representative. Girders and hoisting devices shall be provided in engine room for shifting dismantled assemblies to the hatch openings.

1.22 LAUNCHING OR EQUIVALENT ACTIVITY

Launching of the vessel shall be the responsibility of the Builder. Launching calculations and arrangement drawings shall be

submitted to Owner for approval/information. Sufficient notice shall be given to Owner prior to launching.

1.23 PHOTOGRAPHS

During the construction of the Vessel, progress reports in the form of coloured photographs and category-wise bar charts at fortnightly intervals shall be furnished to the Owner, with proper indication of amount of work completed and amount of work to be done etc.

1.24 INVENTORY, TOOLS AND SPARES

Onboard spare parts for machinery and equipment shall be supplied by the Builder in accordance with the recommendations of the Manufacturer.

All recommended spares shall be supplied for a period of two years.

Main equipment manufacturers shall guarantee availability of spares for a period of minimum ten years.

Builder to supply the following spare parts on board the vessel at the time of delivery:

- (a) Spares recommended by Regulatory Bodies.
- (b) Essential spares recommended (including standard supply) by the Manufacturers of various machinery and equipment.
- (c) Deck, Engine and Accommodation inventories as per Owner's requirement
- (d) Inventory, tools and spare parts as listed in appendix.

All the spares and inventories mentioned above shall be properly listed and stored/stowed on the vessel by the Builder.

1.25 TRAINING/FAMILIARIZATION ON USE OF OIL SPILL EQUIPMENT:

Builder has to provide necessary training/familiarization to the crew on use of all the oil spill equipments listed in this specification

1.26 DELIVERY

After rectifications of any defects identified in sea trials at builders quay. Sea trials are to be conducted in the presence of Ch.P.T officials and Owner's representative at Ch.P.T quay.

After successful completion of all trials and an acceptance survey, the vessel shall be delivered to the Owner .

Notice for delivery shall be given four weeks in advance.

Inventories and spares shall be stowed / handed over to the Owner.

1.27 GUARANTEE / WARRANTY

The vessel including the machinery and equipment shall be guaranteed for a period of 24 months from the date of delivery. Any defect except normal wear and tear shall be dealt with by the Builders at their cost. Any delay/lay up due to non-rectification of defects beyond 7 days' time from the date of receipt of intimation from the employer shall attract penalty of Rs.5000/- per day and the same shall be recoverable from the builder's Security Deposit.

2 HULL STRUCTURE

2.1 GENERAL

The vessel shall be built of steel approved by the Classification Society. The scantlings shall be in accordance with Classification Society Rules.

The whole structure shall be completely welded, while the welding process, method and inspection procedure shall be as per good ship building practice and approved by Classification Society.

All structures exposed to weather or required by Classification Society shall be continuously welded. Intermittent welding shall

be used only in dry spaces where allowed by the Classification Society.

The hull structure shall be strengthened as required by the Classification Society and as stipulated in this specification.

The bottom structure shall be strengthened in way of the A-Brackets, rudders and propellers. In way of hawse pipes, deck machinery, mooring fittings, and elsewhere as required the plating of increased thickness shall be inserted and the structure in way shall be strengthened.

Bulkheads shall be of plain construction, welded directly to shell, deck and tank top, and provided with stiffeners

Drain and air holes shall be cut in all floors and stiffening parts to ensure proper flow off liquids and air.

2.2 SCANTLINGS

The scantlings of all structural members shall be as approved by the Classification Society to meet their rule requirements but the following minimum specifications shall be met:

Bottom/Bilge Plating	: 8mm
Side Plating	: 6mm
Inner Side Plating	: 6mm
Deck Plating	: 5mm
Wheelhouse	: 5 mm
Bulkheads	: 5mm
Stiffeners	: 70 x 6 and 75 x 6 flat bar

The deck shall be executed as flush deck with as few as possible obstructions.

2.3 BLASTING/PRIMING

All steel materials shall be shot blasted to grade SA 2.5 (ISO 8501-1:1988) and painted with approved zinc primer. The type of primer and thickness shall be suitable for the top coating.

All areas shall be carefully cleaned before starting any painting.

2.4 TESTING OF TANKS, BULKHEADS, ETC.

All watertight and oil tight compartments shall be tested for tightness in accordance with Classification Society requirements. Testing of compartments below water line shall be carried out prior to launching. All pressure testing of tanks shall be carried out before the tank coatings are applied.

2.5 NON-DESTRUCTIVE EXAMINATION OF HULL PARTS

X-ray and ultrasonic testing of hull parts shall be according to Classification Society requirements.

2.6 SHELL PLATING

Shell plating shall be butt welded. Shell plating in way of appendages and where excessive local loads are expected shall be increased in thickness.

2.7 EYE PLATES & LIFTING EYES

Eyes plates shall be arranged under the stern to facilitate the fitting and removal of propellers, rudders and tail shafts.

Where eye plates are welded directly to shell plating, local stiffeners shall be welded on the inside. The stiffeners shall be in line with the eye plates.

Lifting points are built into the hull. Hoisting lugs shall be integrated aft and forward of the hull. Hoisting slings shall be delivered.

2.8 STEERING GEAR COMPARTMENT

The steering gear compartment shall be located below main deck. The compartment shall be of sufficient size to accommodate steering gears with motors and all associated equipment.

2.9 MAIN DECK

Main deck plating shall be of 5 mm thickness (min).

Deck plating in way of all deck fittings shall have increased thickness and reinforced suitably.

Except in way of the 5mm checker steel deck forward and aft, the deck will be 25mm fire retardant non-slip GRP grating, laid across main deck beams securely clipped in position with stainless steel clips.

All free edges of the decking panels will be supported and securely clipped. Adjacent free edges are to be securely clipped together.

Panels will be readily removable in way of the engine removal hatches and oil mop inspection panels.

On the engine removal hatches, the decking will rest and be secured on spacers as necessary.

2.10 CHAIN LOCKER

Chain lockers shall be arranged for storage of anchor chain cable. The size of each chain locker shall be sufficient to have ample capacity and height for stowage of chain cables. Adequate drainage arrangement shall be provided for removal of mud and water.

2.11 WHEELHOUSE

The wheelhouse will be a raised structure and supported on pillars and webs in order to facilitate more working space on decks

The wheelhouse window arrangement shall be such that maximum all round vision is possible and consistent with the strength of the structure.

2.12 LOOSE TANKS

Loose tanks provided in machinery or in other spaces inside the hull shall be of mild steel construction and adequately stiffened.

2.13 RUDDER

The vessel shall be provided with two balanced spade rudders.

Rudders shall be of fully welded mild steel construction.

The maximum rudder angle shall be 35° each way. The construction shall be in accordance with the Classification Society Rules.

Arrangements shall be made for securing tackles when shipping and unshipping the rudder, and for lifting generally.

2.14 RUDDER STOCK

The rudder stock diameter shall be in accordance with the Classification Society requirements. The rudder stock shall be of seawater resistant stainless steel

2.15 DRAFT MARKS

Metric draught marks shall be provided at forward and aft on both sides. Draught marks shall be cut from 6 mm plate and welded to the shell plating.

2.16 PROPELLER SHAFT BRACKETS

Two "A Type " Shaft brackets are to be fitted to support the propellers.

2.17 SURFACE PROTECTION

Before construction, all steel plates and sections shall be blast cleaned to SIS SA 2.5 standard. Surface shall be cleaned free from grease and oil using water rinsable degreasing solvent. Surfaces shall be coated after blasting with one coat of zinc rich shop primer as soon as possible preferably by on line process immediately after blasting.

Epoxy coating system shall be employed for all spaces in accordance with manufacturer's specifications suitable for 3 years period.

During and after construction, damages on shop primer by welding, rubbing, burning and rusting shall be cleaned before touching up. Damages on the primer on the external hull and deck shall be spot blasted to SA 2.5 and touch up with primer. Damage

to primer on the internal area shall be power brushed to ST3 and touch up as recommended by paint Manufacturer.

In general, painting shall be carried out by airless spray, and where this is impracticable, brush or roller to be used. Painting work shall not be carried out under condition of weather harmful to proper curing and drying of machinery and equipment shall be compatible to the manufacturer's standard. Painting of exposed steel surfaces such as outside of hull, etc. shall be free from slags and rusts. After specified coating is applied, damages in paint film shall be repaired at proper time. Where damage has reached the steel surface and rust has occurred, the steel shall be cleaned, and paint shall be applied.

2.18 CATHODIC PROTECTION

The underwater portion of the hull, areas around sea chests, rudders and propellers shall be provided with zinc anodes. The anodes shall be provided to give a life span of three years in tropical waters.

2.19 PROPELLER PROTECTION

In way of the propeller heavy side oars shall be fitted forming protection against floating ropes.

2.20 HOSE REEL

A hose reel made of marine grade aluminum with lifting points and lasting arrangement/fixing arrangement on deck. hydraulic hose sets shall be provided.

2.21 STORAGE CONTAINER CUM WORK BENCH

A storage container for storing the equipments, tools etc. with necessary lifting arrangement and lasting/fixing on deck shall be provided.

2.22 OPEN DECK SPACE

Enough deck space for storing boom reel and other oil spill equipment is to be provided onboard.

Main deck should have enough open deck space to facilitate large working area for Oil spill operations.

3 MACHINERY

3.1 MAIN AND AUXILIARY MACHINERY

Vessel is to be fitted with two main engines and two propellers driven by couplings and reversible gear boxes. Main engine and gear boxes are to be of approved type.

Capacity of the main engines to be sufficient to get required speed of the vessel (10 knots).

Auxiliary machinery consists of two main generators

All belts, pulleys and exposed moving parts of machinery are effectively covered with suitable safety guards.

Checkered aluminum plates will be fitted to provide access around engines and equipment in each propulsion engine room and in each machinery space. It will be securely bolted to floors and suitably stiffened and supported at edges. Good access will be provided to all components and equipment under the deck as far as is practicable.

3.1.1 Environmental Conditions

All machinery, components and systems covered by the rules are to be designed to operate under the following environmental conditions.

- Ambient air temperature in the machinery space between 0°C and 50°C
- Relative humidity of air in the machinery space up to 90%
- Sea water temperature up to 32°C

3.1.2 Materials

Materials used in construction are to be manufactured and tested in accordance with requirements of classification society.

Installation of the material which contains asbestos is prohibited.

3.1.3 Installation of Machinery

One propulsion unit shall be installed in the engine room, consisting of a propulsion diesel engine, a reverse reduction gearbox and a shaft line with propeller.

Propulsion Diesel Engine

The propulsion diesel engine shall be of the non-reversible, super-charged marine type approved by IRS and shall have the following main features:

- | | |
|--------------------------------|------------------------------|
| 90 % Maximum Continuous Rating | - to suit the designed speed |
| Type of fuel | - High Speed Diesel Oil |

The diesel engine shall be equipped with at least:

- a main drive shaft with flywheel and flexible coupling.
- an exhaust system with water cooled or insulated manifold, a rectangular to round transition piece and a stainless steel expansion bellow.
- electric start equipment consisting of a 24 V starter motor and an AC alternator with voltage regulator for charging the starting battery.
- a second 24 V AC alternator with voltage regulator and a capacity of approx. 80 Amp. for charging the ship's network battery.
- Charge air filter with silencer
- a fuel system with boost pump, full flow duplex filter, bloc type pressure pump and h.p. fuel pipes.
- a standard type governor with remote speed control from the wheelhouse
- remote start and stop from the wheelhouse .
- a lubrication oil system with engine driven pump, cooler, temperature controlled regulating valve, full flow duplex oil filter
- a fresh water cooling system, with engine driven pump, temperature controlled regulating valve, heat exchanger and expansion tank

- a sea water cooling system with engine driven pump.

All machinery, systems and components that are to be operated or subject to inspection and maintenance on board are to be installed and arranged for easy access.

The machinery shall be so arranged that inadvertent operation, caused by human error, cannot lead to the reduced safety of the ship and personnel.

The machinery shall be so designed, installed and protected that risks of fire, explosions, accidental pollution, leakage and accidents thereof will be acceptably low.

All machinery is to be equipped with control and instrumentation considered necessary for safe operation of the machinery.

Alarm and safety system

Alarm sensors shall be fitted for low lubrication oil pressure, high fresh cooling water temperature and low level in cooling water expansion tank.

Automatic stop functions shall be provided for over speed, too low lubrication oil pressure and too high fresh cooling water temperature.

The diesel engine shall be equipped with PTO with manual operated clutch for driving a bilge pump.

3.1.4 Test and Trials

All inspection, tests and trials are to be carried out in accordance with requirements of IRS Rules.

3.2 STERN GEAR AND PROPELLER

Propulsion system shall consist of two propeller shafts.

propeller shaft is to be of seawater resistant stainless steel

Physical, chemical and mechanical properties of the material are to comply with IRS Rules

Diameter of the propeller shaft and intermediate shaft is to meet the classification requirements.

Diameter of the coupling bolts, thickness of the coupling flange and fillet radius at the base of the coupling is to be as per IRS Rules.

Shafting system is to be designed such that system is free from harmful torsional vibrations.

Propeller shaft is to be of water lubricated type and fitted with synthetic rubber bearing.

Withdrawal of the propeller is to be carried out without the propeller shaft shift to inboard side and removal of rudder. Aft bushing is to be designed to permit withdrawal without removing rudder.

3.3 STEERING GEAR

Electro hydraulic steering gear will be fitted in each steering gear compartment. Each gear is to have its own hydraulic pump and cylinder and hydraulic oil tank. Electrical supply is to be direct from engine start battery through a circuit breaker.

A self compensating wheel controller will be fitted at the helm to ensure simultaneous and equal Operation of each steering gear without any direct linkage between them.

The rudders will be of balanced single plate type with a stainless steel stock. The rudders will be on bolted palms to facilitate removal.

The stocks will run in grease - filled housing tubes (with greasers) with bearings at top and bottom, stayed on to the transom structure, with rudder carrier block, washer and housing tube top flange. A bottom lip seal will be fitted.

A jumping collar will be fitted above the rudder. Nylon lined steel rudder stops will be fitted.

An emergency steering tiller will be provided for use operated from above deck through a screwed brass deck plug.

3.4 PIPING SYSTEM

3.4.1 General

All piping systems shall meet the requirements of the classification society (IACS), unless higher requirements are explicitly stated in this specification.

All pipework to be securely clamped to rigid structure, using Stauff clamps or similar.

All pipework deck penetrations are outside the recovered oil tank area, using appropriate bulkhead fittings.

All longitudinal runs of pipework are below the deck.

Where pipes are to be taken athwart ships above deck, they are led below the deck grating level, securely clamped to the deck or main deck beams.

At the vessel ends, the bow and transom tubes may be used as conduit for hydraulic pipework.

All flanges, studs, nuts, valves, valve stems etc., which are not fully painted or of non-corrodible material will be heavily coated with "Waxoyl" or similar.

All hull penetrations and fittings will be to the approval of the Class surveyor, and fitted with shut-off valves.

All possibility of chafing will be eliminated

The piping lay out shall be in accordance with good marine engineering practice, with the minimum practical number of bends of appropriate radius.

Valves and Accessories

All valves and accessories to be least suitable for pressure stage 10 according to DIN Standards, if no higher system pressure are described.

Materials of valves in general cast iron for body and cover and bronze inner parts. In bilge, ballast fire extinguishing and raw sanitary water systems sea water resistant bronze inner parts to be applied.

Valves in conifer pipe systems shall be completely of seawater resistant bronze.

Hull valves to be according Class requirements.

Butterfly valves to be with rubber lined body, bronze disc and stainless steel shaft.

Valves with a diameter of 25mm or less may be completely of sea water resistant bronze.

Dimensions of valves according to DIN standards and provided with flange connections for diameters over 25 mm. The smaller sizes shall have screwed connections.

3.4.2 Material

Steel pipes shall be generally galvanized, except as mentioned against individual systems.

The valves fitted to hull shall be of approved ductile material.

Piping for fuel oil system is to be of seamless black steel.

Insulation of Piping

Pipes shall be tested and painted (if necessary) before insulation is executed. Thickness of insulation shall be at least in such a way that the surface temperature will be not more than 25-C above the ambient temperature when the engine room ventilation is working.

Where the insulation runs the risk of damage or where hot pipes run within normal reach, they shall be provided with a suitable protection.

The exhaust gas piping and silencer shall be insulated with rock wool blankets on wire gauze finished with a glued layer of glass fibre cloth, and the whole shall be covered with aluminum sheets. Flanges and expansion joints shall be covered with insulating mattresses filled with glass wool.

3.4.3 Workmanship

All piping shall be supported and fastened safely according to good practice.

Where necessary the pipelines shall be fitted with expansion joints or with expansion bends.

Piping carrying fluids shall not be arranged above switchboards.

All piping shall be tested according to the IRS Rules and regulations .

3.5 MACHINERY PIPING SYSTEM

3.5.1 Fuel Oil System

The fuel oil tank shall be part of the ships construction.

Water separating type fuel oil filter shall be fitted in the supply line to each diesel engine.

Each fuel tank shall be provided with separate draw-off for each engine with shut-off cock operated from the deck

Piping shall be executed with steel tubes.

3.5.2 Cooling System

The fresh cooling water system of the diesel engine shall be entirely built on.

The built on sea cooling water pump of the diesel engine shall take suction from a sea inlet stand pipe.

The sea cooling water piping shall be executed in conifer 10 tubes. The liquid velocity in suction lines shall not exceed 1.2 m/sec and pressure lines shall not exceed 2 m/sec.

In the suction lines of the pumps soft iron anodes shall be fitted.

The sea inlet system shall consist of a sea inlet stand pipe fitted in the bottom and provided with an inlet valve and a strainer.

The strainer shall be with PVC coated steel casing, cover and stainless steel basket.

3.5.3 Machinery Exhaust Systems

The diesel engine shall be provided with a steel exhaust pipe which will incorporate a silencer. The silencer shall have a damping effect of approx. 35 dBA. The silencer shall be provided with a flame arrestor.

The exhaust system shall be dimensioned so that the gas velocity will not exceed 35 m/sec.

The diesel engine manufacturer shall approve the arrangement of the exhaust pipe.

The exhaust pipe shall be led to out board on either side of the engine compartment. Provisions shall be made to prevent water entering the exhaust pipe. The pipe shall be made of stainless steel.

The pipe shall be fitted and supported in such a way that tension-free expansion is possible without excessive transfer of sound and vibrations to the ship's structure.

The pipe shall be provided with sufficient stainless steel expansion bellows and shall be supported on steel frames via rubber springs. Discharge will be by means of wet exhaust system after the engine's water-injection point, the wet exhaust line will be approved reinforced flexible exhaust hose, with a water lock silencer.

