



E-TENDER

FOR

DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16

Tender No. IWAI/GHY/NC16/4(152)/2024-25

INLAND WATERWAYS AUTHORITY OF INDIA



भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण
पत्तन,पोत परिवहन और जलमार्ग मंत्रालय, भारत सरकार
Inland Waterways Authority of India
Ministry of Ports, Shipping and Waterways, Government of India

A-13, Sector-1, Gautam Buddha Nagar, NOIDA (U.P.) - 201301

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FEBRUARY 2025

DISCLAIMER

1. This Tender Document is neither an agreement nor an offer by the Inland Waterways Authority of India (IWAI) to the prospective Applicants or any other person. The purpose of this Tender Document is to provide information to the interested parties that may be useful to them in the formulation of their Bid pursuant to this Tender Document.
2. IWAI does not make any representation or warranty as to the accuracy, reliability or completeness of the information in this Tender Document and it is not possible for IWAI to consider particular needs of each party who reads or uses this Tender Document. This Tender Document includes statements which reflect various assumptions and assessments arrived at by IWAI in relation to the Works of **“DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16”** such assumptions, assessments and statements do not purport to contain all the information that each Applicant may require. Each prospective Applicant should conduct its own independent investigations and analyses and check the accuracy, reliability and completeness of the information provided in this Tender Document and obtains independent advice from appropriate sources.
3. IWAI will not have any liability to any prospective Company/ Firm/Consortium or any other person under any laws (including without limitation the law of contract, tort), the principles of equity, restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this Tender Document, any matter deemed to form part of this Tender Document, the award of the Assignment, the information and any other information supplied by or on behalf of IWAI or their employees, any Contractors or otherwise arising in any way from the selection process for the Assignment. IWAI will also not be liable in any manner whether resulting from negligence or otherwise however caused arising from reliance of any Applicant upon any statements contained in this Tender Document.
4. IWAI will not be responsible for any delay in receiving the Bids. The issue of this Tender Document does not imply that IWAI is bound to select a Bidder or to appoint the Successful Bidder, as the case may be, for the Works and IWAI reserves the right to accept / reject any or all of Bids submitted in response to this Tender Document at any stage without assigning any reasons whatsoever. IWAI also reserves the right to withhold or withdraw the process at any stage with intimation to all who submitted the Bids.
5. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. IWAI accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.
6. IWAI reserves the right to change / modify / amend any or all provisions of this Tender Document. Such revisions to the Tender Document / amended Tender Document will be made available on the website of IWAI.

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SECTION-I: NOTICE INVITING E-TENDER



INLAND WATERWAYS AUTHORITY OF INDIA

(Ministry of Port, Shipping & Waterways, Govt. of India)

A-13, Sector -1, Noida 201301 (U.P.)

Website: www.iwai.nic.in, & <https://eprocure.gov.in/eprocure/app>

E-mail: ssingh.iwai@nic.in

NOTICE INVITING E-TENDER

Chief Engineer (NER & Oth WWs) IWAI on behalf of Chairman, Inland Waterways Authority of India (IWAI) invites online Bids from the reputed Contractors/Companies/Firms in two cover system (Cover – I: Technical Bid and Cover – II: Financial Bid) for “**DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16**”. The survey vessel is to be supplied/commissioned at Badarpur / Karimganj (Assam) as per details given below. The Bids will be placed online at <https://eprocure.gov.in/eprocure/app>

Terms & Conditions:

Interested parties may download the Tender document online from the site <https://eprocure.gov.in/eprocure/app> and IWAI's website “www.iwai.nic.in” and pay INR 5,900/- including GST (Rupees Five Thousand Nine Hundred only) as the cost of tender document / tender fee to be deposited to IWAI fund through RTGS / NEFT.

However, Micro & small Enterprises [MSEs] as defined in MSE Procurement Policy Issued by Department of Micro, Small & medium Enterprises [MSME] or start-ups as recognized by Department for Promotion of Industrial Policy & Internal Trade [DPIIT] are exempted from submitting the Tender Fee to the extent as per Government of India rules.

Some important dates for this tender process are as follows:

| | |
|--|-----------------------------|
| Document Download Start Date | 07.02.2025 at 15.30 hrs. |
| Date of submission of pre-bid queries | 19.02.2025 up to 18:00 Hrs. |
| Pre-bid meeting | 21.02.2025 15.00 hrs. |
| Bid Submission Last Date | 08.03.2025 up to 15.00 hrs. |
| Technical Bid Opening Date | 10.03.2025 at 15.30 hrs. |
| Financial Bid Opening Date | To be intimated later |
| Cost of Tender Document | 5900/- |

a) Scope of the work:

In brief, the Scope of Work for the appointed firm shall be **Design, Construction, Delivery, and Commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16** as per the terms and conditions and technical specifications stipulated in the Tender Document. The detailed Terms of Reference (ToR) / Scope of Work shall be as described in the **Section-VI** of this Tender Document.

b) Method of Selection:

Bidder will be selected under Cost Based Selection-L1 (CBS) and procedures described in this Tender Document.

c) Clarifications:

Clarification / Query, if any, on the Tender Document shall be obtained from the following address:

The Chief Engineer (NER & Oth WWs.)

Inland Waterways Authority of India (IWAI),

A-13, Sector- 1, Noida -201 301 (UP)

Email: ssingh.iwai@nic.in & kthongon@iwai.gov.in

Website: www.iwai.nic.in.

(d) IWAI reserves the right to accept or reject any or all tenders without assigning any reason and no correspondence shall be entertained in this regard.