All horizontal runs of exhaust are to slope down towards the discharge.

3.5.4 HYDRAULIC SYSTEM (Electro Hydraulic)

The hydraulic standalone oil tank to be sited in the forward machinery space with a capacity of at least 300 litres. A low level float switch will be installed to activate a warning light on the hydraulic console.

In the feed pipe from the tank, a shut-off valve will be fitted. All bends in the hydraulic pipework will be long radius with no elbow

fittings. A vented filling pipe and strainer with screwed cap are provided, as well as a drain cock.

System description

The hydraulic system will be installed, with all fittings, pipe work, and flexible hoses (Min. SAE100R2, swaged end fittings). The system will be installed, tested and commissioned under the supervision of a qualified Hydraulics Engineer. All pipework will be thoroughly cleaned, all fittings cleaned and inspected, and all valves tested for correct operation before installation. All pipework will be secured at regular intervals with approved clamps and will be suitable for continuous operation. In general, flexible hose will be used, with hoses secured to the vessels structure.

Runs of flexible hose will be well supported to prevent sagging, and all risk of chafing will be eliminated. Routing of pipe work will be neat and logical throughout.

There shall be min two deck mounted Power Take Off (PTO) connection points which the manifold can connect to. The connections are Supply, Return and Case Drain. One connection point to Port and the other to Starboard.

The following machineries/ equipment can be powered by the system :-

Crane

Oil Transfer Pump

Garbage collector system

Pneumatic boom reel hydraulic pump

Power Take-Offs on deck

Case drain connections are to be provided where necessary.

Three emergency stop buttons will be installed and connected up one in the wheelhouse, one next to the pump and one on deck.

A Hydraulic Oil Cooler will be fitted and sited close to the power pack engine.

A Full Flow Return Line Filter with clogging indicator will be fitted

Before testing the hydraulics, the entire system will be flushed through under high flow.

All hydraulic valves etc. on deck are painted as for deck fittings, and rubber boots are to be fitted to valve controls. All valve bodies, fittings, pumps, motors etc. are to be well preserved after commissioning.

An electro hydraulic control panel to be fitted in the wheelhouse

3.6 HULL PIPING SYSTEM

3.6.1 Bilge System

Electric powered bilge pumps are to be installed. The pump shall be a horizontal self-priming centrifugal pumps with a capacity of 15 m³/hr at delivery head of 1 bar.

A manual operated pump shall be fitted as spare.

Each bilge discharge will be through a non-return valve and shut off valve.

Float operated Bilge alarms will be fitted in both Propulsion Engine Rooms and both Machinery spaces, with an alarm in the wheelhouse.

Means of draining and pumping in fore peak and Steering Gear compartments are to comply with rules of classification

All piping to be of steel and shall be hot dipped galvanized after completion. Size OF bilge pipes shall be according to Class requirements.

3.6.2 Air, Sounding and Filling System

3.6.2.1 Air Pipes

Air pipes shall be provided for all tanks, void spaces and sea chest are to be terminated above deck.

Heights of air pipes above deck as required by Classification Rule requirements.

The air pipe for oil tanks shall be fitted with ball vent, valve with fireproof screen at the open ends. Provisions shall be made to prevent draining of oil spill to overboard.

Size of the air pipes is not to be less than 125 % of sectional area of filling/suction pipes.

All pipes on void spaces shall be galvanized. For pipes on oil tanks only the parts above open decks shall be galvanized. Upper ends of pipes shall be clearly labeled.

3.6.2.2 Sounding pipes

An independent sounding system also shall be provided for all tanks.

The fuel oil tank shall be provided with a sounding pipe. The upper end to be shut off with a screwed bronze cap.

Striker plate is to be fitted at the bottom of each sounding pipe.

Stenciling for air pipes, sounding pipes and ventilation pipes are to be provided.

3.7 FIRE FIGHTING SYSTEM

A fire pump shall be provided as per the Statutory and Class requirements but shall comprise of the following:

An 18m hose, nozzle and stowage reel will be fitted on the port and starboard side on the hand rails at different locations on deck and engine room. Hose will be complete with a jet/spray nozzle and is to provide a 6m jet.

A suitable fire monitor turning 360 degrees and up and down shall be fitted on monkey is land.

Portable foam fire extinguishers of a type suitable for the marine environment, each of 9 litre capacity will be provided in all machinery space complete with stowage rack.

Portable 4.5kg dry powder fire extinguisher and one portable 9 litre foam fire extinguisher are to be fitted in the wheelhouse and deck complete with stowage racks.

The machinery space shall have fire fighting/ alarm system as per Statutory and Class requirements..

All firefighting equipments shall be approved type.

4 SHIP OUTFITS

4.1 ANCHORS & CHAINS

Anchors shall be provided in accordance with Classification Society requirements. Chain cable length and diameter shall be based on the Classification Society requirements.

The cable will be stowed in chain locker, complete with cable attachment securely shackled.

Anchor and chain shall be arranged such that they will not foul or damage hull and hull appendages during lowering and hoisting.

4.2 BOLLARDS & BITTS

Two substantial double bollards at the bow and two at the stern will be provided. (One each side port and starboard)

Two mooring bitts at amidships (one each side port and starboard)

Bollards and bitts shall comply with relevant BIS/JIS or equivalent national/international standards.

4.3 BULWARK, GUARD RAILS , STANCHIONS AND FENDERS

BULWARK

A plate bulwark will be provided wherever necessary depending on the vessel . The height and fairleads(suitably reinforced) shall depend on the position of the bulwark.

GUARD RAILS & STANCHIONS

Fixed guard wires/ Removable side rails and Stanchions shall be provided depending on the vessel design and the equipment location and shall also meet the Class and Statutory requirements.

The tops of all stanchions will be blanked off. The fixed stanchions and the sockets for removable stanchions will be welded to the deck and to the deck edge bar, which will be cut and welded as necessary to suit. The main deck stanchions will lean inboard at approximately 3 degrees to the vertical.

FENDERS:

The outer deck edge will be fully protected by a 100mm hollow 'D' rubber fender. The vessel sides will be protected by fully welded split pipe fenders. Diagonal fenders are also fitted in way of the forward shoulders, and vertical fenders at the aft of the inboard side of each hull.

4.4 LIFE SAVING APPLIANCES

Life saving appliances shall be provided as per RSV notification 2013

The vessel will be equipped with LSA items for 12 persons and shall include the following:-

- 1 Inflatable life raft with Hydrostatic Release and "B" pack, stowed on Wheelhouse Top in weatherproof cradle.
- 2 lifebuoys, one with 18m of buoyant line attached, one with automatic light. Each mounted in galvanised flat bar stowage clamped to hand rails and stowed each side of wheelhouse.
- 3 Sufficient lifejackets to be stowed in the wheelhouse.
- 4 Parachute flares *
- 6 Red flares*
- 2 Smoke Signals (Hand held)*
- 1 Medical Kit, Category C.

1 Portable hand held VHF (waterproof)
1 SOLAS No.1 Table
1 LSA Training Manual
GPS
Automatic Identification System (AIS) Class B
* In a watertight box, with contents marked on the lid.

All life saving equipment shall be of approved type duly certified by Administration.

4.5 DOORS

The arrangement, type and sizes of doors shall be in accordance with the approved access plan.

All weather tight doors shall be tested in accordance with the Classification requirements. Watertight door (if fitted) shall be manufactured under class survey.

Doors in the fire class partition shall be of type, meeting the same fire integrity of the partition.

4.6 HATCHES

Emergency escape hatches shall be provided for propulsion engine room

Construction details of hatches shall be as per recognized national/ international standards for e.g. BIS, JIS, NS, etc.

4.7 MANHOLES

Oil tight or watertight manholes shall be fitted to tanks, void spaces, etc. Clear size of manholes shall be generally 600 x 400 mm. Manhole covers shall be of steel plate and fitted with synthetic rubber gaskets and fixed with steel stud bolts and nuts.

Every tank shall have two manholes as far as practicable. All manholes on exposed decks shall have stainless steel studs and nuts.

Construction details of manholes shall be as per recognized national/ international standards for e.g. BIS, JIS, NS, etc.

4.8 WINDOWS

Windows of rectangular large pane openable windows meeting class requirements and fitted with Class approved toughened safety glass shall be provided.

A fixed window in the door shall also be provided..

A heavy duty wiper is to be fitted to the forward Centre window.

5 GENERAL LAYOUT OF WHEEL HOUSE:

5.1 GENERAL:

1. The wheelhouse will be a raised structure and supported on pillars and webs in order to facilitate more working space on decks. However the builder shall take stability and other design aspects into consideration and comply with Rules of Classification.
2. The access to the raised wheelhouse will be by a steel ladder/staircase with handrails from the main deck, via a hardwood hinged door with fixed window in the aft bulkhead of the wheelhouse. The door will be fitted with a mortise deadlock.
3. Windows of rectangular large pane openable windows meeting class requirements and fitted with Class approved toughened safety glass shall be provided.
4. A fixed window in the door shall also be provided..
5. A heavy duty wiper is to be fitted to the forward Centre window.
6. There shall be proper arrangement for Ventilation of the wheelhouse .

Furnishings and fittings the following to be provided:

Upholstered Bench seat with back rest and table with drawers, Helmsman's Chair of revolving type, upholstered and securely fitted to the deck.

Lift out panels or hinged doors are to be provided to give access beneath consoles to wiring, Steering and Machinery Control console, Hydraulic control console, Lifejacket stowage under bench seat ,lifejackets, grab- handles will be provided on consoles,

a Medical kit and 6 sets of protective clothing, safety harness and coat hooks shall be provided in a suitable ward robe located at a suitable place.

Flooring shall be of vinyl "cushion floor" laid on water proof material of suitable thickness and deck head will be lined with laminated wood. Aluminium or Bakelite ceiling panels and insulated with approved insulating material.

Controls and Equipment

- Main engines control panel
- Single lever engine/clutch/gear box control
- Start and Stop Key
- Power pack engine control panel
- Single lever engine control
- Start and Stop Key
- Charging lights

Others:-

- Pressure, temperature and fuel gauges of main and aux.engines.
- GPS / Magnetic Compass with back light, suitable for steel hull and wheelhouse.
- AIS
- Horn Button
- VHF Radio Telephone
- Wiper Control
- Navigation light Panel/Switches
- Engine vent fan controls, with indicator lights
- Compartment Light Switches
- Searchlight Switch
- Floodlight Switches
- Steering Wheel and rudder angle indicator.
- Fire Alarms*, Bilge Alarms*
- Interior Lights and Red Night Light

*These items will be with audible warning and alarm light

Wheelhouse Top

A bolted tubular steel mast with halyards will be arranged on the wheelhouse top to fit the navigation lights.

Steel pads will be arranged to take the searchlight, the horn and the floodlights.

A watershed bar will be fitted across the overhang corners port and starboard.

Instrumentation

Instrument panel in wheelhouse with at least start and stop buttons, a lubrication oil pressure indicator, a fresh cooling water temperature indicator, an engine r.p.m indicator, a running hour counter and an ammeter.

5.2 VENTILATION

Mechanical ventilation system with adequate capacity shall be provided to Main engine room and wheelhouse.

Natural ventilation is to be provided for Steering gear compartment, fore peak spaces.

5.3 TOILETS

Toilets shall be provided for crew for use onboard the vessel.

6 ELECTRICAL SPECIFICATION

6.1 GENERAL

Electrical apparatus and wiring system shall comply with the requirements of IRS.

All electrical equipment shall be suitable for tropical use and constructed with watertight drip proof or explosion proof enclosure according to the locations in the vessel and are so placed or protected as to minimize the possibility of mechanical damage and the accumulation of dust, oil vapour, steam or dripping liquids.

Electrical apparatus and cables shall comply to IEEE Recommended practice for Electrical installation on Shipboard IEEE std 45 (latest edition). Protective devices like fused, circuit breakers etc shall be fitted as close to the supply source as possible. All materials and equipment be approved by the Owner. Prior to commencing actual work, the installation shall be drawn in detail and submitted for approval.

Following the completion of the installation, all drawings and lists shall be brought up-to-date, according to the as fitted situation.

6.2 ELECTRICAL SUPPLY

The electrical supply shall be 415V, 3 phase, 50Hz, 220V, 1 phase, 50HZ and 24V DC.

A main switch to isolate the main battery supply shall be installed in every bank of batteries and this shall be installed as close as possible to the battery terminals.

A parallel switch shall also be installed.

6.3 AC SUPPLY

The AC supply shall be obtained from suitable rated two generating sets with drip proof, self ventilated alternator of class 'F' insulation.

The generating set shall be capable of providing the total electrical load of the craft under all opening condition.

6.4 DC SUPPLY

The 24V DC supply, for emergency lighting, electrical control, navigation lights, VHF set, etc shall be obtained from 2 banks of 2X12 volts. 200 AH batteries.

Separate batteries for main engines and gensets.

The batteries shall be stored in well ventilated acid resistance box.

6.5 BATTERY SYSTEM

A storage battery and starting battery shall be installed in a well ventilated battery box in the engine room, easy accessible for replacement of batteries.

Voltage : 24V and suitable Capacity

The battery will be charged by the above mentioned generator. The starting battery shall be charged by a separate generator

6.6 SHORE SUPPLY

The shore supply shall be taken shore connection box mounded on the main deck.

The box shall be of watertight aluminium alloy construction, fitted with circuit breakers, fuses and terminal block

6.7 CABLES AND CABLE INSTALLATIONS:

All cables shall be graded in temperatures to Class C85 and shall comply with the Requirements of the Classification Society.

Cables shall be of ozone proof and flame retarding type to be used, with standard pure copper cores.

6.8 CIRCUIT BREAKERS AND SWITCHED

All breakers and switches shall be with quick closing and opening main current contacts with surface creepage proof insulation materials (as steatite melanite, mycalex, Teflon a.s.o) and with arc chambers of shuts.

The proximity switches shall be short-circuit proof.

6.9 IDENTIFICATION AND MARKING

All electrical equipment shall be adequately labeled to describe the function of the particular item.

The labeling of junction boxes and power panels is to indicate the relevant circuits and capacity of fuses/circuits and capacity of fuses/circuits breakers.

6.10 LIGHTINGS

Fitting to comply with IRS of equivalent standards. The type and enclosures for light fittings and switches to be determined by the location of the installation. The deck lightings are to be controlled from within the wheelhouse.

Navigation lights to comply with regulation for prevention of collision at sea. Navigation light to be individually controlled from panel in wheelhouse incorporating indicator lamps, changeover switches, and buzzer.

One VHF radio telephone with Digital Selective Calling (DSC), about 25b Watt output and two VHF radio telephone with charger.

One searchlight with wheelhouse control to be fitted on wheelhouse top.

All lighting fixtures and fittings to be of approved marine type.

Open deck illumination in general to be provided by guarded, watertight incandescent type fixtures with guards, shielded to

prevent glare from interfering with navigation and from being seen ahead.

6.11 NAVIGATION LIGHTS

Navigation lights are to be fed through a switch panel fed by two alternative sources of supplies and separately routed.

They are to be to comply statutory rules and requirements.

6.12 RADIO COMMUNICATION EQUIPMENT

The Vessel shall be provided with following radio communication equipments for compliance with RSV notification 2013.

- One (1) VHF radio installation capable of transmitting and receiving radiotelephony on channel 6, channel 13 and channel 16 with Digital Selective Calling (DSC), about 25b Watt output
- One additional VHF radio installation, which could be portable/handheld VHF, capable of transmitting and receiving radiotelephony on channel 6, channel 13 and channel 16.
- One (1) Class B Automatic Identification system (AIS)

6.13 NAVIGATION EQUIPMENT

The Vessel shall be provided with following navigation equipments in compliance with for compliance with RSV notification 2013.

- One (1) Magnetic compass
- One (1) Aldis lamp or search light
- Passage charts
- Tide tables
- One (1) each Sound signal horn and bell meeting requirement of COLREG 1972 (As amended)

6.14 DECKHOUSE TOP

The following are supplied and fitted on the wheelhouse top.

- One searchlight, with control hand wheel inside wheelhouse.
- Electric horn.

6.15 SWITCHES AND SOCKETS

All switches and sockets in accommodation shall be metal cased and in the machinery space and watertight compartments shall be watertight and metal moulded.

SECTION – B

7.0 OIL SPILL RESPONSE SHORE CLEAN-UP EQUIPMENT

TECHNICAL SPECIFICATIONS OF EQUIPMENTS/OSR ACCESSORIES

Flexible Barges: 10 Ton capacity

Quantity : 2 Nos

Temporary Storage :The Flex barge should be able to be moored at sea, or stored on vessels, shorelines or any other stable platform for temporary storage of oils and later collection and disposal.

Engineering: All components of the Flex barge should be engineered to provide safe-working loads during towing.

Filling Point:

Suitable size of fill/discharge fittings with cam lock coupling and suction base, 1X vent fitting, 1xAluminium rear clamp bar with lifting connections. 1x webbing Towing bridle with floatation buoy of suitable weight. 4x webbing grab handles.

Discharge Point

Easily Cam Lock connectable discharge point for transfer from tanks with vent fitting for introducing the Air inside the Flex barge.

Floatation

By flat foam floatation

Aluminum Bow Flotation

The bow section should be manufactured from marine grade Aluminum and must provide flotation and hydrodynamic performance to ensure stable towing in all conditions.

Stable Towing

Shape:

The shape of the Flex barge should be such it provides stability during towing, especially at higher speeds and in the presence of waves and currents.

Shallow Draft : The Flex barge should have a shallow draft enabling access into tidal or shoaled areas.

Visibility:

To ensure high visibility, the Flex barge shall be predominately colored in International Orange.

Deployment

Deployment should be rapid with no tools required.

Fabric Strong , heavy duty and durable; withstand wear and tear
Base – Polyamide/polyester
Coating – Poly urethane / Neoprene
Tensile strength – Not less than 380 kgf/ sq.cm/ 150 Newton per MM
Weight (dry) - approx. 100kg
Chemical Resistance, Resistant to acids, alkalis, solvents
&hydrocarbons
Excellent UV resistance
Operational Temperature - 0o ~ 60oC
Towing Speeds when empty 8 knots and full 4 knots
Buoyancy
Towing Connector
Full size approx. 6.0x2.0x0.9 m
Colour : Black (or) Red
Two inflated airbags along length of tank on the top of both sides
on one side extruded aluminum ASTM 962 standard 1500 kgf/5cm
Valve type 2” PVC valve with cam-lock *2sets
dia. 800mm man enter way *2set
Spare Kit shall be provided with suitable hydraulic hoses with quick
release couplings Kit. Shall include spare for emergency requirement
including spares of suction pump.

1. AIR INFLATABLE BOOMS

Quantity : 200 metres

Manufacture : Shall be manufactured using highest quality components Shall be abrasion, puncture and hydrostatic resistant as per latest appropriate ASTM standards. Shall provide a safe, quick and efficient means of oil Containment and The boom to be so designed that it floats vertically without twisting.

Performance Standards : Shall conform to the minimum performance standards required by appropriate ASTM

Performance Data :All performance data shall be provided to user, including information such as safe towing speed in J/U configuration, safe speed for in-line towing, effectiveness with respect to wave height,

effectiveness with respect to currents, etc. and operations and maintenance manual. The boom should not sink even after cover is severely damaged.

Inflation : Shall be inflatable from a single point source without the need to stop, and open and shut each air chamber manually 300 meter of boom shall be deployable in 10-15 min

Boom Floatation : Cylindrical, Inflatable, Air Chamber

Valves : One way check valves

Buoyancy Chambers : Shall have individual and isolated buoyancy chambers not exceeding 3 to 4 Meters in length

Fabric : Strong and durable; withstand wear and tear

Base : Polyamide/polyester ;

Coating : Poly urethane / Neoprene

Tensile strength – Not less than 200 N/mm

Boom Weight : Minimum 5.5 kg/mtr + 10%

Height when inflated : 600mm to 1200 mm

Freeboard :300mm to 500 mm

Draft : 300mm to 700 mm

Safety: Safe low pressure air source not > 0.03bar

Buoyancy to Weight ratio : 3:1 to 13:1

Ballast : Galvanized Steel Chain

Ballast member : Tensile strength – minimum 70kN

Safe towing speed

Towing Speed in Straight Line Mode : 5 knots

Towing Speed Sweep Mode : 2 knots

Towing Speed with Collected Oil : 0.5 knots.

Usability

The boom should be suitable to be moored at Sea and should suitable to use in high current and in minimum draft up to 2 meter.

1 No. suitable air blower shall be provided .

The above boom shall be delivered on a suitable hydraulically operated boom reel and the size of the reel shall be such that it can accommodate the total quantity of the ordered inflatable boom.

2. U BOOMS / BUSTER BOOMS:

Quantity : 100 metres

Manufacture

Shall be manufactured using highest quality components Shall be abrasion, puncture and hydrostatic resistant as per latest appropriate ASTM standards. Shall provide a safe, quick and efficient means of oil Containment. The boom should not sink even after cover is severely damaged.

Performance Standards

Shall conform to the minimum performance standards required by appropriate ASTM

Performance Data

All performance data shall be provided to user, including information such as safe towing speed in J/U configuration, safe speed for in-line towing, effectiveness with respect to wave height, effectiveness with respect to currents, etc. and operations and maintenance manual

Inflation Shall be inflatable from a double points source without the need to stop, and open and shut each air chamber Manually 200m of boom shall be deployable in 10-15 min

Colour Orange / Red

BOOM

Floatation

Cylindrical, Inflatable, Air Chamber Valves One way check valves

Buoyancy Chambers shall have individual and isolated buoyancy chambers 5 or more chambers / section Chemical Resistance

Resistant to acids, alkalis, solvents and hydrocarbons. U.V. Resistant Fabric Strong and durable; withstand wear and tear.

Base – Polyester / Nylon

Coating – TPU / Neoprene

Tensile strength – 350kgf/5 cm \pm 10%

Boom Weight 1300 kg \pm 10%

Boom Length 200 Metres

Height when inflated 1200mm to 1600 mm (\pm 10%)

Freeboard 400mm to 600 mm (\pm 10%)

Draft 800mm to 1000 mm (\pm 10%)

Safety

Safety low pressure shall conform to the minimum performance standards required by appropriate ASTM

Air Inflation valve

3" Monsun type valves in each chamber

Buoyancy to Weight ratio 20:1

Ballast Galvanized Steel Chain, Dia-12 mm or more

Ballast member

Tensile strength – minimum 70kN

Safe towing Speed

Towing Speed in Straight Line Mode : 5 knots

Towing Speed Sweep Mode : 2 knots

Towing Speed with Collected Oil : 0.5 knts.

Boom connections

Extruded Aluminum ASTM 962 standard (1500 kgf/5cm)

Operational Temperature 0° Celsius to 55° Celsius

Usability

Booms to withstand upto 6 knots current and should be capable of being towed at a speed of 3 knots while approaching spill as well as when oil is collected at apex sections.

Boom reel and power Pack

Suitable boom reel and power pack to be provided for smooth operation and storage of the system.

3. Support boat:

Quantity : 1 No.

As a compliment to the OSR Vessel, a small support Work Boat of steel hull of approximately 4m length with diesel driven out board motor to be provided for carrying out cleaning including beach/shoreline cleaning and for easy deployment of booms and skimmers. The design and beam of the boat shall be such that it can carry atleast 4 persons and a range of cleaning equipments, bins, hand operated dispersant arms etc.

4. Boom Vane:

Quantity : 1 No

A Boom Vane of minimum 0.5 metres suitable for easy deployment of booms and skimmers without boats from shore and towing crafts in shallow waters and beaches . The boom vane shall be suitable for

towing sweep system, deploy equipments, absorbents and for laying booms

The boom vane shall also have dispersant spray arrangement and shall be supplied with complete block and tackle and ropes.

5. Portable Heavy Duty Vacuum Pumps :

Quantity : 1 No.

Recovery Rate 10 cbm/hr \pm 5%,

Diesel Air Cooled Engine, 10 HP \pm 10%,

Weight – 150 kgs. \pm 5%,,

Frame Material: MS,

Tank Material: SUS 304 or similar,

Vacuum Tank capacity : 100 ltrs

Vacuum Pump: Rotary vacuum blower capable of sucking 10 cbm/hr @ 250 mm of Mercury from a height of 5 mtrs.

6. Portable Transfer Pump:

Quantity : 1 No.

Flexible Impeller pump upto 170 lpm + 5%,

Total Head : Upto 10 mtrs+ 5%. Wheel Mounted.

7. Oil Spill Dispersant applicator with Nozzle And Spray arm

Quantity : 6 Nos

Pump Unit Capacity -Approx 60 LPM@3bar

Engine- Diesel Powered with recoil start and exhaust spark arrester

Spray Arm

Length-minimum 4 meters in 2 sections

Material-marine Grade Aluminium

Support Post-3 meter in Galvanised Steel

Nozzle System

Spray Arm should have a minimum of 05 Nos of Nozzle to have drop down pipes of minimum 500 mm.

Nozzle pressure-minimum 3 Bar, Design: shall be appropriate ASTM complaint.

15m Hoses(2 nos) with required couplings to connect up applicator to the pump and suction tank.

8. Quick Erect /Temporary Storage Foldable tank for Shore Clean up

Quantity : 2 Nos
Material of Construction : Poly urethane / Neoprene /Nylon
Coated polyester with tensile strength of 150 KN per mm as per ASTM
D-5035 /D751
Tested and Certified by TPIA should not be more than six month old.
Capacity – not less than 2 tons.

9. Boulder Cleaning Equipment:

Quantity : 1 No.
A complete set of Boulder Cleaning Equipment with necessary extension, hoses and adaptor for connecting to the tank/ portable vaccum pump mentioned above. A water heater for use of cleaning and other purposes shall be included in the system.

10. Shore sealing water Ballast Boom:

Quantity – 200 Metres.
Application: It provides seal to the bottom when the tide goes out. It joins to conventional booms in deeper water. Useful when doing shoreline cleaning, using water flooding method.
Description: The boom uses two water-filled lower chambers for ballast and stability. The top chamber is air inflated for buoyancy. It is made of a rugged urethane coated fabric for maximum abrasion and puncture resistance.
Technical Data: Boom section : 15 m (50 ft); Air chamber: 35 cm (14 in);
Water chambers : 25 cm (9 in)
Ancillaries : Rope, Anchors, Buoys

11. Oleophilic skimmer

Quantity : 1 No.
It should include a drum/brush/skimmer, power pack and necessary pump for transfer of oil. It should have robust and reliable design. It should be capable of recovering both light and heavy oils with less water content. Spec:

Oil recovery rate : 20 TPM
Number of drums : 2
Wiper blades: Self adjusting. (spare wiper blades to be included)
Drive: pneumatic or hydraulic

12. Sorbent Boom Pack:

Quantity : 500 mtrs.
Dimension: Cylindrical shaped : Dia 25 to 30 cm.
Material : Synthetic sorbent material. Natural sorbents such as treated peat moss, cork, cellulose etc. are also acceptable.

Sorbent capacity : Minimum 20 gallons / bale. 25 to 30 cm diameter X 3 meter length X 2 nos/bale

Other Requirement

Linkable booms to contain and absorb spills on or off water. The built-in stainless steel connectors to link the booms together to cover large areas of water. Booms to be encased with Lint free poly sock that prevents shedding.

13. Absorbent Pads:

Quantity : 1000 Nos.
Assorted sizes of Absorbent pads to be supplied.
Material : Synthetic sorbent material. Natural sorbents such as treated peat moss, cork, cellulose etc. are also acceptable.
Sorbent capacity : Minimum 20 gallons / bale. 25 to 30 cm diameter X 3 meter length X 2 nos/bale.

14. Shore Cleanup OSD Applicator:

Quantity : 5 No.
Type : Back Pack Type Applicator.
Drive : Hand Operated/ piston pump
Working Pressure : 3 to 4 Bar,
Suction Volume : 2 ltrs/min,
Tank capacity : 15 - 25 ltrs,
Light Weight : Approx. 10 to 15 kg.
Capable of neat and diluted spray and easily portable.

Note: The Tenderer shall supply the item Sl.No.2,3,6,8,10,11,12,13,14 & 15 of Section B within a period of 4 months from the date of agreement.

SECTION – C

Supply of Flex Barges & OSR Shoreline Clean up equipments.

1. Flex barges of 10T capacity

Quantity : 2 Nos

Temporary Storage : The Flex Barge should be able to be moored at sea. or stored on vessels, shorelines or any other stable platform for collection and temporary storage of oils and later disposal.

All components of the Flex Barge should be designed and manufactured for safe working loads during towing and the operational temperature 0 to 60 °centigrade.

Material : Moulded Polychloroprene rubber and exterior Hypalon layer for resistance to abrasion and UV with two plies of polyester/polymide reinforcement fabric. Fabric; Fabric shall be strong, heavy duty, durable, withstand wear and tear, chemicals and Resistant to acids, alkalis, solvents and hydrocarbons.

Coating : Poly urethane/Neoprene

Construction method : Total cross vulcanization in minimum 70 tonne press and constructed as a tube with bolted ends.

Tensile strength fabric : Minimum 500 KN/mm tensile strength and as per ASTM D-5035/D 751 or latest ASTM standards.

Abrasion resistance: Minimum 88,000 cycles of 250 gram weighted abrasion wheel H18 to remove outer layer.

Visibility : Toflex high visibility the Flex barge shall be predominantly coloured in International orange or Black with reflective yellow stripes.

Repair Method: Cold glue

Deflated condition: Completely flat for winding/fleeting/rolling.

Cleaning: By hot pressure wash upto 70 degrees C/detergent/scrapers.

End Connector: Reinforced aluminium individual

Storage: In a wooden box with loading/unloading ramp/provision and secured to prevent rodent entry.

Filling Point: Suitable filling/discharge fittings with cam lock coupling and suction base, vent fitting, Aluminium rear clamp bar with lifting connections, webbing Towing bridle with floatation buoy of suitable weight. Also to provide minimum 4 Nos. webbing grab handles.

Discharge Point: Easily Cam Lock connectable discharge point for transfer from tanks with vent fitting for introducing the air inside the Flex barge.

Aluminium Bow Floatation: The bow section should be manufactured from marine grade Aluminium and must provide flotation and hydrodynamic performance to ensure stable towing in all conditions.

Towing: The shape of the Flex barge should be such it provides stability during towing, in all conditions especially at higher speeds even in rough sea conditions with waves and currents.

Shallow Draft: The Flex barge should have a shallow draft enabling access into tidal or shoaled areas.

Deployment: Deployment should be rapid with no tools required.

Towing Speeds: The Flex barge shall be stable while towing in empty or any loaded condition and at minimum towing speeds of 8 knots when empty and 4 knots in fully loaded condition.

Two inflated airbags all along the length of tank on the top and on one side extruded aluminium of ASTM 962 standard.

Suitable hydraulic hoses with quick release couplings, necessary valves, cam lock and man enter way to provide.

Spares: The minimum required spares and spare kit for 5 years maintenance shall be supplied and include spares for suction pump and emergency requirements.

2. Portable vacuum system - 1 no.

The vacuum system shall be a compact, portable and easy to operate unit. The unit shall skim at a rapid recovery rate a variety of spilled liquids ranging from light oils to sludge from ground or water surface.

The equipment should be suitable for shore line and beach cleaning operations and capable of handling solid substances of minimum 1" in size.

The entire and other main equipments shall be placed on a trolley with necessary mountings/vibration dampers and the trolley shall be towable on road and off road.

The system shall consist of three main components viz.,

- The Diesel driven vacuum pump generates suction to draw the spilled oils/sludge from water or land.
 - The transfer pump with suitable drive. The drive for transfer pump may also be given from the same diesel engine driving the vacuum pump.
 - The hopper with vacuum head and adjustable stand to place oil barrel underneath to collect oil. Alternately a collection tank is to be provided.
 - Accessories/other equipments required to carry out the following functions with the supplied Vacuum system shall also be provided.
- 2) A high pressure water jet for cleaning
 - 3) Suction lance
 - 4) Chemical dosing
 - 5) Weir/Skimmr suction head
 - 6) Boulder cleaner head
 - 7) Arrangement to carry the accessories in back straps
 - 8) Necessary accessories, Valves, reducers, cam locks, control valve shut off/relief valves to control vacuum, oil filling couplings, level indicators and vacuum and other gauges, hoses etc.

Specifications;

Diesel driven Vacuum pump of minimum 180 lpm, 70 cfm, 0.8bar/13psi (vacuum) and suitable speed fitted with selector handle.

Diesel engine: Suitable diesel engine to operate both the vacuum pump and transfer pump with hand and electric start and the rating shall be optimum for simultaneous operation of both the equipments.

Vaccum tank comprising of vacuum head and hopper with necessary fittings and accessories.

Portable Transfer Pump shall be suitable for other spill response equipments with or without this diesel engine.

The transfer pump shall be suitable for other spill response equipments with or without this diesel engine.

Suitable suction and discharge cam locks for all the functions shall also be provided

Hoses and fittings: 20 metres vacuum hose with hand lance, 15 metres suction hose and 15 m pump discharge hose.

Weir/Skimmer head: Light weight, floating suction skimmer head that can be deployed even in shallow waters and only water on the ground by attaching to a suitable suction pump or vacuum pump or diaphragm pump with necessary cam lock and suction hose fittings, suction and shut off/by pass valves.

Boulder cleaning head fitted to 2" suction lance and Hose connector with 2" cam lock with suitable Brush and with necessary extension, hoses and adaptor for connecting to the tank/portable vacuum pump mentioned above.

Spares: The minimum required spares and spare kit for 5 years maintenance shall be supplied.

3. Absorbent Pads

Quantity: 1000 Nos.

Absorbent pads of size 1 mx 1m or of area minimum 1 sq.ft.

Material: Synthetic sorbent material or natural sorbents such as treated peat moss, cork, cellulose etc.

Absorbent capacity and performance shall comply to relevant ASTM standards.

4. Storage Container and Trolley Cum Heavy Lift - 1 no.

Container: A compact aluminium or corrosion resistant material container with racks or storing all the above beach cleaning equipments shall be provided. The container shall be fitted with wheels for easy transportation. The container shall also be provided with fork lift channels and lifting eyes arrangements.

BATTERY OPERATED TROLLEY CUM HEAVY LIFT: A battery operated trolley with Heavy lift arrangement of minimum lifting capacity of ½ ton for easy handling and quick transportation of spill response equipments from store to vessels/vehicles in an emergency shall be provided. The trolley cum heavy lift shall be simple to operate and shift weights with minimum persons and have less maintenance.

5. Double diaphragm Suction Pump - 1 no.

The double diaphragm can be suitable for operation in shallow waters and also having lifting ability from harbour water and tanks upto 9 mtrs. and handle solids of sizes of minimum 0.25 inches. The pumping action shall not emulsify oil and water and allow rapid gravity suppression.

The pump shall be portable and compact. The pump shall be hydraulically driven and the speed and out put shall be infinitely variable. The pump shall have the ability to self prime and run dry.

Technical Specification:

Capacity	: 30 m ³ per hour (Minimum)
Delivery Head	: 30 mtrs (minimum)
Self priming/suction lift	: 9 mtrs. (minimum)
Suitable hydraulic power unit	: To match the required maximum hydraulic flow rate and pressure.

The pump shall also be supplied with necessary hydraulic connections and hoses.

Spares: The minimum required spares and spare kit for 5 years maintenance shall be supplied.

6. Light Weight Temporary Storage Tanks - 2 nos.

Capacity	: 3 to 5 m ³
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The tank shall be of Quick Erect/Temporary Storage Foldable tank for shore clean up.

The tank shall be provided with clips on roof cover and lined with suitable polythene material.

The tank shall be provided with the following:

Pipe saddle	: To safety pump over tank without tools.
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Ground mat : To provide extra protection on rough/sharp ground.
Hand Pump : Output of 110 l/min.
Accessories : inlet and Outlet hoses, Decanting valve and Pipe kit for emptying and water level control.

Material of construction: Poly urethane/Neoprene/Nylon Coated Polyester with tensile strength of 150 KN per mm as per ASTM D-5035/D 751 or latest ASTM standard.

Spares: The minimum required spares and spare kit for 5 years maintenance shall be supplied.

Note: The Tenderer shall supply the item Sl.No. 3 & 5 of Section C within a period of 4 months from the date of agreement.

CHIEF MECHANICAL ENGINEER

APPENDIX-1

INVENTORIES, TOOLS AND SPARE PARTS

General

Within the frame work of he contract inventories tools and spare parts have to be supplied by the contractor. All parts shall be clean, well preserved for tropical conditions.

The items shall be supplied as much as possible of standard make and from a restricted number of suppliers.