**SECTION – II:
INSTRUCTION TO BIDDERS (ITB) & APPENDIX TO BID**

1. Background

- 1.1 Inland Waterways Authority of India (IWAI) [hereinafter referred to as “employer”] is a statutory body under the Ministry of Shipping, Government of India. IWAI was set up in 1986 for regulation and development of Inland Waterways for the purposes of shipping and navigation. IWAI is primarily responsible for development, maintenance and regulation of Inland Water Transport (IWT) in the country and specifically National Waterways (NW). In April, 2016, the Government of India has declared 106 new national waterways in additiona to the existing five national waterways.
- 1.2 Inland Water Transport (IWT) has the potential to form the most economic, reliable, safe and environmentally friendly form of transport. When developed for use by modern inland waterway vessels, it can reduce investment needs in rail and road infrastructure, promote greater complementarities in the riparian states, enhance intra- regional trade and, through increased economies of scale, significantly reduce overall logistics costs for the benefit of the entire economy and India’s global trade competetiveness.
- 1.3 The Inland Waterways Authority of India (IWAI) under the Ministry of Shipping, Government of India has declared the river Brahmaputra as the National Waterway No. 2.

The objective of this tender is to select the reputed Contractors/Companies/Firms for works listed below:

“DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16.”

2. Introduction

- 2.1 The Employer will select a firm / organization (the “Contractor”) in accordance with the evaluation process and method of selection specified in **clause 15 & clause 16.2 Section-II: Instruction to Bidder (ITB)**.
- 2.2 The name of the Assignment/Job has been mentioned in **Section - III: Data Sheet**. Detailed scope of the Assignment/Job has been described in **Section - VII: Technical Specification** of Survey Vessel
- 2.3 The date, time, and address for submission of the Bids have been given in **Section - III: Data Sheet**.
- 2.4 Bidder shall bear all costs associated with the preparation and submission of their Bids and contract negotiation.
- 2.5 The Employer is not bound to accept any Bid and reserves the right to annul the selection process at any time prior to contract award, without thereby incurring any liability to the Bidder.

3. Bidder Eligibility Criteria

The Bidders shall meet the following pre-qualification criteria: -

- 3.1 Bidder may be a firm that is a private entity, a government owned entity or any combination of such entities in the form of JV/consortium under an existing agreement or with the intent to enter into such agreement supported by a Letter of Intent. Bidders that are Government owned entity in the employer's country may participate only if they can establish that they (i) operate under commercial law and (ii) are not dependent agencies of the employer.
- 3.2 The Bidder shall meet the Qualification criteria of executing similar works of the value as mentioned in clause 16.4.4 of ITB. The Bidder shall indicate the value of the order executed by him together with the details of name of the party, order value, scope of work / component breakup, completion period stipulated in the order and actual completion period. The completion certificate, awarded by the client on its letter head should have a mention of start date, date of completion and value of the work executed by the Bidder. The Bidder can provide the details of the works that have been substantially completed. "Substantially Completed Works" shall be based on completion of 80% or more works that have been financially completed under the claimed relevant component of the contract. Substantial completion of works shall be supported by client certificates with the name of the work including component breakup of relevant work to the extent of similar work, work order value, start date, percentage of similar work completed till date of issue of the Tender in financial terms (Net Payment received against the Contract) as indicated in Form 4B. In case the work was performed by the Bidder in a JV, the same shall be supported by a Client Certificate enumerating the claimant share also. In case the work was performed by the bidder as a sub-contractor, the bidder shall submit similar completion certificate awarded to it by the main contractor and countersigned by the Employer / Client of the main contractor.
- 3.3 Copy of work order/letter of award/letter of work agreement alone shall not suffice Bidders claim for executing the similar work as defined in Section III data sheet. Submitting completion certificate from the client on its letter head is mandatory.
- 3.4 Average Annual Turnover during the last three (03) years ending 31st March of the previous financial year should be as mentioned in clause 16.4.4 of ITB. The bidder should be profitable organization based on Profit before Tax (PBT) for at least 02 (two) out of 3(three) financial years mentioned above. The Bidders shall provide financial turnover of the firm for the last three years along with profit & Loss statement for corresponding years duly certified by statutory auditor(s).
- 3.5 Any entity which has been barred by the Central Government, any State Government, a statutory Employer or a public sector undertaking, or International Funding Agency (World Bank, ADB, JICA etc.), as the case may be, from participating in any project, and the bar subsists as on the Bid submission date, would not be eligible to submit Bid.
- 3.6 The similar work experience of parent company/subsidiary/sister Company or any associated firm/company of the Bidder shall not be considered unless the parent company/subsidiary/sister company or associated firm/company is part of the JV/consortium participating in the Bid.

- 3.7 The Bidder shall offer and make available the list of all Key Personnel as specified in Clause - 7 of Section – VI: Terms of Reference.
- 3.8 Bidder should have, during the last three years, neither failed to perform on any agreement, as evidenced by imposition of a penalty by an arbitral or judicial Employer or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or agreement nor have had any agreement terminated for breach by such Bidder.
- 3.9 The Bidder shall also indicate following:
- 3.9.1 The Bidder shall have adequate resources for successful execution for **DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16** and should be financially solvent. Bidder shall provide a solvency certificate from any nationalized/scheduled bank in India for an amount as indicated in Section - III: Data Sheet.
- 3.9.2 The Bidder shall be income tax assessee and accordingly the Bidder shall submit copy of Income Tax Return (ITR) filed by the Bidder for the last three financial years.
- 3.9.3 A preliminary design and detailed schedule of detailed design, supply, installation, testing and commissioning is required to be submitted.
- 3.9.4 The details of manufacturing yard as the proof of adequate capacity available for the work which must include the size, capacity, and facilities etc, is required to be furnished along with the registration and survey certificate (if any) from the concerned organization.

4. Pre-bid Meeting

A Pre-Bid meeting shall be held as per the date and time mentioned in **Section III - Data Sheet**. Bidders willing to attend the pre-bid should inform the employer beforehand in writing and email. The maximum no. of participants, who chose to attend the pre-bid meeting, shall not be more than two per bidder. The representatives attending the pre-bid meeting must carry an authority letter duly signed by the authorized signatory of his/her organization permitting the representatives to attend the pre-bid meeting on behalf of the respective bidder.

During the course of Pre-Bid Meeting, the Bidders will be free to seek clarifications and make suggestions for consideration by the Employer. The Employer will endeavour to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive selection process.

The bidders may put forth their pre-bid queries in the format prescribed in **Form 4J, Section IV**.