Deck Inventory

- 4 portable rubber fenders
- 4 mooring ropes
- 1 boat hook

Engine room inventory

- 1 electric torch
- 1 claw hammer
- 1 hack saw
- 1 iron saw
- 1 set of steel files
- 1 set of bearing pullers
- 1 set of screw drivers
- 1 set of combination pliers
- 1 grease gun
- 1 oil can
- 1 set of stranded tools for each engine
- 1 set of special tools for replacing of parts, replacing after 8000 running hours
- 1 propeller nut/distracting tool.

Spare Parts

The spare parts shall consist of:

- All spare parts as required by the Class for the service intended.
- Standard spare parts according manufacturer's standard.

- Extra spare parts.

(N.B. including consumable parts and liquids, excluding fuel oil and lubricants.

The spare parts shall include all parts for mounting such as bolts, nuts, pins, seals, bearings, bushes etc.

The extra parts to be itemized shall include in any case the following items:

For propulsion diesel engines (consumables based on 2500 running hours.

- Diesel engine cpl. including clutch coupling if applicable	1
- intake and exhaust valve	1 set
- high pressure fuel pipes	1 set
- fuel injectors	1 set
- fuel hoses	1 set
- cooling water pump	1
- starter motor cpl.	1
- 24 V alternator cpl.	1
- V-belts	1 set
- cooling water thermostat	1
- gaskets/ seals/ O-rings	2 sets
- fuel filter elements	10
-lubrication oil filter elements	20
- air filter elements	10
- tacho transmitter	1
- lubrication oil pressure transmitter	1
- Cooling water temperature transmitter	1
- lubrication oil pressure alarm switch	1
- cooling water temperature alarm switch	1
- start and stop push buttons	1 set
- key switch	1
- tachometer	1
- lubrication oil pressure indicator	1
- cooling water temperature indicator	1
- alarm buzzer	1
- start switch	1
- stop) solenoid	1

For reverse reduction gear or clutch coupling respectively:

- reverse reduction gearbox cpl.	1
- bearings	1 set
- friction plates	1 set
- hydraulic oil pump cpl-	1
- seals and gaskets	1 set

For propeller shaft:

- propeller shaft cpl.	1
- propeller shaft bearings cpl.	1 set
- propeller	1

For pumps:

- bearings	1 set
- seals and gaskets	1 set

NOTE:

With "set is meant the total number of parts as fitted in one (1) diesel engine, gearbox, coupling, etc.

Electrical installation:

For generators:

- bearings	2 sets
- air filter elements	2 sets
- Diodes for excitation	2 sets
- recommended by the manufacturer	1 set

For motors:

- bearings	1 set for each type of motor
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For switch- and distribution boards:

- circuit breakers for generator	1 piece
- small circuit breakers	2 pcs of each type used
- relays	1 for each 6 installed
- fuses	20 pcs for each type used
- fuse bases	3 pcs of each type used
- signal lights	2 pcs of each type used

- bulbs for signal lights	10 pcs
- terminals	10 pcs of each type used
- switches	1 pce of each type used
For lighting installation:	
- bulbs	: 200 % each type used
- globes of fixtures	: 1 pce of each type used
- switches	: 2 pce of each type used
- socket-outlets	: 2 pce of each type used
- plugs	: 5 pce of each type used
For engine alarm installation:	
- printed circuit boards	: 1 pce of each type used
- bulbs for flashing light	: 2 pce
For rectifiers and inverter:	
- fuses	: 2 pce of each type used
- bulbs	: 2 pce of each type used
- recommended by the manufacturer	: 1 set
Window wipers:	
- blades	: 4 pcs
Horn:	
- compressor	: 1 pce
VHF:	
- recommended by the manufacturer:	1 set
miscellaneous:	
-limit switch used	: 1 pce of each type
- flexible cable 2 x 2.5 mm ²	: 25 metres
- distilled water for batteries	: 3 litres

PART 3

CONTRACT

Section VI
General Conditions of Contract
Table of Clauses

1. Definitions
2. Contract Documents
3. Fraud and Corruption
4. Interpretation
5. Language
6. Joint Venture, Consortium or Association
7. Eligibility
8. Notices
9. Governing Law
10. Settlement of Disputes
11. Scope of Supply
12. Delivery and Documents
13. Contractor 's Responsibilities
14. Contract Price
15. Terms of Payment
16. Taxes and Duties
17. Performance Guarantee
18. Copyright
19. Confidential Information
20. Subcontracting
21. Specifications and Standards
22. Packing and Documents
23. Insurance
24. Transportation
25. Inspections, tests, taking over and commissioning
26. Liquidated Damages
27. Warranty
28. Patent Indemnity
29. Limitation of Liability
30. Change in Laws and Regulations
31. Force Majeure
32. Change Orders and Contract Amendments
33. Extensions of Time
34. Termination
35. Assignment
36. Export Restriction
37. Site Activities
38. Employer's Decision
39. Employment of Employer's Personnel
40. Licenses

Section VI

GENERAL CONDITIONS OF CONTRACT

1.0 Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

“Employer” means the Board of Trustees of Port of “Chennai Port Trust” or its representatives or *Chief Mechanical Engineer* or any other person or firm nominated by the Employer or as specified in SCC.

“Contract” means the Contract Agreement entered into between the Employer and the Contractor, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.

“Contractor” means the natural person, private or government entity, or a combination of the above, whose Tender to perform the Contract has been accepted by the Employer and is named as such in the Contract Agreement or his representative who is duly authorized to deal with the Contract.

“Contract Documents” means the documents listed in the Contract Agreement, including any amendments thereto.

“Contract Price” means the price payable to the Contractor as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.

“Day” means calendar day.

“Completion” means the fulfillment of the supply of Goods and Related Services by the Contractor in accordance with the terms and conditions set forth in the Contract.

“Commercial Use” means, use of Goods, which the contractor contemplates or of which it is commercially capable after enacting at Project site.

“GCC” means the General Conditions of Contract.

“Goods” means all of the commodities, raw material, machinery and equipment, and/or other materials that the Contractor is required to supply to the Employer under the Contract.

“Employer’s Country” is INDIA.

“Tender” means the offer of the Contractor along with all other relevant documents as referred to in the Contract.

“Related Services” means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other such obligations of the Contractor under the Contract.

“SCC” means the Special Conditions of Contract.

“The Project Site,” where applicable, means the place named in the SCC and in pursuant to ITT clause 14.5 a (iii).

“Engineer” means Employee of Employer or any other person or firm, nominated by the Employer or as specified in **SCC**.

2.0 Contract Documents

2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3.0 Fraud and Corruption

The Employer as well as Tenderers, Contractor, Sub-Contractors and Consultants observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Employer: **defines, for the purposes of this provision, the terms set forth below as follows:**

“Corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution; and

“Fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;

“Collusive practice” means a scheme or arrangement between two or more Tenderers, designed to establish Tender prices at artificial, non competitive levels; and;

“Coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

will black list a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded, if it at any time determines that they have, directly or through an agent, engaged, in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing and

will have the right to require that Contractors to permit the Employer to inspect their accounts and records and other documents relating to the Tender submission and contract performance.

4.0 Interpretation

4.1. If the context so requires it, singular means plural and vice versa.

4.2 Entire Agreement

The Contract constitutes the entire agreement between the Employer and the Contractor and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.

4.3 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.4 Non waiver

Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

Any waiver of a party’s rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized

representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.5 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

4.6 Employer's Lien

The Employer shall have lien on and over all or any money that may become due and payable to the contractor under those present and/or also on and over Performance Guarantee lodged under this contract which may become payable to the contractor under the conditions on that behalf herein contained for or in respect of any money of any set of all or any of these moneys or Performance Guarantee against any debit or sum that may become due and payable to the Employer by the Contractor either alone or jointly with another or other and either under this or under any other contracts or transactions of any nature whatsoever between the Employer and the Contractor.

4.7 Execution

The contractor/contractors shall and will in consideration of the payment to be made to him/them as hereinafter provided construct, execute, and to the works described in the specifications and in the manner and upon the terms set forth in the specification and in the manner and in accordance with the drawings at the respective rates entered in the Price Schedule in accordance with such other drawings and instructions as may pursuant to the provisions hereinafter contained from time to time be pointed out, furnished and given to him/them by the Employer and/or the Engineer and under the subject to the terms, stipulations and provisions of Contract.

5.0 Language

- 5.1. The Contract as well as all correspondence and documents relating to the Contract exchanged by the Contractor and the Employer, shall be written in "ENGLISH". Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified, in which case, for

purposes of interpretation of the Contract, this translation shall govern.

- 5.2 The Contractor shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Contractor.

6.0 Joint Venture, Consortium or Association

Not Applicable.

7.0 Eligibility

- 7.1 A Contractor or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.

8.0 Notices

- 8.1. Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the **SCC**. The term “in writing” means communicated in written form with proof of receipt.
- 8.2 A notice shall be effective when delivered or on the notice’s effective date, whichever is later.

9.0 Governing Law

- 9.1 The Contract shall be governed by and interpreted in accordance with the laws of India, unless otherwise specified in the **SCC**.

9.2 Dock Safety

For the work carried out within dock area in the vicinity of any wharf or quay, the contractors shall abide by all the provisions of the Dock Workers (Safety, Health & Welfare) Regulation 1990.

9.3 Labour/ Minimum wages

- a) The contractor or his sub-contractors shall not employ a young child who has not completed his fifteenth year of age. He/They shall also not employ an adolescent who has not completed his eighteenth year unless he is certified fit for the work as an adult as prescribed under Clause (b) of sub-section (2) of section 69 of the Factories Act, 1948.

b) The contractor or his sub-contractors shall also see that all the provisions set forth under the Minimum Wages Act as amended from time to time are fully complied with by him/them and shall maintain necessary registers and records for payment of wages, overtime, etc. made to his/their workmen as required by the Conciliation Officer (Central), Ministry of Labour, Government of India or such authorised persons appointed by Central or State Government.

c) The contractor/contractors shall also see that the provisions regarding employment of young persons covered by the Employment of Children Act, 1938 and the Factories Act, 1948 as amended from time to time shall be fully complied with.

d) Notwithstanding anything herein contained the contractor shall comply with all the provisions of the contract labour (Regulation and Abolition) Act, 1970 and Rules and Regulations made there under as amended from time to time if applicable.

e) The rates quoted by the contractors in the Price Schedule shall be deemed to include expenses whatsoever that the contractor may be required to incur for compliance with the provisions of the above Acts.

f) In pursuance of Section 21 of the above Act and Rule 25(2)(V)(A) framed thereof, the Tenderers should note that in cases where the workmen employed by them to perform the same and similar kind of work as the workmen directly employed by the Employer, the wage rate of all category of workmen shall be in accordance with the statement of the Employer's Schedule of Rates revised from time to time. The wage rates in respect of categories of workmen which are not included in the Employer's Schedule shall not be less than those specified in the Schedule of "Fair Wages". The current statement of the Employer's Schedule of Rates is annexed hereto.

g) The contractor shall make his own arrangements for the engagement of all labour, preferably local.

h) The Contractor shall also comply fully with the provisions of the payment of Wages Act, 1936.

i) If any enhancement in the rates of Wages become payable as a result of the implementation of the Chief Labour Commissioner's interpretation of the Contract Labour (Regulations and Abolitions) Central Rules, 1971 including an increase of the Wages, the same

shall be borne by the contractor/contractors. The contractor shall be responsible for the observance by his sub-contractors, of the foregoing provisions/precautions.

j) The contractor shall make necessary arrangements for the representative of the Employer and/or his representative to witness the payment made by the Contractor to his labourers. The contractor shall also submit periodical returns of labour employed by him and wages paid, to the Employer's representatives.

9.4 **Fair wages :**

a) The contractor shall pay the labourer engaged by him on the work not less than fair wages which expression shall mean whether for time or piece work the respective rates of wages as fixed by the Central Public Works Department as Fair Wages payable to the different categories of labourers. However, subject to the other provisions of any other law for the time being in force in the country, the minimum rates of wages for any person/persons below 18 years of age and for disabled persons be 70% respectively of the rates payable to adult workers of the appropriate category.

b) The Contractor shall notwithstanding the provision of any contract to the contrary cause to be paid in fair wages to the labourers directly engaged on the works including any labour engaged by the sub-contractors in connection with the said work, as if the labourer had been immediately employed by him.

c) Display of notices regarding wages, etc.,

The Contractor shall, before he commences his work of contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition at conspicuous places on the work site notices in English and in the local Indian language spoken by the majority of the workers stating therein the rates of wages which have been fixed as fair wages and the hours of work for which such wages are earned and send a copy of such notices to the Employer.

d) Wages book and wage slips

The contractor shall maintain:

X) A wage book of each worker in such forms as may be convenient but the same shall include the following particulars:-

- i)Rate of daily or monthly wages.
- ii)Nature of work on which employed.
- iii)Total No. of days worked during each wage period.
- iv)Total amount payable for the work during each wage period.
- v) All deductions made from the wages with an indication in each case of the ground for which the deductions are made.
- vi)Wages actually paid for each wage period.

Y) A Wage slip for each worker employed on work provided that the Employer may grant exemption from the maintenance of the wage slips, if in his opinion not more than 19 persons are likely to be employed directly or indirectly on the work but in any case he will have to maintain wage books as specified in Clause.

e) Preservation of books and slips

The wage books and the wage slips shall be preserved for a period of not less than 12 months after the date of last entry made in it.

f) Inspection of books and slips

The contractor shall allow inspection of the aforesaid wage books and wage slips to any of his workers or to an agent at a convenient time and place after due notice is received to the Employer or any other person authorized by him on his behalf.

(g) Powers of the Employer to make Investigation/enquiries

The Employer or any other person authorized by him on his behalf shall have power to make enquiries with a view to ascertaining the enforcement due and proper observance of the "Fair Wages Clause". He shall also have the power to investigate into any complaint regarding any default made by the contractor or sub-contractor in regard to such provision.

The Employer shall have the right to deduct from the money due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-payment of the aforesaid fair wages, except on account of any deductions that may be permissible under any law for the time being in force.

(h) Representation of parties

a) A worker shall be entitled to be represented in any investigation or enquiry under this clause by:

(i) An Officer of registered Trade Unions of which he is a member. Any Officer of Federation of Trade Union to the Trade Union referred to in the previous sub-clause is affiliated. Where the worker is not a member of any registered Trade Union, or of any approved Trade Union by an Officer of a registered Trade Union connected with industry in which the worker is employed.

b) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by an officer of an Association of Employers' of which he is a member.

c) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

9.5 Work men compensation

The contractor shall indemnify the Employer in the event of the Trustees being held liable to pay compensations for injury to any of the contractor's servants or workmen under the Indian Workmen's Compensation Act, 1923 as amended from time to time and shall take out an Insurance Policy covering all risks under the Act and shall keep the same renewed from time to time as necessary for the duration of the contract and produce the same to the Employer On Demand whenever so required.

9.6 ESI Clause

The details of employees proposed to be engaged shall be furnished to this office before the commencement of the work.

(a) As per the Govt. Notification dated 20.07.2009, Chennai Port Trust has registered under the ESI Act on 26.09.2012 with ESI Corporation and provision of ESI Act, 1948 are applicable to Chennai Port Trust, a Social Security Act, is applicable to Factories using power and employing 10 or more personnel and establishment employing 20 or more persons and drawing wages/salary upto Rs.15,000/- per month. Workers covered under ESI Act, are entitled for full medical care for self and family. Besides, cash benefit in the event of sickness, maternity and employment injury. Accordingly, the contractual/casual employees drawing wages upto

Rs.15,000/- per month employed either directly by Port Trust or through contractor are covered under ESI Act, 1948. It is obligatory on the part of the employer to calculate and remit ESI contribution comprising of employers' share of 4.75% plus employees' share of 1.75% which is payable on or before 21st of the following month, to which the salary relates.

- (b) In case of Contractor employs more than 20 employees, they should register their name with ESI as per ESI Act, 1948 and obtain ESI Code. Both Employers share of 4.75% and Employees contribution of 1.75% (recovered from employees), totally 6.5% to be paid as contribution to ESI in their Code on or before 21st of following month to which the salary relates and acknowledgement for the same shall be submitted to the Port while claiming the bill. The bill without the acknowledgment of ESI contribution will not be entertained. In case the contractor has not paid the ESI contribution same will be recovered in the running bill and paid to the ESI Corporation in contractor's code. The delay in payment of contribution payable under the Act may be recovered as an arrear of Land Revenue.
- (c) In case the contractor employs less than 20 employees, the list of employees' names, their father's name, identification proof, one passport photo shall be submitted to the Port Trust. The contribution of ESI amount, both Employers share of 4.75% and Employees contribution of 1.75% (recovered from Employees salary), totally 6.5% shall be paid by the Contractor in the Chennai Port Trust Code on or before 21st of the following month to which the salary relates or otherwise payment to the contractor will be withheld. If the contractor fails to comply with the above instruction, then the Principal Employer (Chennai Port Trust) will make payment to the ESI Corporation. Such amount will be deducted from any amount due to the contractor. The delay in payment of contribution payable under the Act may be recovered as, then either the Employer or the Contractor may give notice an arrear of Land Revenue.
- (d)
 - i) As per the above government Notification i) All intending tenderer at the time of Tender shall disclose all necessary documents as to whether they are covered under ESI Act or not.
 - ii) In case they are covered under ESI Act, they have to furnish the details of registration.
 - iii) In case the tenderer does not possess ESI Registration at the time of participation in the Tender, then they should obtain registration under ESI Regulations before award of the work by Chennai Port Trust and submit the same within 30 days from the date of issue of

work order. Any payment towards the work order will be made only after the ESI registration.

iv) The Tenderer shall submit his first bill together with evidence of having obtained registration under ESI regulations and only then the bill will be processed for payment. Subsequently, the Tenderer should periodically submit to Chennai Port the Form 6 prescribed under ESI Regulations along with the proof for having remitted his dues under ESI Regulations in respect of the workers / labours employed for the work awarded by Chennai Port to facilitate making payment for the bills of the Contractor.

v) In respect of workers engaged by the successful bidder even for the work carried out in the contractor premises all his employees are to be enrolled for ESI contribution. In case the successful bidder is not holding the ESI code number the employee contribution at 1.75% and the employer's contribution at 4.75% of the wages paid by Contractor will be deducted from the bill payable to the contractor and remitted to ESIC.

10.0 Settlement of Disputes

10.1 The Employer and the Contractor shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

10.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the **SCC**.

10.3 Notwithstanding any reference to arbitration herein,

(a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

(b) the Employer shall pay the Contractor any amount due the Contractor.

11.0 Scope of Supply

- 11.1 The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.