5. Clarifications and Addendums

- 5.1 Bidders may request a clarification on any clause of the document up to the number of days indicated in Section - III: Data Sheet before the Bid submission date. Any request for clarification must be sent in writing, or by e-mail to the Employer's address indicated in Section - III: Data Sheet. No request for the clarification shall be entertained if such request is received by the client after the deadline for submitting clarifications.

5.2 The Employer will respond in writing or by e-mail and will send written copies of the response (including an explanation of the query but without identifying the source of query) to Bidders. Should the Employer deem it necessary to amend the Tender Document as a result of a clarification, it shall do so following the procedure mentioned hereunder:

(i) At any time before the submission of Bids, the Employer may amend the Tender Document by issuing an addendum/corrigendum (amendment) in writing or by e-mail. The information of issue of such amendment will be uploaded on the website and will be binding on the Contractor. The Contractors shall acknowledge receipt of all amendments. However, failure of any contractor to furnish such acknowledgement shall not by itself take away the binding nature of the any / all amendments. To give Contractors reasonable time to the bidders to take an amendment into account, the Employer may, if the amendment is substantial, extend the deadline for the submission of Bids. The amendment /clarification, if any, to the document will be available on <https://eprocure.gov.in/eprocure/app> and IWAI's website "www.iwai.nic.in" All bidders participating in the bid shall be deemed to have kept them informed and updated about each such amendment / clarification which is posted on the above website from time to time.

6. Preparation of Bids

In preparing Bid, Bidders are expected to examine in detail the documents comprising the Tender Document. Material deficiencies in providing the requested information may result in rejection of the Bidder's Bid. Bidders shall adhere to the requirements mentioned below:

6.1 EMD

6.1.1 Bidders shall furnish EMD of the required amount for "**Design, Construction, Delivery and Commissioning of Survey Vessel for NW-16**" as mentioned in Section III Data Sheet except Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase organization or the Concerned Ministry or Department or Startups as recognized by Department for Promotion of Industrial Policy & Internal Trade [DPIIT] on submission of a valid registration certificate as per the Government of India rules. In case of a JV, the EMD shall be furnished by the Lead Member

EMD for the amount mentioned above shall be deposited to IWAI Fund through RTGS in the following account:

| | | |
|-------|------------------------------|---------------------------------------|
| i.) | Name of Bank Account: | IWAI FUND |
| ii.) | Bank Name and Address | Union Bank of India, Sector 15, Noida |
| iii.) | Bank Account Number | 513202050000007 |
| iv.) | IFSC Code | UBIN0551325 |

6.1.2 A part of EMD is acceptable in the form of bank guarantee also. In such case, 50% of earnest money or Rs. 20 Lakhs, whichever is less, will have to be deposited through RTGS and balance can be deposited in the form of Bank Guarantee of any scheduled bank in India

having validity for six months or more from the last date of receipt of bids. Bidders claiming exemption of EMD are however required to submit a **signed Bid security declaration on Form 4P**.

- 6.1.3 Bids submitted without EMD / Bid security declaration shall be rejected as non-responsive.
- 6.1.4 No interest shall be payable by the Employer for the sum deposited as earnest money deposit.
- 6.1.5 The EMD of the unsuccessful bidders would be returned within one month of signing of the contract with the successful bidder.
- 6.1.6 The Earnest Money of the successful Bidder submitted in the form of RTGS will be retained as Security Deposit and that given in the form of Bank Guarantee will be discharged/returned when the Bidder has signed the Agreement and furnished the required Performance Security.
- 6.1.7 Part of EMD acceptable in the form of bank Guarantee shall be deposited as per attached Bank Guarantee format (Annexure VI).
- 6.1.8 The EMD shall be forfeited by the Employer in the following events:
- (i) If Bid is withdrawn during the validity period or any extension agreed by the Bidder thereof.
 - (ii) If the Bid is varied or modified in a manner not acceptable to the Employer after opening of Proposal during the validity period or any extension thereof.
 - (iii) If the Bidder tries to influence the evaluation process.
 - (iv) If the Bidder withdraws his proposal during negotiations.
 - (v) In case the Bidder, submits false certificate in terms of any documents supported to such Tender.
 - (vi) If the Bidder fails to sign the contract in accordance with Conditions of Contract on receipt of award of work
 - (vii) In case of a Bidder revoking or withdrawing his Tender or varying any terms in regard thereof without the consent of the Employer in writing.
 - (viii) In case the bidder is found to indulge in corrupt or fraudulent practices at any stage of the execution of the contract, as described in Clause 17.5 of GCC.
 - (ix) In case the bidder fails to furnish the prescribed performance guarantee within the prescribed period as mentioned in clause 4.4.1 of GCC
 - (x) In case of forfeiture of earnest money, as prescribed in vii and ix above, the tenderer shall not be allowed to participate in the retendering process of the work.

6.2 Cost of Tender Document/Tender Fee

All Bidders except Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase organization or the Concerned Ministry or Department or Start-ups as recognized by Department for Promotion of Industrial Policy & Internal Trade [DPIIT] on submission of a valid registration certificate as per the Government of India rules are required to pay the cost of Tender Document separately for **DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16** as mentioned in **Section-III, Clause 8 of Data Sheet** through RTGS/NEFT to be deposited in the following account. The cost of Tender Document is Non-Refundable.

- i) Name of Bank Account: IWAI FUND
- ii) Bank Name and Address: Canara Bank, Sector-18, Noida Branch Morna
- iii) Bank Account number: 90622150000086
- iv) IFSC: CNRB0018778

6.3 Bank Solvency

All bidders shall submit bank solvency certificate from a nationalized/scheduled bank in India for the amount as mentioned in **Section III: Clause 9 of Data Sheet**.

The solvency certificate submitted by the bidder shall not be older than six (06) months from the Bid Submission Last Date. In case bidder does not adhere to this criterion, his bids shall be considered non-responsive and shall not be considered for further evaluation process. The bank solvency certificate shall be from any Nationalized/Scheduled Bank in India in the name of the bidder. **The bank solvency certificate can be submitted by any one member of the JV / Consortium and the name of that member submitting the bank solvency certificate shall be mentioned in the JV / Consortium Agreement.**

6.4 Taxes

The Bidders shall fully familiarize themselves with the applicability of all types of taxes and all such taxes, as prevailing on date of submission of the bid, must be included by the Bidder in the Financial Proposal along with the conditions mentioned therein, except for GST which will be quoted separately by the Bidder as per Form Fin – 2. It may be noted that the bidder shall have to be registered with GST and shall submit the proof of the same. The GST and all other relevant taxes shall be as per existing rules and regulations at the time of payment

6.5 Currency

Bidders shall quote the price of their Assignment/job in Indian Rupees.