12.0 Delivery and Documents

- 12.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of shipping and other documents to be furnished by the Contractor are specified in the **SCC** to the Address specified in accordance with GCC clause 8.1. The Goods and related services shall be delivered to the Project site in accordance with ITT clause 14.5.

13.0 Contractor's Responsibilities

- 13.1 The Contractor shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 11, and the Delivery and Completion Schedule, as per GCC Clause 12.

13.2 Phasing of work:

The contractor will be required to furnish a phased programme of the works as to how he intends to complete the work to the Employer immediately on receipt of the work order and to proceed with the preliminary preparations. The contractor shall indicate separate definite times for completion of various parts of the work. He will be required to adhere to such programme so as to complete the entire work within the stipulated completion period. Within fifteen days from the receipt of acceptance of offer letter, the successful Tenderer/ contractor shall submit a detailed computerized squared network chart (PERT/CPM Chart) with month wise milestones indicating clearly the physical and financial progress of the work free of cost to the Employer. The Employer will monitor the progress of work in accordance with the chart so submitted. Should there be any sort of delay attributed to any reason whether on part of this Employer or on the Contractor; the contractor shall make available a revised squared Network Chart PERT/CPM with original actual scheduled dates and fresh revised dates separately for each milestone as and when requested by the Employer free of cost. This arrangement will continue till the deliveries, erection and commissioning are enacted and the contract work completed. The PERT/CPM chart should be

computerized and easily reproducible/modified. The soft copy of the PERT/CPM network should also be made available to the Employer free of cost along with the prints of the chart.

14.0 Contract Price

Prices charged by the Contractor for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Contractor in its Tender, with the exception of any price adjustments authorized in the **SCC**.

Normally no variable rates in the Price Schedule will be entertained. However, if any Tenderer insists on such provision whereby variations in costs of controlled materials only over or under certain basic rates are intended to be on Employer's account, all such basic rates should be submitted with the tender. A suitable clause will then be inserted in the Formal Agreement mentioned in ITT Clause 43 whereby the successful Tenderer shall be required to obtain prior written approval of the Engineer for any expenditure against which the Employer may become liable for extra payment, shall be required to submit to the Engineer such periodical statements and documentary evidence as may be directed by him from time to time. The books of the successful Tenderer shall be open for inspection by a responsible officer of the Employer. Variation in the rates of other materials and labour will not be entertained.

15.0 Terms of Payment

- 15.1. The Contract Price, (including any Advance Payments, if applicable,) shall be paid as specified in the **SCC**.
- 15.2. The Contractor's request for payment shall be made to the Employer in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 12 and upon fulfillment of all other obligations stipulated in the Contract.
- 15.3. Payments shall be made promptly by the Employer, but in no case later than Thirty (30) days after submission of an invoice and other relevant Documents/ certificates and on request for payment by the Contractor and after the Employer has accepted it.
- 15.4. The currencies in which payments shall be made to the Contractor under this Contract shall be those in which the Tender price is expressed.

- 15.5. The Contractor shall note that no interest be payable by the Employer on Retention Money or for any Delayed Payments unless otherwise stipulated in **SCC**.
- 15.6. According to the provisions of the Income Tax Act, as amended by Section 28 of the Finance Bill, 1972, an amount equal to 2% of the sum payable or any rate as applicable as per Tax laws as on the date of payment, under the contract will be deducted from each bill as Income Tax on income comprised therein or at the time of payment thereof. For purpose of this deduction gross amount of the bill after deduction only of the amount of rebate for prompt payment, if any, will be taken into account. The amount on which the tax is to be deducted will be rounded off to the nearest multiple of ten rupees and any paise included in the amount will be ignored and if the last figure in the amount is less than five rupees it will be reduced to next lower amount which will be multiple of ten, but if the last figure in the amount is five rupees or more, the amount will be a multiple of ten. The Amount of tax will be rounded off to the nearest rupee, and fifty paise will be ignored. Any stipulation by the Tenderers that Income Tax so deductible from the bills should be borne by the Employer will result in the summary rejection of his tender.
- 15.7 No payment of any bills or any advances will be made till the stamped acceptance letter /the contract agreement is executed and the PERT/CPM chart indicating various activities, events, month wise milestones, scheduled contractual completion periods for each activity is furnished.

16.0 Taxes

- 16.1 The firm shall furnish the Tax Invoice as per GST Act/Rules in the name of Chennai Port Trust by mentioning the GSTIN of ChPT and indicating amounts of GST separately. The GSTIN of Chennai Port Trust is 33AAALC0025BIZ9.

The firm shall remit the GST amount in the invoice to the Government within the due dates and also file the returns by mentioning the GSTIN of ChPT to enable ChPT to avail applicable input tax credit.

Chennai Port Trust shall reimburse the GST component mentioned in the invoice to the Contractor/Supplier/Vendor only to the extent and on reflection of the same under the GSTIN of ChPT in the GST Web Portal.

Applicable statutory recoveries including TDS under Income Tax, TDS under GST etc., will be deducted/recovered while accounting for or

making payments to the Contractor/Supplier/Vendor as per the applicable laws.

16.2 Financial Evaluation:

The financial evaluation of the Tender will be based on the Base Price of supply of goods or services or both excluding the applicable GST.

17.0. Security Deposit/Performance Guarantee

17.1 The Security Deposit of 10% of the Contract value shall be submitted by the successful bidder within 21 days from the date of acceptance or 7th day of the issue of work order.

17.2 Performance Security may be submitted as Account Payee Demand Draft/ Fixed Deposit Receipt from a Commercial Bank, Bank Guarantee from a Commercial Bank or online payment in an acceptable form safeguarding the purchasers interest in all respects in favour of Chairman, Chennai Port Trust payable at Chennai.

17.3 In case the Contractor fails to remit SD within the stipulated period, the department shall initiate action for forfeiture of EMD within a period of 15 days.

17.4 If the Department decided to condone the delayed payment of Security Deposit with justification, the SD have to be remitted along with interest @ 18% provided the maximum period of condonation does not exceed 15 days from the stipulated period.

17.5 Security Deposit paid in any mode except as specified above will not be taken into account and the concerned tender will be rejected.

17.6 Performance Guarantee / Security Deposit shall be refunded after completion of the guarantee period of two years or extended guarantee period.

18.0 Copyright

18.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor, or if they are furnished to the Employer directly or through the Contractor by any third party, including Contractors of materials, the copyright in such materials shall remain vested in such third party.

19.0 Confidential Information

19.1 The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Subcontractor such documents, data, and other information it receives from the Employer to the extent required for the Subcontractor to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Contractor under GCC Clause 19.

19.2 The Employer shall not use such documents, data, and other information received from the Contractor for any purposes unrelated to the contract. Similarly, the Contractor shall not use such documents, data, and other information received from the Employer for any purpose other than the performance of the Contract.

19.3 The obligation of a party under GCC Sub-Clauses 19.1 and 19.2 above, however, shall not apply to information that:

now or hereafter enters the public domain through no fault of that party;

can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or

otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

19.4 The above provisions of GCC Clause 19 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

19.5 The provisions of GCC Clause 19 shall survive completion or termination, for whatever reason, of the Contract.

20.0 Subcontracting

20.1 The contractor shall notify the Employer in writing of all the sub-contracts awarded under the contract, if not already specified in the

tender, such notification, in the original tender or later shall not relieve the contractor from any of its obligations, duties, responsibility, liability under the contract.

20.2 Sub-contractor will comply with the provisions of GCC clauses 3, 7, 19.

21.0 Specifications and Standards

21.1 Technical Specifications and Drawings

The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section V, Schedule of Requirements and when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.

The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Employer, by giving a notice of such disclaimer to the Employer.

(c)Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Employer and shall be treated in accordance with GCC Clause 33.

21.2 In case the contractor fail to Supply the said materials as herein provided or in case he/they shall fail to replace any parts of any materials that may be rejected as herein provided with other of approved quantity within two weeks from the date of such rejection, the Engineer shall be at liberty forthwith to procure and obtain the same in the open market and the cost thereof and all expenses thereby incurred shall be charged to the contractor or the Engineer may fix such other subsequent date or dates as he may think fit by which the delivery of the said material shall be completed. If the rejected materials be not forthwith removed, the Engineer shall be at liberty to charge ground rent for such time as the material shall lie on the site materials and keep a watchman at night or remove the materials to less inconvenient site (charging rent for new site) and all expenses thereby incurred in connection with the rejected materials shall be charged to the contractors.

21.3 If during the progress of the work, the Employer and/or the Engineer shall decide and notify in writing to the contractor that contractor has executed any unsound or imperfect work, or has supplied anything inferior in quality to that specified, the deficiencies shall at his own expenses, within seven days of his receiving the notice or otherwise within such time as may be reasonably necessary for making it good, proceed to alter, reconstruct or remove such work, or Supply fresh materials upto the standard of the specifications

21.4 The specifications and drawings are to be considered as explanatory to each other and should anything appear in the one that is not described in the other no advantage shall be taken of any such omission. Should any discrepancies or inconsistencies however appear or should any misunderstanding arise as to the meaning and import of these specifications or drawings or as to the dimensions or the quality of the materials or due to proper execution of the works as to the measurements or quality and valuation of the works executed under this contract or as extras thereupon the same shall be explained by the Employer and/or his representatives whose explanation shall be final and binding upon the contractor/contractors who shall execute the work according to such explanation and also to liaise with the inspecting agency at the manufacturing site and point of delivery site and without extra charge or deduction to or from the price specified in Price schedule and shall also do all such works and things as may be necessary for the proper completion of works as implied by the specifications and drawings even though such works and things are not specifically shown and described therein. The Tenderers should visit the site and make themselves thoroughly acquainted with the nature and requirement of work before finalizing the designs and detailed Engineering.

22.0 Packing and Documents

22.1 The Contractor shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

22.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall

be expressly provided for in the Contract, including additional requirements, if any, specified in the **SCC**, and in any other instructions ordered by the Employer.

22.3 All works required by the Employer and/or the Engineer to be packed or protected for transportation to India, shall be securely placed and protected by the contractor. Packing cases shall be of a size convenient for shipment and cases containing easily damageable articles shall be bind as specified. The contractor will be held responsible for the inefficiency of the packing and protection.

(a) The cases, crates and packages shall be permanently branded, not painted with the shipping marks. The marking shall be carried out with a view to the mark remaining unobliterated when the consignment reaches destination but as a further precaution, a reproduction, of the shipping marks shall be placed inside each case, crate and packages.

(b) Packages or bundles, which cannot be permanently branded, shall have metal label, with the above particulars stamped or attached to them by strong wire.

23.0 Insurance

23.1. Unless otherwise specified in the **SCC**, the Goods supplied under the Contract shall be insured fully against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance in the manner specified in the **SCC**.

23.2 The contractor shall insure with the General Insurance Corporation of India or any other insurance company approved by IRDA or its branches in appropriate foreign currency, if any, subject to the conditions that the premium will be payable to the corporation in Rupees such materials, tools, plants and things ordered from the works till they are delivered at site and then those for the works may for the time being on site and shall keep them insured in his own name and that of the Employer against destruction or damage by accident, fire, flood and tempests for the full value of such materials, plants and things until the same to be taken over by the Employer under GCC Clause 25 and he shall from time to time, when so, required by the Employer produce the policy and receipt for the premium. All money received under any such policies shall be applied in or towards the reconstruction or preparation of the materials, plant and things destroyed or damaged, but this provision shall not affect the contractor's liabilities under contract.

24.0 Transportation

Unless otherwise specified in the **SCC**, responsibility for arranging transportation of the Goods shall be in accordance with the specified in the SCC.

25.0 Inspection Tests, Taking over and Commissioning

25.1 The Trust Engineering In Charge will carryout the tests and/or inspections of the Goods and Related Services as are specified in the **SCC**.

25.2 The inspections and tests may be conducted on the premises of the Contractor or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in India as specified in the **SCC**. Subject to GCC Sub-Clause 25.3, if conducted on the premises of the Contractor or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Employer.

25.3 The Employer or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 25.2, provided that the Employer bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all travelling and board and lodging expenses or otherwise specified in **SCC**.

25.4 Whenever the Contractor is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Employer. The Contractor shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Employer or its designated representative to attend the test and/or inspection.

25.5 The Employer may require the Contractor to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract, provided that the Contractor's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impede the progress of manufacturing and/or the Contractor's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery

Dates and Completion Dates and the other obligations so affected unless otherwise specified in **SCC**.

- 25.6 The Contractor shall provide the Employer with a report of the results of any such test and/or inspection.
- 25.7 The Employer may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Contractor shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Employer, and shall repeat the test and/or inspection, at no cost to the Employer, upon giving a notice pursuant to GCC Sub-Clause 25.4.
- 25.8 The Contractor agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Employer or its representative, nor the issue of any report pursuant to GCC Sub-Clause 25.6, shall release the Contractor from any warranties or other obligations under the Contract.
- 25.9 The contractor/contractors shall furnish at his/their own cost electrical instruments, tools, measuring tapes and other implements and labour required for the proper setting out of the work and shall set out and be entirely responsible for such setting out. He/They may have obtained the lines and lay outs from the Employer or his representatives and shall at once alter or amend any mistake or deficiencies in such setting out being ordered to do so by the Employer and/or his representatives. The contractor/contractors shall provide all men, materials, appliances and things which the Employer or his representatives may require for measuring or inspecting the work
- 25.10 The supply, delivery and installation of the items at site shall be deemed to have been accepted by the Employer when the same shall have been stored and erected on site and the Employer shall have certified in writing that it has fulfilled the contract conditions and such certificates shall not be unreasonably withheld, or shall the Employer delay the issuing of such certificates on account of minor omissions, or defects, which do not affect the commercial use, without any serious risk, of the supplies, provided always that the contractor undertake to make good such omissions and defects at the earliest possible moment
- 25.11 In the event of the equipment/plant put into commercial use before the actual completion of works as per the contract, the contractor shall be eligible for Substantial Completion. However, a pre-defined period (say 2 months) shall be granted to the contractor

to complete the balance minor works as per the list of pending works as on the date of substantial completion. If the contractor completes all the works within the predefined period, the date of taking over shall be the date of substantial completion. Otherwise, date of taking over shall be date of completion of all works.

25.12 All materials, plant and other things, the Supply of which form the part of the contract work shall on delivery at Project Site become the property of the Employer. All the contractor's materials, brought to and delivered at site for use of the contract works, shall from time of their being so brought, vest in and be the property of Employer and shall be used solely for the purpose of the works and shall not on any account be removed or taken away by the contractor or any other person without the express permission in writing of the Engineer but the contractor shall nevertheless be solely liable or responsible for the loss or destruction thereof or damage which may be caused thereto during the continuance of this contract. Upon the completion of the contract the property, if any, surplus of such materials, shall revert to the contractors or unless they shall be due owing to or accruing or to accrue to the Employer from the contractors any money under, or in respect of or by reason of the contract in which case the Employer shall be at liberty to sell and dispose of such surplus materials as they shall think fit and to apply the proceeds in or towards the satisfaction of such money or moneys so due owing to or accruing or to accrue to them as aforesaid.

25.13 The Goods, whether Installed or not, shall immediately, in consideration of Payment of the First Installment of the Contract Price to the Contractor by the Employer; provided always that the Contractor shall have a particular possessory lien on the Goods, to the extent the value thereof exceeds the total value of the Installment Payments made by the Employer to the Contractor

25.14 Notwithstanding the above provision, the contractor shall be responsible for all damages to and loss of all aforesaid items furnished by the Contractor and any item furnished to the Contractor by the Employer to enable the Contractor to complete the Installation and for all temporary structures facilities and for all parts of the installation completed or in progress until the certificate of final taking over has been issued in accordance with GCC clause 25.10 and 25.11

25.15 If the contractor neglects to make the tests on completion within the time stipulated by the contractor, the Employer shall nevertheless have the right of using the installations at the

contractor's risk until the 'test on completion' is successfully carried out.

- 25.16 All the contract works until taken over by the Employer in accordance with GCC Clause No. 25.10 and 25.11 shall stand at the risk of the contractor who shall be responsible for and make good at his own cost all loss or damage caused by or due to fire, weather or any other cause whatsoever and the contractor shall hand over the contract work complete in every respect at the termination of the Agreement.
- 25.17 Until the work shall be or be deemed to be taken over as provided in respective Clause, Employer in respect of all injury to any person or damage to any property of the Employer or of other occasioned by the negligence or default of the contractor or his employees, or sub-contractors or of the Employer' employees, if any, working under the contractor's supervision by defective design or work by the non-compliance by the contractor with the terms of this contract.
- 25.18 The contractor shall indemnify and save harmless the Employer against all actions, suits, demands, claims, costs or expenses arising in connection with injuries suffered by persons employed by the contractor or his sub-contractors on the work including the Employer' employees, if any, working under the contractor's supervision. The contractor shall during the progress of the contract work insure himself and Employer and keep himself and them insured with the Life Insurance Corporation of India or any other insurance company under IRDA or their branches against all liabilities in respect of such injuries to persons employed as aforesaid and shall at all times when required by the Employer produce the policy for such insurance and the receipts for the last premium payable in respect thereof provided that his obligation to insure shall not apply if the Employer has made other proper and adequate provisions to meet all such liability.
- 25.19 In the event of any claim being made or action brought against the Employer including the contractor and arising out of the matters referred to and in respect of which the contractor is liable under this clause, the contractor shall be promptly notified thereof and he shall with the assistance if he so requires of the Employer but at the sole expense of the contractor conduct all negotiations for the settlement of the same or any litigation that may arise there from. In such case the Employer shall at the expense of the contractor afford all available assistance for any such purpose.

25.20 All the works shall be carried out under direction and to the satisfaction of the Employer and / or his representative but the contractor shall be responsible for the correctness of the work according to the drawing, excepting such works as have been carried out by the Engineer and/ or his representative.

26.0 Liquidated Damages/Late Delivery Charges

26.1 Except as provided under GCC Clause 31 and 33, if the Contractor fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Employer may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the **SCC** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those **SCC**. Once the maximum is reached, the Employer may terminate the Contract pursuant to GCC Clause 35. Contract price shall be inclusive of price plus all taxes and duties payable for computing Liquidated Damages.

26.2 Penalty During the Guarantee Period:

If the Tenderer fails to achieve the Performance during Guarantee Period a penalty of 1 % (one percent) of the total contract price cost shall be levied for **each day** or part thereof shortfall in the guaranteed availability subject to a maximum of 10% on the contract price cost will be levied as the penalty charges.