6.6 Language

The Bid as well as all related correspondence exchanged between the Bidders and the Employer shall be in English language and shall be strictly as per the formats attached in this Tender Document. The Employer will evaluate only those Bids that are received in the specified formats and are complete in all respects as per this Tender Document. Any supporting documents submitted by the Bidder with its Bid or subsequently, in response to any query/ clarification from the Employer shall be in English and in case any of these documents is in another language, it must be accompanied by an accurate translation of all the relevant passages in English, and in such case, for all purposes of interpretation of the Bid, the translation in English shall prevail.

6.7 Bid Validity

The **Section – III: Data Sheet** indicates for how long the Bids submitted by the bidders must remain valid after the submission date. During this period, Bidders shall maintain the availability of Professional staff nominated in the Bid and the amount quoted for the services in the Financial Bid shall remain unchanged. Should the need arise; however, the Employer may request Bidders to extend the validity period of their Bids. Bidders who agree to such extension shall confirm that they will maintain the availability of the Professional staff Proposed in the Bid and that their financial Bid will remain unchanged. Also, in their confirmation of extension of validity of the Bid, bidders could submit new staff in replacement, which would be considered in the final evaluation for contract award. The bidders have the right to refuse to extend the validity of the bids and bids of such bidders, who do not extend the validity of their bids, shall not be considered for further evaluation.

6.8 Number of Bids

A bidder can submit one bid only either as a single entity or in the form of a JV/consortium. In case a bidder submits or participates in more than one bid, the application of the bidder shall be rejected summarily.

6.9 Bids by Joint venture/consortium

- 6.9.1 The Joint Venture/consortium can be entered between two firms only.
- 6.9.2 The lead member should have highest share of participation in a JV/consortium.
- 6.9.3 The minimum percentage share of the 2nd member shall be 25%, with total share of all the JV/consortium members being 100%.
- 6.9.4 There shall be a Joint Venture Agreement/ Memorandum of Understanding specific for the contract between the constituent firms, indicating clearly, amongst other things, the proposed distribution of responsibilities both financial as well as technical for execution of the work amongst them. A copy of the Joint Venture Agreement/ MOU in accordance with requirements mentioned shall be submitted along with the bid. The bidder has to submit documentary proof of "intent of forming JV/consortium" on Rs.100/- registered stamp

paper at the time of submission of bid. The bidder is required to submit the Letter of Intent to enter into a JV / Consortium agreement should contain at least the following:

Name of the Lead Partner

Clearly mentioned Percentage share of JV / Consortium members adhering to the clause 6.9.3 mentioned above.

“All the partners shall jointly and severally liable for the execution of the Contract in accordance with the Contract terms”

However, successful bidder is required to submit proof of registration of JV/consortium after issue of Letter of Intent and before signing of agreement. The members of JV / Consortium shall incorporate a special purpose vehicle as Contractor under the provisions of Companies Act, 2013, to execute the Project, if awarded to the JV/Consortium.

- 6.9.5 Lead partner’s authorization shall be evidenced by submitting a power of attorney, duly notarized, signed by the legally authorized signatories of all the partners /members of JV/consortium.
- 6.9.6 The Lead Partner shall be authorized to incur liabilities and to receive instructions for and on behalf of the partners of the Joint Venture, whether jointly or severally, and entire execution of the Contract (including payment) shall be carried out exclusively through the partner-in-charge. A copy of the said authorization shall be furnished in this Bid.
- 6.9.7 In the event of default by any partner, in the execution of his part of the Contract, the Employer shall be so notified within 30 days by the Lead Partner, or in the case of the Lead Partner being the defaulter, by the partner nominated as partner-in-charge of the remaining Joint Venture/consortium. The partner-in-charge shall, within 60 days of the said notice, assign the work of the defaulting partner to any other equally competent party acceptable to the Employer to ensure the execution of that part of the Contract, as envisaged at the time of bid. Failure to comply with the above provisions will make the Contractor liable for action by the Employer under the Conditions of Contract. If the Most experienced i.e. Lead Partner, defined as such in the Communication approving the qualification, defaults, it shall be construed as default of the Contractor and Employer will take action under the Conditions of Contract.
- 6.9.8 Notwithstanding the permission to assigning the responsibilities of the defaulting partner to any other equally competent party acceptable to the Employer as mentioned in sub clause 6.9.7 above, all the partners of the Joint Venture/consortium will retain the full and undivided responsibility for the performance of their obligations under the Contract and/ or for satisfactory completion of the Works.
- 6.9.9 The bid submitted shall contain all relevant information for each member of JV/consortium as per the requirement stipulated under clause 10.1 of ITB
- 6.9.10 Lead member should have stake in the Joint Venture/consortium as stipulated in Clause 6.9.3 of Instructions to Bidders (ITB). However, the JV/Consortium members together shall meet the overall qualification Criteria stipulated in Clause 16.1 of ITB.

6.9.11 For sustainability of JV, clause 24 of GCC shall be referred.

7. Conflict of Interest

7.1 Employer requires that selected bidder (Contractor) provides professional, objective, and impartial advice and at all times holds the Employer's interest is paramount, strictly avoids conflicts with other assignment(s)/job(s) or his own corporate interests and act without any consideration for future work.

7.2 Without limitation on the generality of the foregoing, Bidders, and any of their affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:-

- (a) **Conflicting Activities:** A firm or any of its affiliates who have been engaged by the Employer to provide goods, works or assignment/job other than design and build assignment/job for a project shall be disqualified from providing design and build assignment/job related to those goods, works or assignments/ jobs. Conversely, a firm or any of its affiliates who have been hired to provide design and build assignment/ job for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from subsequently providing goods or works or assignment/job other than design and build assignment/job resulting from or directly related to the firms design and build assignment/job for such preparation or implementation. For the purpose of this paragraph, assignment/ job other than design and build assignment/job are defined as those leading to a measurable physical output, for example, surveys, exploratory drilling, aerial photography, satellite imagery etc.
- (b) **Conflicting assignment/ job:** A Contractor {including its Personnel and Sub-Contractor(s)} or any of its affiliates shall not be hired for any assignment/ job that by its nature may be in conflict with another assignment/ job of the Contractor to be executed for the same or for another Employer, for example a Contractor hired to prepare engineering design for an infrastructure project shall not be engaged to prepare an independent environmental assessment for the same project and a Contractor assisting an Employer in the privatization of public assets shall not purchase nor advise purchasers of such assets.
- (c) **Conflicting Relationships:** A Contractor (including its Personnel and Sub-Contractors) that has a business or family relationship with a member of the Employer's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment/job (ii) the selection process for such assignment/job or (iii) supervision of the Contract, may not be awarded a Contract unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Employer throughout the selection process and the execution of the Contract.

7.3 Contractors have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Employer, or that may reasonably be perceived as having this effect. Any such disclosure shall be made as per the standard

forms of technical proposal provided herewith. If the Contractor fails to disclose said situations and if the Employer comes to know about any such situation at any time, it may lead to the disqualification of the Contractor during bidding process or termination of its Contract during execution of assignment on this ground alone.

- 7.4 No agency or current employees or consultants of the Employer shall work as Contractors under their own ministries, departments, or agencies. The contract is liable for cancellation if either the Contractor himself or any of his employees or representatives are found to be persons/person who have held class I post under IWAI immediately before retirement and has within two years of such retirement accepted without obtaining the previous permission of IWAI, or the chairman as the case may be, and employment as contractor, or in connection with the execution of the public works, or as an employee of such contractor. If the contract is terminated on account of the failure of the contractor to comply with this clause, IWAI shall be entitled to recover from him such damages as may be determined by the Engineer in Charge with due regard to the inconvenience caused to IWAI on account of such termination without prejudice to IWAI's right to proceed for legal action against such officer.

8. Acknowledgement by Bidder

It shall be deemed that by submitting the Bid, the Bidder has:

- 8.1 Made a complete and careful examination of the Tender for “**DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16**” and received all relevant information requested from the Employer;
- 8.2 Satisfied itself about all matters and necessary information required for submitting a competitive bid; inter-alia including fully familiarizing itself with the site and other conditions prevailing at site.
- 8.3 Updated itself about any amendments / clarifications that have been posted on the website in terms of clause 5.2 above.
- 8.4 Acknowledged that he does not have a Conflict of Interest; and
- 8.5 Agreed to be bound by the undertaking provided by him under the terms and conditions laid in this tender document.

9. Guidelines for e-submission of the Bids

- 9.1 The Bids should be submitted through Central Public Procurement Portal for e- Procurement <https://eprocure.gov.in/eprocure/app>
- 9.2 Possession of valid Digital Signature Certificate (DSC) and enrolment/registration of the Contractors/Bidders on the e-procurement/e-Tender portal is a prerequisite for e-Tendering.
- 9.3 Bidder should enroll in the e-Procurement site using the <https://eprocure.gov.in/eprocure/app> option available “Enrol Here” on the home page portal. Enrolment is free of charge. During enrolment/registration, the Bidders should provide the correct/true information including

- valid e-mail id. All the correspondence shall be made directly with the Contractors/Bidders through email id provided.
- 9.4 Bidders need to login to the site through their user ID/password chosen during enrolment/registration.
 - 9.5 Then the Digital Signature Certificate (Class - II or Class - III Certificates with signing key usage) issued by SIFY/TCS/node/eMudra or any Certifying Employer recognized by CCA India on e-Token/Smart Card, should be registered.
 - 9.6 Only the registered DSC should be used by the Bidder and should ensure safety of the same.
 - 9.7 Contractor/Bidder may go through the Tenders published on the site and download the required Tender documents/schedules in which the Bidder is interested.
 - 9.8 After downloading/getting the Tender document/schedules, the Bidder should go through them carefully and then submit the documents as asked.
 - 9.9 If there are any clarifications, this may be obtained online through the Tender site, or through the contact details as specified in Section – III: Data Sheet. The Bidder should also take into account the addendum/corrigendum published before submitting the Bids online.
 - 9.10 Then the Bidder may log into the site through the secured log in by giving the user id/ password chosen during enrolment/registration and then by giving the password of the e-Token/Smart card to access DSC.
 - 9.11 Bidder selects the tender which he/she is interested in by using the search option & then moves it to the „my favorites“ folder.
 - 9.12 From the favorite’s folder, he selects the tender to view all the details indicated.
 - 9.13 It is construed that the bidder has read all the terms and conditions before submitting their offer. Bidder should go through the tender schedules carefully and upload the documents as asked; otherwise, the bid will be rejected.
 - 9.14 Bidder, in advance, should get ready the Bid documents to be submitted as indicated in the Tender document/nd generally, they can be in general PDF/XLS/RAR/JPG formats. If there is more than one document, they can be clubbed together and can be provided in the requested format. Each document to be uploaded online should be less than 2 MB. If any document is more than 2 MB, it can be reduced through Zip/RAR and the same can be uploaded, if permitted.
 - 9.15 The Bidders can update well in advance, the documents such as certificates, annual report details etc., under My Space option and these can be selected as per Tender requirements and then sent along with Bid documents during Bid submission. This will facilitate the Bid submission process making it faster by reducing upload time of Bids.
 - 9.16 Bidder should submit the Cost of Tender document/ EMD for the amount as specified in Section –III: Data Sheet. The original payment instruments should be

posted/couriered/given in person to the employer within the due date as mentioned in this Tender document. Scanned copy of the instrument should be uploaded as part of the offer, if asked for.