27.0 Guarantee

27.1 The Contractor guarantee for all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

27.2 Subject to GCC Sub-Clause 21.1(b), the Contractor further warrants that the Goods shall be free from defects arising from any act or omission of the Contractor or arising from design, materials, and workmanship, under normal use in the conditions prevailing in INDIA.

27.3 Unless otherwise specified in the **SCC**, the warranty shall remain valid for twenty four (24) months after the Goods or any portion thereof as the case may be, have been taken over at the Project Site.

27.4 The Employer shall give notice to the Contractor stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Employer shall afford all reasonable opportunity for the Contractor to inspect such defects.

- 27.5 Upon receipt of such notice, the Contractor shall, within the period specified in the **SCC**, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Employer.
- 27.6 If having been notified, the Contractor fails to remedy the defect within the period specified in the **SCC**, the Employer may proceed to take within a reasonable period such remedial action as may be necessary, at the Contractor's risk and expense and without prejudice to any other rights which the Employer may have against the Contractor under the Contract.
- 27.7 The guarantee period will be effective for a period of twenty four (24) months and it will be in force from the date of final acceptance of the items of work completed under the contract by the Employer and the contractor shall be responsible for any defects that may develop under proper use arising from faulty materials, designs, workmanship in the work but not otherwise and shall at his own cost remedy such defects when called upon to do so by the Engineer who shall state in writing in what respect any portion is faulty.

If it becomes necessary for the contractor to replace or renew any defective portions of the Supply of the items under this clause, the provisions of this clause shall apply to the portions of the Supply so replaced or renewed until the expiry of six months from the date of such replacement or renewal or until the above mentioned period of 24 months, whichever may be later. If any defects are not remedied within a reasonable time, the Employer may proceed to do the work at the Contractors' risk and expenses but without prejudice to any other rights which the Employer may have against the contractor in respect of such defects.

If the replacement or renewals are of such a character as may affect the efficiency of the items Supplied, the Employer and/or the Engineer shall have the right to give to the contractor within one month of such replacement or renewal notice in writing the 'Test on Completion' be made in which case test shall be carried out as provided in accordance with GCC Clause 25.15 thereof. Should such guarantee not be sustained the cost of the test shall be borne by the contractor.

All inspection, adjustments, replacement or renewal carried out by the contractor during the period referred to in this clause shall be subject to the conditions of this contract which shall be binding on the contractor in all respects during the guarantee and the additional warrantee period.

28.0 Patent Indemnity

28.1 The Contractor shall, subject to the Employer's compliance with GCC Sub-Clause 28.2, indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Employer may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Contractor or the use of the Goods in the country where the Site is located; and
- (b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Contractor, pursuant to the Contract.

28.2 If any proceedings are brought or any claim is made against the Employer arising out of the matters referred to in GCC Sub-Clause 28.1, the Employer shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

28.3 If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf.

28.4 The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

29.0 Limitation of Liability

29.1 Except in cases of criminal negligence or willful misconduct,

- (a) the Contractor shall not be liable to the Employer, whether in contract, transport or otherwise, for any indirect or

consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer and

- (b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement

30.0 Change in Laws and Regulations

30.1 Unless otherwise specified in the Contract, if after the date of 28 days prior to date of Tender submission in accordance with ITT clause 24, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the place of India where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 14.

31.0 Force Majeure

31.1 The Contractor shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

31.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Contractor that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Contractor. Such events may include, but not be limited to, acts of the Employer in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

31.3 If a Force Majeure situation arises, the Contractor shall promptly notify the Employer in writing of such condition and the cause

thereof. Unless otherwise directed by the Employer in writing, the Contractor shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

32.0 Change Orders and Contract Amendments

32.1 The Employer may at any time order the Contractor through notice in accordance GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Employer;
- (b) the method of shipment or packing;
- (c) the place of delivery; and
- (d) the Related Services to be provided by the Contractor

32.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Contractor's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Contractor for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Contractor's receipt of the Employer's change order.

32.3 Prices to be charged by the Contractor for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Contractor for similar services.

32.4 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

- (a) No extras shall be allowed for unless ordered as such in writing by the EMPLOYER and such extras will be paid for at rates and prices to be agreed upon mutually and upon the certification by the Employer or his Representative.
- (b) Any extra expenses in addition to the amount specified in the Price Schedule which may be incurred by the Employer in the

performance of the work required owing to the neglect or omission on the part of the contractor/contractors his/their workmen in any of the cases mentioned in this contract shall be deducted from any sums due of which may therefore, become due to the contractor/contractors by the Employer or he/they may be called upon to pay the amount of such extra expenses to such person or persons as the Employer may appoint to receive the same and in the event of the contractor/contractors failing to make such payment the said amount shall be recoverable from him/them in such manner as the Employer may determine.

32.5 The quantities indicated in the Price Schedule are estimated only and are liable to be altered or omitted to the extent in accordance with ITT clause 37.1 and GCC 33.1. The work shall be measured upto the end of each mile stone by the Employer along with the contractor/contractors or any other person or persons appointed on his/their behalf (TPI), such person/persons not being in the service of the Employer. Should the contractor/contractors or any appointed agent on his/their behalf fails/fail to attend on the day or days, fixed by the Employer (of which three days' notice shall be given) for taking measurement the same shall always be confirmed to actual work and for that alone shall the contractor/contractors be allowed to claim. The several works shall be measured by a standard measure without reference to any local custom that may obtain excepting the contrary may be directed in the specifications.

33.0 Extension of Time

33.1 If at any time during performance of the Contract, the Contractor or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 12, the Contractor shall promptly notify the Employer in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Contractor's notice, the Employer shall evaluate the situation and may at its discretion extend the Contractor's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

33.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Contractor in the performance of its Delivery and Completion obligations shall render the Contractor liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

34.0 Termination

34.1 Termination for Default

- (a) The Employer, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Contractor, may terminate the Contract in whole or in part:
 - (i) if the Contractor fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Employer pursuant to GCC Clause 33;
 - (ii) if the Contractor fails to perform any other obligation under the Contract; or
 - (iii) if the Contractor, in the judgment of the Employer has engaged in fraud and corruption, as defined in GCC Clause 3, in competing for or in executing the Contract.
- (b) In the event the Employer terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Employer may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Contractor shall be liable to the Employer for any additional costs for such similar Goods or Related Services. However, the Contractor shall continue performance of the Contract to the extent not terminated.

34.2 Termination for Insolvency

- (a) The Employer may at any time terminate the Contract by giving notice to the Contractor if the Contractor becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Contractor, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Employer.

34.3 Termination for Convenience

- (a) The Employer, by notice sent to the Contractor, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Employer's convenience, the extent to which performance of the Contractor under the Contract is

terminated, and the date upon which such termination becomes effective.

- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Contractor's receipt of notice of termination shall be accepted by the Employer at the Contract terms and prices. For the remaining Goods, the Employer may elect:
 - (i) to have any portion completed and delivered at the Contract terms and prices; and/or
 - (ii) to cancel the remainder and pay to the Contractor an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Contractor.

In such termination Security deposit will be forfeited.

34.4 **Liquidation and Re-Entry**

In the event of the contractor/contractors going into liquidation or passing an effective resolution for winding up or upon the contractor/contractors making an arrangement with or assigning in favour of his/their creditors or upon his/their assigning this contract or upon execution being levied on the contractor/contractors goods or upon the EMPLOYER certifying under his hand and in his opinion the contractor/contractors has/have

Abandoned the contract or

Suspended the progress of the work for seven days after receiving from the Employer's written notice to proceed without any lawful excuse under conditions, or

Failed to make proper progress with the work for seven days after receiving from the Employer's written notice to employ more men, or

Failed to remove materials from site or pull down the rebuilt work for seven days after receiving from the Employer's written notice that the said materials or works are condemned and rejected by the Employer under GCC Clause 35, of these conditions, or

Failed to give the Employer proper facilities for inspecting the works or any part of them for three days after receiving from the Employer, written notice demanding the same, or Failed to submit any work or materials to proper test for three days after receiving

written notice from the Employer requiring the same,
or
Failed to complete all or any part of the work by the
time or extended time for completion, or
Failed to complete all or any part of the work by the
time or extended time for completion.

Then the Employer may enter upon the site and works and expel the contractor/contractors there from and may themselves use the material and plant upon the premises for the completion of the work and employ any other contractor/contractors to complete or may themselves complete the work, upon such entry the contract shall be determined save the rights and power conferred upon the Employer hereby. The Employer's certificate under this clause shall be conclusive proof as between the contractor/contractors and Employer of the statement contained in it.

35.0 Assignment

35.1 Neither the Employer nor the Contractor shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

36.0 Export Restriction

36.1 Notwithstanding any obligation under the Contract to complete all export formalities, any export restrictions attributable to the Employer, to the country of the Employer, or to the use of the products/goods, systems or services to be supplied, which arise from trade regulations from a country supplying those products/goods, systems or services, and which substantially impede the Contractor from meeting its obligations under the Contract, shall release the Contractor from the obligation to provide deliveries or services, always provided, however, that the Contractor can demonstrate to the satisfaction of the Employer that it has completed all formalities in a timely manner, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract. Termination of the Contract on this basis shall be for the Employer's convenience pursuant to Sub-Clause 35.3.

37.0 Site Activities

37.1 The contractor/contractors shall give the customs, State Government, municipal, police, petroleum, road, railway, and all other authorities all notices, etc. that may be required by law and

obtain all requisite licences for temporary obstructions, transportation, loading and unloading activities, enclosures, and for any other purposes whatsoever and pay all fees, taxes, duties, and charges which may be leviable on account of his/their own operations in executing the contract. He/They shall make good any damage to adjoining property whether public or private and supply and maintain any flags, horns, sirens, light etc. in whatever manner required in day or at night or for the purposes of warning/indication of work in progress or of imminent danger etc. He shall be allowed rent free the use of such grounds as is available on the site of works as in the opinion of the Employer may be absolutely necessary and on the completion of work or termination of this contract he shall vacate the premises and remove all surplus material.

- 37.2 The Employer shall indicate the storage space at site, for storing the material but the contractor shall satisfy himself as to the suitability of such sites and protection and such provision shall not release the contractor from liability to make good any loss or damage which may hamper such work until the same shall have been taken over.
- 37.3 Suitable access to and possession of the site shall be afforded to the contractor by the Employer in reasonable time. In the execution of the work, no persons other than the contractor or his duly appointed representatives, sub-contractor and workmen shall be allowed to do work at site except by the special permission in writing of the Employer and/or his representative.
- 37.4 The contractor shall comply with all precautions as per International Labour Organization (I.L.O.) Convention (No.62) as far as they are applicable to this contract.
- 37.5 The contractor/contractors shall on completion of the work when directed by the Employer remove all plants, tools, materials, and rubbish which may have been used or may have accumulated during the progress of the work, other than those permanently taken into the works of all such rubbish or surplus materials or plants which the Employer may require the contractor/contractors to remove by the contractor or his sub-contractors within twenty-four (24) hours after receipt of written notice from the Employer requiring him/them to remove the same, and in default of compliance with such notice the Employer may forthwith remove all such rubbish or surplus materials or plant at the risk and cost of the contractor/contractors

- 37.6 The contractor will be allowed to tap/use electric power to the extent of as specified in **SCC**, if electric Supply from the Employer's network is available at work site, subject to the contractor's complying with the rules and regulations of temporary load and safety precaution laid down by the Employer from time to time. Use of power is restricted to single phase for electrical drilling machine, temporary lighting and testing of the lighting installation etc. For any other requirements, the contractor shall request the Employer. Upon suitability, the Employer shall provide the same at cost to the Contractor.
- 37.7 No work shall be carried out between sunset and 6.00 a.m. and on Sunday or Employer's holidays except with the previous sanction in writing from the Employer, granting to which will be entirely at his discretion and cannot be claimed by the contractor/contractors as matter of right and the refusal to grant such permission will not be accepted as a ground of excuse for not completing the work within the period hereinafter mentioned.
- 37.8 No living accommodation shall be made available for the contractor's staff and labour. The contractor/ contractors shall at his/their own expense provide the necessary transport to and from the site of the work and accommodation for his/their employees, the intention being that the sum named in the tender shall be inclusive of all expenses, whatsoever in connection with the contractor's/ contractors' staff and labour force.
- 37.9 Notwithstanding that all reasonable and proper precautions may have been taken by the contractor/contractors at all times during the progress of the work, the contractor/contractors shall nevertheless be wholly responsible for all damages, whether to the works themselves or to any other Employer's property or to the lives or persons or property of others during the progress of the works and period of maintenance.
- 37.10 The contractor/contractors shall at his/their own cost provide all labour and materials, haulage, stores, consumables, templates, staging, scaffolding, tarpaulins and all plants and tools whatsoever required to carry out and complete the work to the satisfaction of the Engineer and shall fence, with bamboo or other good materials of sufficient strength, all excavation, trenches, open culverts etc. and shall light the same at night and keep sufficient watchmen to the satisfaction of the Engineers at work site. He/They shall construct proper enclosures and fences for the protection and convenience of the work and the public during the progress of work.

The make and brand of the materials offered wherever applicable must be clearly stated and in case of unknown make or brand proper description should be submitted even if not so specified.

The contractor must make his own arrangement for obtaining all the materials required for completing the work. The rates to be entered for the items in the Price Schedule should be inclusive of Supply, manufacture and assembly, testing, completion, delivery, storage at site, installation of new equipment and commissioning of all the works. The contractor/contractors shall make his/their own arrangements to obtain from the authorities concerned the petrol, oils, spare parts etc. required by him for the efficient and regular operation of the transport used by him/them to carry out and complete the work comprised in the contract, without delay whatsoever. The Employer will only issue a certificate if required to the contractor to enable him to request the concerned authorities, to provide all assistance within the law to him/them under this contract. The non-Supply of these materials by the authorities will not be taken as an excuse for not completing the contract within the stipulated period.

- 37.11 The contractor shall employ at least one qualified, experienced and competent representative whose name or names shall have previously been communicated in writing to the Employer and/or his representative by the contractor to supervise the delivery, unloading and storage and carrying out the work and also to liaise with the inspecting agency at the manufacturing site and point of delivery site. The said representative shall be present at site during working hours and any written orders or instructions which the Employer and/or his representative may give to the said representative of the contractor shall be deemed to have been given to the contractor, the said representative or representatives shall arrive at site on a date to be arranged by the Employer and/or his representative. Further all the correspondence pertaining to technical, financial, legal and the other matters shall be addressed to him.

The contractor shall have to execute electrical work of cranes under Supervision of Electrical contractor having valid Electrical's contractor Licence issued by the State Governments of India & work is required to be executed under the Supervisor having Supervisory Certificate of competency issued by the State Governments of GOI & copy of all documents to be submitted to Mechanical Engineer's office. The contractor shall obtain the

Electrical inspection Certificate for effective power supply to the machines.

37.12 Employment of Labour

The contractor/contractors shall employ such sufficient number of trustworthy, skilful and experienced assistants or Supervisors, Foremen, Maistries and Watchmen as may be approved by the Engineer and shall at all times employ a competent, qualified and experienced Engineer and careful and skilled workmen in or about execution of the said work to the satisfaction of the Engineer or any Engineer, Supervisor, Maistry, Watchmen to whom the Engineer and/or his representative shall object to on the ground of bad behaviour incompetence or negligence shall be removed by the contractor/contractors from the work within 24 hours after receipt of written order signed by the Engineer and/or his representative shall be again allowed on the work except with the written permission of the Engineer and/ or his representative. The contractor/ contractors shall arrange to meet the Engineer or his Assistants on the works whenever required.

37.13 Protective Personal Gear Such As Helmet, Face shield, Footwear, Gloves, Etc.,

The contractor/contractors shall, at his/their own expense, provide footwear and gloves for all labour employed on concrete mixing work, gas cutting, welding etc, and all other types of work involving the use of tar and cement, glass shields for welders and diving equipment for divers, etc. to the satisfaction of the Employer or his representative and on his/their failure to do so, the Employer shall be entitled to provide the same and recover the cost thereof from the contractor/contractors.

Safety Provision

- i) The contractor should take necessary safety measures to carry out the job, without causing any accident, in the work premises, which will ultimately cause loss to Employer either directly or indirectly.
- ii) The contractor should apply for written permission to carry out the hot jobs with full details of the work, date, duration of work etc.

- iii) All the required safety gear and fire fighting accessories be made available by the contractor at the site of work for any emergency.
- iv) The permission copy should be sent to Port Fire and Safety Officer, and the Safety section in advance.
- v) The hot jobs should be started only after the concerned supervisory staff of the concerned department is satisfied with the safety arrangements made at site.

The contractor shall supply to his workmen and staff cotton arm bands of approved quality and colour for wearing them on their arms while carrying out the work. These arm bands should be of distinctive type and serially numbered and the contractor shall maintain a register of issue of arm bands and names of workmen to whom these have been issued.

Notwithstanding anything herein contained the contractor shall comply with all the provisions of the contract labour (Regulation and Abolition) Act, 1970 and Rules and Regulations made there under as amended from time to time if applicable.

The rates quoted by the contractors in the Price Schedule shall be deemed to include expenses whatsoever that the contractor may be required to incur for compliance with the provisions of the above Act.

In pursuance of Section 21 of the above Act and Rule 25(2)(V)(A) framed thereof, the Tenderers should note that in cases where the workmen employed by them to perform the same and similar kind of work as the workmen directly employed by this Employer, the wage rate of all category of workmen shall be in accordance with the statement of the Employer's Schedule of Rates revised from time to time. The wage rates in respect of categories of workmen which are not included in the Employer Schedule shall not be less than those specified in the Schedule of "Fair Wages".

The contractor shall make his own arrangements for the engagement of all labour, preferably local.

The Contractor shall also comply fully with the provisions of the payment of Wages Act, 1936.

If any enhancement in the rates of Wages become payable as a result of the implementation of the Chief Labour Commissioner's

interpretation of the Contract Labour (Regulations and Abolitions) Central Rules, 1971 upto and including an increase of 10% of the Wages, the same shall be borne by the contractor/contractors.

The contractor shall be responsible for the observance by his sub-contractors, of the foregoing provisions/precautions.

The contractor shall make necessary arrangements for the representative of the Employer and/or his representative to witness the payment made by the Contractor to his labourers. The contractor shall also submit periodical returns of labour employed by him and wages paid, to the Employer's representatives.

Supply of water: The contractor shall, as far as practicable having regard to local conditions, provide on the site to the satisfaction of the Engineer's representative, an adequate Supply of drinking and other water for the use of the contractor's staff and workmen.

Festivals and religious customs : The contractor shall in all dealings with labour in his employment, have due regard to all recognised festivals and observe days of rest as applicable to the outdoor staff of the Mechanical Engineering Department of Employer.