- 9.17 While submitting the Bids online, the Bidder should accept the Terms & Conditions and proceed further to submit the Bid packets.
- 9.18 The Bidder has to select the payment option as offline to pay the Cost of Tender Document/ EMD as applicable and enter details of the instruments.
- 9.19 The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during Bid submission time. Otherwise submitted Bid will not be acceptable.
- 9.20 The Bidder has to digitally sign and upload the required Bid documents one by one as indicated. Bidders to note that the very act of using DSC for downloading the Bids and uploading their offers shall be deemed to be a confirmation that they have read all sections and pages of the Bid document including conditions of contract without any exception and have understood the entire document and are clear about the requirements of the Tender requirements.
- 9.21 The Bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the Bid will be automatically rejected.
- 9.22 If the price Bid format is provided in a spread sheet file like BoQ_xxxx.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Price Bid/BOQ template must not be modified/replaced by the Bidder; else the Bid submitted is liable to be rejected for this Tender.
- 9.23 The Bidders are requested to submit the Bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the Bid submission end Date & Time (as per Server System Clock). The TIA will not be held responsible for any sort of delay or the difficulties faced during the online submission of Bids by the Bidders at the eleventh hour.
- 9.24 After the Bid submission, the acknowledgement number, given by the e-tendering system should be printed by the Bidder and kept as a record of evidence for online submission of Bid for the particular Tender and will also act as an entry pass to participate in the Bid opening date.
- 9.25 The Bidder should ensure/see that the Bid document submitted is free from virus and if the documents could not be opened, due to virus, during Tender opening, the Bid is likely or liable to be rejected.
- 9.26 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- Tender system. The Bidders should follow these time settings during Bid submission.
- 9.27 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.

- 9.28 Any Bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/Bid openers' public keys. Overall, the uploaded Tender documents become readable only after the Tender opening by the authorized Bid openers.
- 9.29 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.
- 9.30 The Bidder should logout of the Tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.
- 9.31 Any queries relating to the Tender document and the Terms and Conditions contained therein should be addressed to the Tender Inviting Employer for a Tender or the relevant contact person indicated in the Tender.
- 9.32 Any queries relating to the process of online Bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315.

10. Submission of Bids

The scanned copy of the Technical and Financial Bids, complete in all respects for “**DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16**” should be submitted online as per sequence mentioned below.

Bids shall be submitted in two covers.

The Bidders shall number all the pages and prepare a table of contents in the beginning of each Part referring the page numbers of the indexed items.

The Technical and Financial Bids, complete in all respects, should be submitted as per sequence mentioned under Clause 10.1 below.

10.1 Cover-I: Technical Bid

10.1.1 Enclosure – I

- a. Scanned copy of the proof of Cost of Tender Document as specified in Section III: Data sheet. For bidder claiming exemption shall submit a scanned copy of valid registration certificate as per Govt. of India rules, and submission of documents to the extent as per Govt. of India Notification. (The Original payment instruments should be posted / couriered / given in person so as to reach to the Employer on or before the Bid closing date and time.)
- b. Scanned copy of the proof of EMD as specified in **Section – III: Data Sheet** and Annex – VI (if submitted in the form of BG). Bidders claiming exemption of EMD are however required to submit a signed **Bid security declaration as per form 4P**.

(The Original payment instruments should be posted / couriered / given in person so as to reach to the Employer on or before the Bid closing date and time.)

- c. Proof of bank solvency for the amount as specified in **Section – III: Data Sheet**
- d. Power of Attorney for the authorized person of the bidder as per **Form 4D**. This form shall be accompanied by copy of company identity card or general identity card (passport/Driving license/Voter's ID etc.) of the authorized representative.
- e. Power of Attorney for lead member of the JV/Consortium as per **Form 4K**
- f. Joint Bidding Agreement as per **Form 4M**
- g. Statement of legal Capacity as per **Form 4L**
- h. Scanned copy of Tender Acceptance Letter duly filled and signed by the authorized signatory of the Bidder as per **Annex – V**
- i. Scanned copy of Form of Tender (**Form 4A**)
- j. Scanned copy of a signed declaration by the bidders (**Form 4G**)
- k. Bidders Information Form (**Form 4H**)
- l. Composition/Ownership/Shareholding pattern of the organization
- m. Board Resolution, details of top management (Board members), key officials with documentary evidence, Articles of Association/memorandum of association of the company.
- n. Registration/incorporation certificate of the company/Firm.
- o. Original tender document with all addendums and corrigendum issued till date duly stamped and signed by the authorized signatory of the bidder.

10.1.2 Enclosure – II

- a. Scanned copy of the Annual Report/Audited balance sheets, for the last three financial years ending 31st March of the previous financial year i.e. **2021-22, 2022-23 and 2023-24.**
- b. Scanned copy of GST Registration certificate.
- c. Scanned copy of PAN card of the Bidder.
- d. **Form 4C of Section V** for average annual turnover with profit & loss statement for the last three financial years ending 31st March of the previous financial year i.e. **2021-22, 2022-23 and 2023-24.**
- e. Scanned copy of Bank account details, along with a cancelled cheque, for transaction through e-payment in format given at **Annex- III & Annex - IV.**
- f. Integrity agreement in format given at **Annex- VIII.**

10.1.3 Enclosure – III

Scanned copy of complete Company profile with details such as:

- a. Background of the organization.
- b. Copies of completion certificate on client letter head for similar projects executed by the bidder in last seven years. The submitted certificates shall comply to conditions laid in clause 3 of ITB (Bidder Eligibility Criteria) Such eligible projects shall be supplied in **Form 4B of Section V**.
- c. Copies of work order/agreement with value and status (% completed till submission) in case of on-going work shall be submitted separately as proof of on-going assignments as per **Form- 4F of Section V**. The bidder shall also submit, along with **Form – 4F**, plan/provision to move the existing machinery to the project site when required.
- d. General Construction experience of the bidder to be submitted as per **Form 4N**
- e. Output of the Shipyard During Preceding 7 Years **Form 4Q**
- f. Contract Non-Performance (During Preceding 7 Years) **Form 4R**
- g. Financial Performance (During Preceding 7 Years) **Form 4S**
- h. List of litigation history.