Epidemics: In the event of any outbreak of illness of an epidemic nature, the contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government or the local medical or sanitary authorities for the purpose of dealings with overcoming the same.

Disorderly conduct, etc.:. The contractor shall at all time take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or among his employees, officers, or agents and for the preservation of peace and protection of person and property in the neighbour hood of the works against the same.

Accidents: The contractor shall, within twenty four (24) hours of the occurrence of any accident at or about the site or in connection with the execution of the work, report such accidents to the Employer or his representative. The contractor shall also report such accidents to the concerned constituted authorities.

The contractor shall use water free of cost from the nearest Employer's tap or hydrant dependent on the availability as directed by the Engineers.

Every precaution shall be taken by the contractor/contractors to prevent the breeding of mosquitoes on the works during the construction and all receptacles used for storage of water, soaking bricks, etc. must be suitably protected for this purpose or must be emptied at the close of the work everyday. All water used for during concrete must contain saponified croseol in solution of not less than 1:2000 or more than 1:1000 so that the solution will have a markedly cloudy appearance and will give a reasonably strong odour.

- 37.14 The contractor/contractors shall give notice to the Employer or the Engineer or his assistant whenever any work is to be buried in the earth or made inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial in default whereof the same shall at the opinion of the Employer or the Engineers or his assistant be either opened up for measurement at the contractor/contractors expenses and no allowance shall be made for such work. Should any dispute or difference arise after the execution of any work as to measurements etc. which cannot be conveniently tested or checked the Employer's or the Engineers' or his Assistants notes shall be accepted as correct and be binding on the contractor/contractors.

37.15 Safety of Existing Underground Services

The contractor shall take due care and adopt such measures to ensure that the existing underground services of the Employer as well as Public Utility Bodies viz. Electric Boards/Companies, BSNL/MTNL, local municipality, Gas Co., etc., are not damaged during the excavation work of cables trench, pole pits, foundation pits etc. The drawing showing the approximate route of such service will be available with the Superintendent, Electrical Construction Division of this office and shall be consulted before starting the work. Exact location of a service shall be ascertained by taking trial pits at strategic points as directed by the Employer or his representative. The work in the vicinity of such services shall be carried out to meet the specific requirements of a party to whom the service belongs. Any damage caused to a service, irrespective of the fact that the utmost precautions are taken to avoid damage shall be at the entire risk and cost of the contractor.

38.0 Employer's Decision

38.1 The whole of the work under this contract shall be carried out under the direction of the Employer and his decision upon all questions relating to the details of construction or the meaning of the drawings, Specifications, Price Schedule and the methods of carrying out the work shall be final and any dispute arising under in connection with this contract or the carrying out thereof including any question as to construction and meaning of this contract or any clause therein shall be final and binding upon the contractor or his sub-contractors whether such decision shall have been given by way of certificate or otherwise and whether it shall have been given during the progress of the work or after completion of the same.

39.0 Employment and Employer's Personal

39.1 The successful Tenderer shall furnish information before the award of contract, whether he himself or any of his partners, directors or employees had held Class I post with the Employer within the period of last two years.

39.2 The Employer shall be at liberty to terminate the contract if the successful Tenderer himself or any of his partners, employees or any of his directors who having held Class I post with the Employer prior to his retirement has failed to obtain the Chairman's specific permission to undertake an occupation or any outside employment before the expiry of two years from the date of his retirement, in accordance with the provision of Class I Employees, (Acceptance of Employment after retirement) Regulations.

40.0 Licences

40.1 Import Licence, Permits, etc.

The contractor will make his own arrangements for obtaining materials required for the manufacture of the items and for the efficient and regular operation of the work. The Engineer will, however, forward his application for import licences, to the proper authorities if desired by him certifying the nature of the work to be carried out but under no circumstances the non-Supply of such controlled or other materials by the authorities will be taken as an excuse for not completing the contract, if awarded, within the stipulated period.

Variation

Variation means variation in quantities of items ie. Where there is increase of quantities of items of work in the agreement. On other

words, the nomenclature of work remains the same, but the quantity of variation is maximum 30 % against the Tender cost shown in the agreement. The said variation shall be executed after approval of the competent authority.

CHIEF MECHANICAL ENGINEER

Section VII

SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC 1.1(a) and 1.1(q)

*Chief Mechanical Engineer,
Chennai Port Trust,
No.1, Rajaji Salai,
Chennai – 600 001.
The Employer is: Trustees of Port of “Chennai”*

GCC 1.1 (p)

The Project Site(s)/Final Destination(s) is/are:

Chennai Port Trust
in pursuant to ITT clause 14.5 a(iii)..

GCC 4.2 (a)

Incoterms is not applicable to this tender, since the procurement is from local bidders (INDIAN BIDDERS).

GCC 4.2 (b)

Incoterms is not applicable to this tender and QUOTED RATE SHOULD BE INCLUSIVE OF ALL TILL DELIVERY, INSTALLATION, TESTING AND COMMISSIONING AT CHENNAI PORT TRUST, CHENNAI.

GCC 8.1

For **notices**, the Employer’s address shall be:

Attention: Chief Mechanical Engineer
Chennai Port Trust,.
No.1 Rajaji Salai, Chennai – 600 001
City: Chennai, PIN Code: 600 001
Country: India
Telephone: (044) - 25362070
Facsimile number: (044) – 25360955
Electronic mail address: cme@chennaiport.gov.in

GCC 9.1

The governing law shall be the law of Government of India or its constituents and all legal disputes shall be subjected to the jurisdiction of High Court of Madras.

GCC 10.2

The rules of procedure for arbitration proceedings pursuant to GCC Clause 10.2 shall not be applicable to this contract.

The decision of Chief Mechanical Engineer shall be final with an appealing authority as Chairman of the Port. The decision of the Chairman shall be binding on either party.

GCC 12.1

Details of Shipping / dispatch and other Documents to be furnished by the Contractor are a railway consignment note, a road consignment note, insurance certificate, Manufacturer's or Contractor's warranty certificate, inspection certificate issued by nominated inspection agency, Contractor's factory shipping details etc.

The above documents shall be received by the Employer before arrival of the Goods and, if not received, the Contractor will be responsible for any consequent expenses.

GCC 14.1

The prices charged for the Goods supplied and the related Services performed shall *not be* adjustable.

No escalation of what so ever nature shall be payable in the contract except that the contract price shall be adjustable on account of any changes in statutory Taxes and duties.

GCC 15.1 and 15.5

PAYMENT TERMS:

Stage payment

- i) The first installment amounting to 10% of the BASIC PRICE excluding the cost of OSR equipment mentioned above as an advance payment, on signing of the Agreement and issue of a formal work order letter by the Engineer and subject to the production of the Bank Guarantee of equivalent amount either the local (i.e. Port City) branch of any Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank having its Branch and payable at Chennai with a counter assurance from its local branch regarding acceptance of liabilities on placement of demand by the Engineer. Such guarantee shall be in force till the taking over of the vessel by the Chennai Port Trust. The Contractor shall pay the interest at the prime lending rate of State Bank of India plus 2%

prevailing on the date of disbursement for the advance payment of 1st installment till the completion of the project and handing over the vessel.

However, 10% advance given as the first stage payment along with interest will be recovered against payments from third stage to seventh stage.

Alternatively, if the contractor does not avail 10% advance payment there will not be any deduction from the third stage payment to seventh stage payment. The contractor will be paid payment from the Second stage to ninth stage as indicated below, whereas the tenth stage payment will be 20%.

- ii) The Second installment amounting to 10% of the BASIC PRICE excluding the cost of OSR equipment mentioned above within 30 days after production to the Engineer of the certificate granted by the Engineer/Representative that detailed construction schedules for the vessel along with various system as specified have been approved by the Engineer and orders for Main Engines, Engine controls etc. have been placed and accepted and that 50% of total steel requirement is available at the contractor yard, lofting has been completed and the policy of insurance referred to in [Cl.17](#) of this General Conditions of contract taken with the receipt of the premium thereof by the Insurance Agency subject to the production of a Bank Premium thereof by the Insurance Agency subject to the production of a Bank Guarantee of equivalent amount either the local (i.e. Port City) branch of any Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank having its Branch and Payable at Chennai with a counter assurance from its local branch regarding acceptance of liabilities on placement of demand by the Engineer. Such guarantee shall be in force till the taking over of the vessel by the Chennai Port Trust.
- iii) The third installment amounting to 10% of the BASIC PRICE excluding the cost of OSR equipment mentioned above within 30 days after production to the Engineer of the certificate granted by the Engineer/Representative that 50% of the vessel has been fabricated, and on production of documents that orders for complete Propulsion system, Generators, Dock Machinery such as aft towing winch, towing book, wind loss cum mooring winch and Main Switch Board have been placed with and accepted by the suppliers and that 100% of total steel requirement is available at the yard and approval of Engineer has been obtained for all structural drawing approved by classification society for the vessel subject to the production of a Bank Guarantee of equivalent amount either the local (i.e. Port City) branch of any Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank having its Branch and payable at Chennai with a counter

assurance from its local branch regarding acceptance of liabilities on placement of demand by the Engineer. Such guarantee shall be in force till the taking over of the vessel by the Chennai Port Trust.

- iv) The fourth installment amounting to 10% of the BASIC PRICE excluding the cost of OSR equipment mentioned above within 30 days after production to the Engineer of the certificate granted by the Engineer/Representative that 100% fabrication of the hull including Frames and Beams, Deck Panels and Main Frames have been completed and machinery such as Main/General Service Pump, Air Compressors, Fuel Oil Purifier, Fire Fighting Pump and Monitor and bought out items specified (except stores, spares and consumables) have been ordered and order accepted by suppliers, subject to the production of a Bank Guarantee of equivalent amount either the local (i.e. Port City) Branch of any Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank having its Branch and Payable at Chennai with a counter assurance from its local branch regarding acceptance of liabilities on placement of demand by the Engineer. Such guarantee shall be in force till the taking over of the vessel by the Chennai Port Trust.
- v) The fifth installment amounting to 10% of the BASIC PRICE excluding the cost of OSR equipment mentioned above within 30 days after the production to the Engineer of the certificate granted by Engineer/Representative that 100% erection of the hull including 50% of super structure have been completed, subject to the production of a Bank Guarantee of equivalent amount either the local (i.e. Port city) Branch of any Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank having its Branch and payable at Chennai with a counter assurance from its local branch regarding acceptance of liabilities on placement of demand by the Engineer. Such guarantee shall be in force till the taking over of the vessel by the Chennai Port Trust.
- vi) The sixth installment amounting to 10% of the BASIC PRICE excluding the cost of OSR equipment mentioned above within 30 days after the production to the Engineer of certificate granted by Engineer/Representative that 100% hull and superstructure has been erected, all principal welding works have been completed throughout the hull, dry surveys and tank testing carried out and passed by classification society, on production of documents on ordering of Onboard Oil spill response equipment/systems , propulsion system, piping prefabrication for the vessel commenced, and main engine have arrived in the yard after appropriate inspection and certification at supplier's or manufacturer's test bed by classification society and Engineer/Representative of Engineer, subject to the production of a Bank Guarantee of equivalent amount either the local (ie. Port

- City) Branch of any Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank having its branch regarding acceptance of liabilities on placement of demand by the Engineer. Such guarantee shall be in force till the taking over of the vessel by the Chennai Port Trust.
- vii) The seventh installment amounting to 10% of the BASIC PRICE within 30 days of production to the Engineer of certificate granted by Engineer/Representative that the vessel has reached the launching stage, i.e. Installation of onboard Oil spill response equipment/systems, propulsion system installed and all hull apertures have been duly fitted out to make the vessel float, Main Engines have been lowered and preliminary alignment carried out, Generator sets and Main Switch Board, Main pumps, windlasses, compressors, air bottles, hydraulic equipment, separators etc. having all arrived in the yard and works pertaining to piping, electrical cabling and ventilation have been commenced, subject to the production of a Bank Guarantee of equivalent amount either the local (i.e. Port City) branch of any Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank having its Branch and payable at Chennai with a counter assurance from its local branch regarding acceptance of liabilities on placement of demand by the Engineer. Such guarantee shall be in force till the taking over of the vessel by the Chennai Port Trust.
 - viii) The eighth installment amounting to 10% of the BASIC PRICE excluding the cost of OSR equipment mentioned above within 30 days after the production to the Engineer of the certificate granted by Engineer/Representative that outfitting jobs including installation of all Engine Room machinery, Deck fittings and deck machinery are completed and control cables and shafting's, ventilation work, electrical fittings, paneling and insulation work etc. have commenced, subject to the production of a Bank Guarantee of equivalent amount either the local (i.e. Port city) branch of any Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank having its Branch and payable at Chennai with a counter assurance from its local branch regarding acceptance of liabilities on placement of demand by the Engineer. Such guarantee shall be in force till the taking over of the vessel by the Chennai Port Trust.
 - ix) The ninth installment amounting to 10% of the BASIC PRICE excluding the cost of OSR equipment mentioned above within 30 days after the production to the Engineer of certificate granted by Engineer/Representative that the trails have been satisfactorily completed in the presence of the Engineer/Representatives all LSA, FFA and LSS surveys and inclining experiment have been

successfully completed to the satisfaction of classification and statutory surveyors , Procurement of OSR equipment/accessories listed in section 7 of technical specifications and the Engineer/Representatives, all painting and furnishing jobs have been completed and appropriate steps have been initiated to get the vessel registered under M.S. Act at Chennai, subject to the production of a Bank Guarantee of equivalent amount either the local (i.e. Port City) branch of any Nationalized/Scheduled Bank or from a Nationalized/Scheduled Bank having its Branch and payable at Chennai with a counter assurance from its local branch regarding acceptance of liabilities on placement of demand by the Engineer. Such guarantee shall be in force till the taking over of the vessel by the Chennai Port Trust.

- x) The tenth installment amounting to 10% of the BASIC PRICE excluding the cost of OSR equipment mentioned above within 30 days after the production to the Engineer of certificate granted by Engineer/Representative that all modifications, additions and alterations recommended by classification and statutory surveyor and owner's Engineer/Representatives during the trials have been duly carried out, all classification and statutory certifications are complete, supply of requisite journals, 'As Fitted' drawings, manuals, stores, spares, specified consumables, tools and tackles as per contract have been completed, services of a Guarantee Engineer on board is available, due registration of the vessel at Chennai under Merchant Shipping Act has been carried out and, after satisfactory compliance of any and every other free delivery contractual obligation of the Contractor the certificate of handing over the vessel at Chennai has been issued.

All interim stage payment will be treated as advance and will be adjusted against the final bill on successful performance of the contract. For this purpose, the contractor shall have to submit an irrevocable Bank Guarantee as per specimen attached for the amount of stage payments then and there. The Bank Guarantee shall remain in force throughout the period of contract and will be returned on successful completion of the contract ie taking over of the vessel by the Port Trust.

The tenderer shall quote the Bank Account details for the payment through ECS along with PAN. A copy of the Pan Card along with copies of self attested statutory documents as applicable such as ESI Registration or exemption certificate as per ESI Clause in the Tender Document, GST Registration Number, EPF, any other documents for payment shall be furnished.

Any claim for interest will not be entertained by the ChPT with respect to any payment or balance which may be in their hands owing to any disputes between themselves and the Contractor or with respect to any delay on the part of the ChPT in making payment.

NOTE: On successful tenderer shall submit the Schedule of materials with rate for payment purpose on approval of Engineer-in-charge.

GCC 16.3

- (i) All the prices shall be firm inclusive of all taxes and duties.
- (ii) Any new and variation in Taxes & Duties shall be applicable only during the scheduled completion period and new/variation in Taxes & Duties will not be allowed during the extended delivery/ completion period.
- (iii) Any penal interest, penalty or fine payable / paid by the contractor to the Tax Authorities on the Taxes & duties shall not be paid / reimbursed by the Trust under any circumstances.
- (iv) In the event, the firm not indicating the rate of Taxes and Duties included in the price separately in the Bid, the port shall not pay any change in the rate of Taxes and Duties including any newly levied Taxes and Duties during the entire currency of the contract under any circumstances.

GCC 17.1

Security Deposit/Performance Guarantee

The Security Deposit of 10% of the contract value shall be submitted by the successful bidder within 21 days from the date of acceptance of 7th day of the issue of work order.

GCC 17.2

The **Performance Guarantee** shall be in the form of Account Payee Demand Draft/Fixed Deposit receipt from a Commercial Bank, Bank Guarantee from a Commercial Bank (or) online payment in an acceptable form safeguarding the purchasers interest in all respects in favour of the Chairman, Chennai Port Trust payable at Chennai.

The Performance security shall be denominated in the INR.

GCC 17.4

Discharge of the Performance Guarantee shall take place: Upon issuance of a letter to that extent by the Employer and on satisfactory completion of the Contract period.

GCC 22.2

The packing, marking and documentation within and outside the packages shall be as stated under GCC Cl No. 22.1 to 22.3 and clearly mention the **final destination** mentioned under clause TIS 14.5 (a) (iii).

GCC 23.1

The **insurance** coverage shall be as follows:-

The contractor has to quote for the Insurance Charges. The entire equipment shall be insured during transit of materials from the Place of dispatch to the Place of Destination and till handing over / taking over of the equipment to the satisfaction of the Employer.

GCC 24.1

The Contractor is required to arrange for transporting the entire equipment from the place of manufacturer to a specified place of final destination, defined as the Project Site (i.e. Chennai Port Trust).

GCC 25.1

TRIALS:

Forthwith after the completion of the vessel in manner specified, the vessel shall undergo in the presence of the Engineer/Representative/Statutory authorities trials in accordance with the provisions of the specification. The said trials shall be at the sole expense and risk of the contractor who shall pay and discharge all costs and bear all liabilities whatsoever arising out of the same. The contractor shall also be responsible for all risks to the vessel and other crafts or to any persons or property during the continuance of such trials, make good any damage which may arise in consequence thereof and indemnify there from the Engineer/Representatives/other officers and employees of the Corporation authorized by the Engineer in writing to the contractor to be present during the trials, and from all claims, actions, suits and proceedings and all costs charges and expenses in respect thereof or in any way arising there out or incidental thereto. On satisfactory completion of the above mentioned trials, the Engineer, before leaving the yard shall give to the contractor a certificate to that effect. However, if trials are not satisfactory and deficiencies are noted during the trials, the same shall be notified by the Engineer/Representative to the contractor in writing and the Engineer may at his/her discretion, demand and the contractor obliged to carryout a repeat of all or part trials of the entire vessel or selected components or systems, till the Engineer/Representative is fully satisfied that contractual obligations emanating from the specification have been

complied with no additional time beyond contractual completion time specified shall be allowed for such repeat trials. Such trials shall not establish final acceptability of the vessel which shall be determined only after the final trials at Chennai.