10.1.4 Enclosure – IV

- a. Scanned copies of following, keeping in view the scope of work listed in the ToRs:
 - (i) The approach to the work and methodology to be adopted, and
 - (ii) Detailed work plan
 - (iii) List of Equipment to be deployed as per **Form 4I of Section V** (Details of make and manufacture to be provided).
- b. List of experts/key personnel (**Form 4E of Section V**) required for carrying out all the contractual obligations.in compliance of the statutory requirements.

It may be noted that the Technical Bid shall not contain any reference to any fee or charges.

All the submissions enumerated under Enclosure II & III shall be submitted by all the JV Partners separately.

10.2 Cover-II: Financial Bid

Financial Bid in excel format (BoQ_1) provided along with this Tender as Form **Fin – 2** shall be used for quoting prices/offer.

- (i) This will contain fixed price contract rate to be charged for completing the work.

- (ii) While working out the price, following points should be noted:
- (a) The Contractor will have to bear the cost of mobilization of equipment to the floating terminal site and their demobilization as required. All other incidental cost during the work is also to be borne by the Bidder.
 - (b) The Contractors will have to make their own arrangements for the transport/accommodation/TA/DA of their personnel assigned to this project. The price quoted shall also include the Contractor's representative visit to various offices, and other places for meetings, data collection, presentations, public consultation, secretarial staff, their salary, allowances, overhead expenditure etc.
 - (c) All duties, taxes, royalties, and other levies payable by the Contractor under the Contract, or for any other cause, shall
 - (d) be included in the rates, prices, and total Bid price submitted by the Bidder except for GST which will be as per existing rules and regulations at the time of payment. The rates and prices quoted by the Bidder shall be fixed for the duration of the Contract and shall not be subject to any adjustment other than that defined in clause 5.2 Section VI, Part I. The prices shall be quoted b
 - (e) the Bidder entirely in Indian Rupees. All payments shall be made in Indian Rupees (INR).

10.3 The total duration of Works shall be as specified in Section – III: Data Sheet.

11. Extension of Bid submission date

The employer may extend the date of submission of bids by issuing an addendum and uploading the same in website.

12. Late Proposals

Proposals received by the employer after the specified bid submission date or any extension thereof, pursuant to clause 11, shall not be considered for evaluation and shall be summarily rejected.

13. Liability of the employer

The bidders are advised to avoid last moment rush to submit bids online and they should upload their bids well in advance before the bid submission deadline. The employer shall not be liable for failure of online submission of bids by the bidder that may arise due to any reason whatsoever. It shall be construed that the guidelines for online submission of bids, mentioned under clause 9 of ITB, have been read and understood by the bidder.

14. Modification/Substitution/ Withdrawal of Bids

The tender for works once submitted may be modified, substituted, or withdrawn by the bidders before the submission deadline through e-Procurement Mode as mentioned in NIT of this tender document.

No bid shall be modified after the deadline for submission of bids.

15. Bid opening and evaluation process

- 15.1 From the time the Proposals are opened to the time the Contract is awarded, the Bidders should not contact the Employer on any matter related to its Technical and/or Financial Proposal. Any effort by Bidders to influence the Employer in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidders' Proposal."
- 15.2 The employer will constitute a tender evaluation committee (TEC) which will carry out the evaluation process.
- 15.3 Online Bid opening shall be carried out in two stages. Firstly, 'Technical Bid' of all the online Bids received shall be opened on the date and time mentioned in Section – III: Data Sheet. 'Financial Bid' of those Bidders whose Technical Bid has been determined to be responsive and on evaluation fulfils the criteria as stipulated in the Tender Document, shall be opened on a subsequent date, which will be notified to such Bidders. In the event of the specified date for the submission of bids being declared a holiday for The Employer, the Bids will be opened at the defined time and location on the next working day. Bids for which a notice of withdrawal has been submitted shall not be opened.
- 15.4 The TEC shall evaluate the Technical Bids on the basis of their responsiveness to the Terms of Reference and by applying the evaluation criteria specified in Clause 16. Bid shall be rejected if it is found deficient or found not meeting the eligibility criteria as mentioned in clause 3 and clause 16.1 of ITB. Only responsive bids shall be further taken up for evaluation. A Bid shall be considered responsive only if:
- 15.4.1 It is received by the Bid submission date and time including any extension thereof, pursuant to Clause 11;
- 15.4.2 It is accompanied by the Earnest Money Deposit"/ a signed **Bid security declaration** as specified in Clause 6.1;
- 15.4.3 It is received in the forms specified in section IV and in section V
- 15.4.4 It does not contain any condition or qualification
- 15.5 The Employer shall inform the Bidders, whose Technical Bids are found responsive and on evaluation fulfils the criteria stipulated in the Tender document, of the Date, Time and Place of opening of the Financial Bids. The Bidders so informed, or their representative, may attend the meeting of online opening of Financial Bids.

- 15.6 At the time of the online opening of the “Financial Bids”, the names of the Bidders, whose Bids were found responsive and qualified for opening of financial bid, the total amount of each Bid, and such other details as the Employer may consider appropriate will be announced by the Employer at the time of Bid opening.
- 15.7 Bidder may, if deemed necessary by him, send a representative to attend the financial bid opening. Such representative shall have a letter of authorization from the bidder to attend the bid opening on its behalf. In case a bidder sends a representative on its behalf to attend the financial bid opening, it shall be construed that the representative has the authority of the bidder.

16. Qualification Criteria and Bid evaluation

16.1 Scope of Bid

- 16.1.1 The Owner invites online bids for “**Design, construction, delivery and commissioning of survey vessel for NW-16**” to be delivered at **Badarpur/Karimganj, Assam, NW-16** as described in these documents and referred to as “the works”.
- 16.1.2 The successful bidder is expected to complete the works by the delivery schedule as follows:
- (i) Delivery of Survey vessel as per technical specifications – within 8 (eight) months from the date of Letter of Award.
- 16.1.3 Throughout these bidding documents, the terms “bid” and “tender” and their derivatives (bidder/tenderer, bid/tender, bidding/tendering, etc.) are synonymous.

16.2 Source of Funds

The expenditure on this project will be met by Inland Waterways Authority of India (IWAI).

16.3 Eligible Bidders

- 16.3.1 This Invitation for online Bids is open to all bidders engaged in Shipbuilding and has constructed vessels of similar type or vessels with similar or higher size/ capacity as already described in NIT.
- 16.3.2 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices by the Central Government, the State Government or any public undertaking, autonomous body, authority by whatever name called under the Central or the State Government.

16.4 Qualification of the Bidder

- 16.4.1 This invitation for online bids is open to all manufacturers and their dealers registered with the applicable authorities under the appropriate laws in force for the time being in India.
- 16.4.2 All bidders shall include the scanned copy of following information and documents with their bids online.

- (a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder and memorandum of understanding and Joint bidding agreement/consortium agreement between JV/consortium partners.
- (b) Total monetary value of similar works performed for each of the last seven years.
- (c) Experience certificate in works of a similar nature and size for each of the last seven years with satisfactory performance certificates from clients on client letterhead.
- (d) Evidence of availability (either owned or leased or rented) of shipyard where the vessel is proposed to be built. The bidder to submit the details of the yard owned by them, in case the yard is on lease or rented, a copy of the lease or rent agreement to be enclosed as evidence. No change of yard or place of construction will be allowed.
- (e) Qualification and experience of key site management and technical personnel proposed for the contract.
- (f) Audited Annual Reports/Balance sheets on the financial standing of the Bidder, and a certificate from Chartered Accountant as a proof of turnover for the last three financial years
- (g) Evidence of adequacy of working capital for this contract [access to line(s) of credit and availability of other financial resources].
- (h) Proposals for subcontracting components of the works amounting to more than 10% of the contract price.
- (i) Information regarding any litigation or arbitration during the last five years in which the Bidder is involved, the parties concerned, the disputed amount, and the matter;
- (j) Details of the contracts if any having delay in completing the work more than one year over and above contractual delivery period. In the event of no case, similar statement is to be submitted.
- (k) Valid income tax clearance certificate from Indian builder/supplier.

16.4.3 Bids from firms/company jointly or consortium are allowed. Maximum number of JV/consortium partners shall be 2. Memorandum of Understanding between the firms for joint bids to be submitted.

16.4.4 To qualify for award of the Contract, each bidder should have

- a) Achieved average annual financial turnover during the last 3 years (2021-22, 2022-23, 2023-24), ending 31st March of the previous financial year (in all cases of shipbuilding works/supply of survey vessels only) at least **Rs. 1.76 crore**.
- b) Satisfactorily completed, as a prime contractor of similar works during last seven years ending last day of month previous to the one in which bids are invited should be either of the following:
 - (i) Three similar completed works costing not less than 40% of estimated cost of

Rs. 2.34 Cr.

- (ii) Two similar completed works costing not less than 50% of estimated cost of Rs. 2.93 Cr.
- (iii) One similar completed work costing not less than 80% of estimated cost of Rs. 4.68 Cr.

The similar work means design, construction, and supply of inland/sea-going vessels particularly survey vessels/ Ro-Ro/Ro-pax/ferry vessels, Workboats, Cargo vessels, Self-propelled barge and other vessels of propelled type duly certified by any classification society/ IRS/ any statutory body under state government and registered by any registering authorities under Inland Vessel Act 2021 or any other relevant act / regulation.” (Escalation factor as specified in the appendix shall be used to bring the value of such completed works at the level of current financial year i.e. 2024-25)

Note : Escalation factor (for the cost of works completed during the last 7 years) may be taken as follows:

| Year Before Multiplying Factor | |
|---------------------------------------|---------------|
| One | .1.1 |
| Two | .1.21 |
| Three | .1.33 |
| Four | 1.46 |
| Five | 1.61 |
| Six | ..1.77 |
| Seven | ..1.94 |

16.5 Qualification Criteria for Bid capacity)

- i. The Bidder shall submit the details asked for the Bid capacity as per the format prescribed in **Form 40**.
- ii. The Bid Capacity of the Bidder must be equal to or more than the estimated cost of the work.
- iii. Work put to the Tender i.e. **Rs 585/- Lakhs for Survey Vessels for River Barak (NW-16)**
- iv. In case the Bid capacity of the Bidder is less than the estimated cost of the work, his bid shall be cancelled, and such Bidder shall not be considered for opening of Financial Bid even if he has been determined eligible in other criteria's set forth in the Tender Document.
- v. In the event of a Joint Venture, all parties combined shall together meet the Qualification requirement of Bid Capacity.

16.6 Qualification Criteria for Work Plan and Methodology Statement

- i. The Bidder shall submit the work plan indicating the design, construction, supply, installation, testing and commissioning schedule in bar chart format.

- ii. The Bidder should have its own manufacturing facility for floating modules, in India. The bidder shall also furnish the details manpower & equipment available with him, for the construction and installation of floating jetties.

16.7 Bid evaluation

16.7.1 The Bids shall be evaluated based on the qualification criteria mentioned in Clause 16.1 of ITB. In case a bidder fails to meet the above-mentioned qualification criteria, their bids shall be treated as non-responsive and financial bids of such bidders shall not be opened.

16.7.2 A substantially responsive bid is one that conforms to all the terms, conditions, and specifications of the bidding document without material deviation or reservation. A material deviation or reservation is one:

- (a) that affects in any substantial way the scope, quality, or performance of the Works;
- (b) that limits in any substantial way, inconsistent with the bidding documents, the Employer's rights, or the bidder's obligations under the contract; or
- (c) whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids. Further, a bid will not be considered substantially responsive if the bidder has not offered to undertake all the items of the work as listed in Bill of Quantity (BoQ) of section V of bid document.

16.7.3 The lowest priced bidder i.e. L-1 shall be chosen based on the amount quoted by the bidders in BoQ of Section V.

16.7.4 If the bid, which results in the lowest Evaluated Bid Price, is seriously unbalanced or front loaded as compared to the estimate of the items of work to be performed under the Contract, the bidder shall be asked to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and operating methodology proposed. After evaluation of the price analysis, taking into consideration the schedule of estimated Contract payments, price may be negotiated with the lowest bidder to remove the imbalance, make an appropriate adjustment on sound technical and/