Delivery Voyage of the Vessel: All the required permission from statutory and other authorities for the voyage and delivery of the Vessel at Chennai should be obtained by the Contractor at his own cost and time.

Final Trials in Chennai: The vessel shall undergo in Chennai at the sole risk and cost of the contractor all or any of the trials mentioned and as may be required by the Engineer to demonstrate that neither the hull nor the machinery nor any other part of the vessel has received injury during transit/voyage and that the whole vessel is good working condition and fully capable of performance to the specified standard when working under local conditions.

Time of completion: Subject to other provisions of the contract, the vessel shall be finished, after satisfactorily completing all specified trials as noted, equipped in all respects delivered and handed over, in full compliance with all provisions and in accordance with all elements of this Contractor at Chennai within a period of 12 months. Contractor to note that time is the essence of the contract.

GCC 26.1

The Liquidated Damage/Late Delivery Charges:

I. The Liquidated Damage/late delivery charges shall be ½% per week or part thereof, on the total contractual price. However in case of part taking over, LD shall be calculated based on the balance/unfulfilled portions of the contractual obligations i.e. not ready for taking over by the Employer. This does not absolve the contractor from his obligation of completion of whole of the work in an expeditious manner. The maximum amount of liquidated damages shall be 10% of Total Contract Price. Even in case of the part taking over, maximum ceiling limit remain in reference to the total contract price.

II. If it is found by the Engineer from the final trials that the launch does not attain the specified speed of 10 knots at 85% MCR, the contract price for such launch shall be reduced as follows:

1. Upto 0.1 knot : 0.1% of contract price
2. Beyond 0.1 knot upto 0.2 knot : 0.2% of contract price
3. Beyond 0.2 knot upto 0.4 knot : 0.4% of contract price

- | | | |
|-----------------------------------|---|--|
| 4. Beyond 0.4 knot upto 0.5 knot | : | 0.5% of contract price |
| 5. Beyond 0.5 knot upto 0.75 knot | : | 0.75% of contract price |
| 6. Beyond 0.75 knot upto 1.0 knot | : | 1% of contract price |
| 7. Beyond 1.0 knot | : | The Board reserves the right to reject the launch or accept at its sole discretion, subject to deduction of 1% or more of contract price, as deemed appropriate. |

GCC 26.2

Penalty

During the Guarantee Period:

If the Tenderer fails to achieve the Performance during Guarantee Period a penalty of 1 % (one percent) of the total contract price cost shall be levied for **each day** or part thereof shortfall in the guaranteed availability subject to a maximum of 10% on the contract price cost will be levied as the penalty charges.

GCC 27.3

The period of validity of the **Guaranty** shall be 24 months from the next day of issue of taking over Certificate by the Chief Mechanical Engineer.

GCC 27.5 & 27.6

The period for repair or replacement shall be **Three (3)** days in normal course. However, if spare parts are required, the period shall be as determined by the Employer.

Defect Liability Period shall be extendable to the extent of idling of Equipment/ Facility (non-commercial use) due to non rectification of defects during the original or extended defect liability period; Reasonable period of response may be decided on case to case basis and indicated by the Employer after considering the nature and type of defect, its remedial process and scope of contract.

GCC 27.8

Scope shall be as defined in Section V, Schedule of Requirements.

CHIEF MECHANICAL ENGINEER

Section VIII

Contract Forms

Table of Forms

1. EMD Bank Guarantee
2. Contract Agreement
3. Performance Bank Guarantee

BANK GUARANTEE FORMAT FOR EMD

KNOW ALL BY THESE PRESENT THAT ----- (Name of the Bank), a Banking corporation carrying on banking business including Guarantees at Chennai and other places and having its office at ----- Chennai (hereinafter called 'The Bank' which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include its successors and assigns)

WHEREAS The Board of Trustees of CHENNAI PORT TRUST constituted under the Major Port Trusts Act, 1963 (hereinafter called 'The Board' which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and assigns) had invited tenders for ----- (hereinafter called Tender) as per Instruction to the Tenderers, General conditions of the Contract, scope of work, specifications and Price schedule covered under 'Tender No.-----.

AND WHEREAS M/s ----- (hereinafter called the 'Tenderer') has offered to carry out the work under the said Tender.

AND WHEREAS under the conditions of the Contract, the Tenderer is required to give a Earnest Money Deposit in the form of Bank Guarantee from a Scheduled Bank having its branch in Chennai for the sum of Rs. -----(Rupees -----)

AND WHEREAS M/s ----- have requested the Bank to furnish a Guarantee to the Board for the sum of Rs. ----- (Rupees -----) which the Bank has agreed to do in the manner hereinafter appearing.

NOW THIS INDENTURE WITNESSETH that the said Bank doth hereby stand surety for the said sum of Rs. ----- (Rupees -----) AND DOTH HEREBY GUARANTEE TO AND COVENANT WITH AND irrevocably agree to pay to the Board upon demand in writing without referring to M/s ----- (Name of the Tenderer) and without questioning the right of the Board to make such demand or the propriety or legality of such demand, such sum or sums not exceeding in the whole a sum of Rs. ----- (Rupees -----) as may be payable to the Board by the Tenderer by reason of withdrawing his Tender before the expiry of the day from the last date of the submission of the Tender or such time as may be extended by the Board to which M/s ----- have agreed in writing, or in the event of the tender being accepted by the Board and fails to enter into a Contract or to furnish Performance Guarantee as per the terms of the Contract, in respect of which the decision of the Board shall be final and legally binding and the said Bank doth further covenant and declare that this security is irrevocable and shall remain in force up to and inclusive of the ----- (date) and if the Contract is not awarded by the Board before the expiry of the aforesaid date, the said Banker undertakes to renew this Guarantee from month to month until 6 months after the aforesaid date i.e. up to ----- (date) and the said Bank doth hereby further covenant and declare that if the said M/s ----- do not obtain and furnish renewals of this Guarantee for a further period of six months to the Board not less than 30 days prior to the expiry of the period of this Bank Guarantee or renewals thereof as to keep the same valid and subsisting till the Contract is awarded by the Board and for 6 months thereafter i.e. up to ----- the entire amount of this Bank Guarantee in default of obtaining and furnishing the renewals of this Bank Guarantee in the manner and within the time aforesaid shall become forthwith due and payable to the Board notwithstanding :

that the period of the Guarantee of the renewal or renewals thereof has not expired or,

AND THE BANK further declares that notwithstanding anything to the contrary contained hereinabove, the Bank's liabilities under the Guarantee is restricted to Rs. ----- (Rs. ----- ----) and unless a demand in writing under the Guarantee is made with the Bank within the 3 months from the date of expiry i.e. by -----, all the rights of Board under this Guarantee shall be forfeited and the Bank shall be relieved and discharged from all liability thereunder :

Notwithstanding anything to the contrary contained herein:

Our liability under this Bank Guarantee shall not exceed Rs. -----
----- (Rupees -----)

This Bank Guarantee shall be valid up to -----; and

We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ---

IN WITNESS WHEREOF, the duly constituted attorneys of the Bank has hereupto set his/their hands and seals on the ----- of --
-----2017.

SIGNED, SEALED AND DELIVERED

By the within named -----

Through its duly -----

Constituted Attorney Mr. -----

& ----- in the presence of

CONTRACT AGREEMENT

(To be executed on Rs.100/- non-judicial Stamp Paper)

[The successful Tenderer shall fill in this form in accordance with the instructions indicated]

THIS CONTRACT AGREEMENT is made

the [*insert: **number***] day of [*insert: **month***], [*insert: **year***].

BETWEEN

- (1) *The Trustees of Port of Chennai Port Trust, an Autonomous Body of the Ministry of SHIIPING of the Government of INDIA, incorporated under the Major Port Trust Act,1963 as Amended thereafter, under the Laws of India and having its principal place of business at [ChPT] (hereinafter called “the Port”), and*
- (2) [*insert name of Contractor*], [incorporated under] the laws of [*insert: country of Contractor*] and having its principal place of business at [*insert: address of Contractor*] (hereinafter called “the Contractor ”).

WHEREAS the Employer/ Board invited Tenders against tender no. “” viz., and has accepted a Tender by the Contractor in accordance with the supply/delivery schedules, in the sum of [*insert Contract Price in words and figures, expressed in the Contract currency(ies)*] (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall constitute the Contract between the Employer/ Board and the Contractor, and each shall be read and construed as an integral part of the Contract:
 - (a) This Contract Agreement;
 - (b) Special Conditions of Contract;
 - (c) General Conditions of Contract;
 - (d) Technical Requirements (including Schedule of Requirements and Technical Specifications, drawings);

- (e) Notice Inviting Tender;
- (f) Replies issued to the Pre-bid queries, addenda is any issued **[numbers and dates]**;
- (g) The Contractor 's Bid and original Price and Delivery Schedules;
- (h) The Employer/ Board's Notification of Award;
- (i) *Correspondence the Employer/ Board had exchanged with the bidder till and after award of contract*;
- (j) *and any other document(s)*

AND WHEREAS

EMPLOYER/ BOARD accepted the Bid of CONTRACTOR for the provision and the execution of WORK at the CONTRACT PRICE as indicated in CONTRACT upon the terms and subject to the conditions of Contract. Now this CONTRACT AGREEMENT witnesseth and it is hereby agreed and declared as follows:

- (a) In consideration of the payment to be made to CONTRACTOR for WORK to be executed by him. CONTRACTOR hereby Covenants with EMPLOYER/ BOARD that CONTRACTOR shall and will duly provide, execute and complete Work and things in CONTRACT, mentioned or described or which are to be implied there from or may be reasonably necessary for completion of Work and at the times and in the manner and subject to the terms and conditions or stipulations mentioned in CONTRACT.
- (b) In consideration of the due provision, execution and completion of WORK by the CONTRACTOR in accordance with the terms of the CONTRACT, the EMPLOYER/ BOARD does hereby agree with CONTRACTOR that EMPLOYER/ BOARD will pay to Contractor the respective amounts for the work actually done by him and approved by EMPLOYER/ BOARD as per Payment Terms accepted in CONTRACT and payable to CONTRACTOR under provision of Contract at such time and in such manner as provided for in the CONTRACT.

AND

- (c) In consideration of the due provision, execution and completion of WORK, CONTRACTOR does hereby agree to pay such sums as may be due to EMPLOYER / BOARD for the services rendered by EMPLOYER/ BOARD to Contractor as set forth in CONTRACT and such other sums as may

become payable to EMPLOYER/ BOARD towards loss, damage to the EMPLOYER/ BOARD's equipment, materials etc. and such payments to be made at such time and in such manner as is provided in the CONTRACT.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *INDIA* on the day, month and year indicated above.

For and on behalf of the Employer/ Board

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

For and on behalf of the Contractor

Signed: *[insert signature of authorized representative(s) of the Contractor]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

SPECIMEN BANK GURANTEE PERFORMANCE GUARANTEE/
SECURITY DEPOSIT

(To be executed on Rs.100/- non-judicial Stamp Paper)

[The bank, as requested by the successful Tenderer, shall fill in this form in accordance with the instructions indicated]

In consideration of the Board of Trustees of the Port of **Chennai Port Trust** incorporated by the Major Port Trusts Act, 1963 as amended by Major Port Trust (Amendment) Act 1974 (hereinafter called "The Board" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the Board of Trustees of the Port of **Chennai Port Trust** its successors and assigns) having agreed to exempt _____ (hereinafter called the "Contractor")'

(Name of the Contractor/s)

from the demand under the terms and conditions of the Contract, vide _____ 's letter No. _____

(Name of the Department)

date _____ made between the Contractors and the Board for execution of _____

covered under Tender No. _____ dated _____ (hereinafter called "the said contract") for the payment of Performance

Guarantee in cash or Lodgment of Government Promissory Loan Notes for the due fulfillment by the said Contractors of the terms and conditions of the said Contract, on production of a Bank Guarantee for Rs. _____ (Rupees _____)

only we, the (Name of the Bank and Address)

_____ (hereinafter referred to as "the Bank") at the request of the Contractors do hereby undertake to pay to the Board an amount not exceeding Rs. _____ (Rupees _____) only

against any loss or damage caused to or suffered or which would be caused to or suffered by the Board by reason of any breach by the Contractors of any of the terms and conditions of the said contract.

2. We, _____, _____, do hereby
(Name of Bank) (Name of Branch)

undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Board stating that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Board by reason of any breach by the Contractors of any of the terms and conditions of the said contract or by reason of the Contractors failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to any amount not exceeding Rs. _____ (Rupees _____) only.

3. We, _____, undertake to pay to the
(Name of Bank and Branch)

Board any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

4. We, _____ further agree with the Board that
(Name of Bank and Branch)

the guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the said

contract and that it shall continue to be enforceable till all the dues of the Board under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the

(Name of the user department)

of the said certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractors and accordingly discharge this guarantee. PROVIDED HOWEVER that the Bank shall be the request of the Board but at the cost of the Contractors, renew or extend this guarantee for such further period or periods as the Board may require from time to time.

5. We, _____ further agree with the Board

(Name of Bank and Branch)

that the Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance by the said contract or to extend the time of performance by the said Contractors from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said Contractors and to forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extensions being granted to be Contractors or for any forbearance, act or omission on the part of the Board or any indulgence shown by the Board to the Contractors or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. It is also hereby agreed that the Courts in CHENNAI would have exclusive jurisdiction in respect of claims, if any, under this Guarantee and en-cashable at Mangalore local branch.

8. We, _____ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. *Notwithstanding anything contained herein :

a) Our liability under this Bank Guarantee shall not exceed Rs. _____
(Rupees _____ only);

b) This Bank Guarantee shall be valid upto _____; and

c) we are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____ (date of expiry of Guarantee).”

Date _____ day of _____ 20

For (Name of Bank)

(Name)

Signature

SECTION – IX

INTEGRITY PACT

BETWEEN

Chennai Port Trust Chennai hereinafter referred to as “The Principal”,

AND

..... hereinafter referred to as “The Bidder/Contractor”.

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with the Bidder/s and Contractor/s.

In order to achieve these goals, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

(a) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles :-

No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

The Principal will, during the tender process treat all Bidders/Contractors with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders/Contractor the same information and will not provide to any Bidder/Contractor confidential/additional information through which the Bidder/Contractor could obtain an advantage in relation to the tender process or the contract execution.

The Principal will exclude from the process all known prejudiced persons.

(b) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform its Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder/Contractor

(a) The Bidder/Contractor commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

- (i) The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- (ii) The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- (iii) The Bidder/Contractor will not commit any offence under the IPC/PC Act; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- (iv) The Bidder/Contractor of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder/Contractor of Indian Nationality shall furnish the name and address of the foreign principals, if any.
- (v) The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.

- (b) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder/Contractor, before award of contract has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder/Contractor into question, the Principal is entitled to disqualify the Bidder/ Contractor from the tender process or to terminate the contract, if already signed, for such reason.

- (a) If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
- (b) The Bidder/Contractor accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- (c) If the Bidder/Contractor can prove that he has restored/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.
- (d) A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

Section 4 – Compensation for Damages

- (a) If the Principle has disqualified the Bidder/contractor from the Tender process prior to the award according to section 3, the Principal is entitled to demand and recover from the Bidder/

contractor liquidated damages equivalent to 3 % of the value of the offer or the amount equivalent to Earnest Money Deposit/ Bid Security, whichever is higher.

- (b) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principle shall be entitled to demand and recover from the contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit / Performance Bank Guarantee, whichever is higher.
- (c) The Bidder / Contractor agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder / Contractor from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder / Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 – Previous Transgression.

- (a) The Bidder / Contractor declares that no previous transgressions occurred in the last 3 years with any other Company in any country conforming to or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (b) If the Bidder / Contractor makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all Bidders / Contractors / Sub-Contractors

- (a) The Bidder / Contractor undertake to demand from all sub-contractors as commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (b) The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Sub-Contractors.
- (c) The Principal will disqualify from the tender process all bidders/contractors who do not sign this pact or violate its provisions.

**Section 7 – Criminal charges against violating Bidders/Contractors/
Sub-Contractors**

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Sub-Contractor or of an employee or a representative or an associate of a Bidder, Contractor or Sub-Contractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer.

**Section 8 – External Independent Monitor/Monitors (number
depending on the size of the contract to be decided by the Principal)**

- (a) The Principal appoints competent and credible external independent Monitor for this pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (b) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently.
- (c) The Bidder/Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor 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 Sub-Contractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Sub-Contractor with confidentiality.
- (d) The Principal 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 Principal and the Contractor. The parties offer to the Monitor, the option to participate in such meetings.
- (e) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or to take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

- (f) The Monitor will submit a written report to the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.
- (g) Monitor shall be entitled to sitting fee for his service as decided by the Principal from time to time depending upon the total value of the project. The said fee will be borne by the Principal.
- (h) If the Monitor has reported to the Principal substantiated suspicion of an offence under the IPC/PC Act and the Principal has not, within reasonable time, taken visible action to proceed against such offence or reported to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (i) The word 'Monitor' would include both singular and plural.
- (j) The present Independent External Monitor is -
 - (1) Shri. M. Selvaraj, Ex.Director (Fin.)
 - (2) Shri Ramabadran Krishnan, Ex.Director(HR)

Section 9 – Pact Duration

- (a) This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidder 6 months after the contract has been awarded.
- (b) If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by the Chennai Port Trust.

Section 10 – Other Provisions

- (a) This agreement is subject to Indian Law. Place of performance and jurisdiction is Chennai.
- (b) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (c) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(d) Should one or several provision of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

For the Principal
(Office Seal)

For the Bidder/Contractor
(Office Seal)

Place:
Date:

WITNESS 1
(Name and Address)

WITNESS 2
(Name and Address)

DECLARATION FORM

Sl.No.	Description	Yes / No
1.	Agreed all Trust terms and Conditions	
2.	Have you ever been Black listed by any Government / PSU	

I/We confirm that all statements documents, information submitted/given with this bid or in support of bid is/are true, genuine, authentic, legitimate and valid. I agree that at any time from the date of submission of Bid or after award to selected successful bidder, in case any of these statement document, information is/are found incorrect. False, willful misrepresentation or omission of facts or submission of false/forged documents, the EMD/Security Deposit submitted by me/us shall be forfeited by ChPT

Firm's Sign and Seal

Place:
Date: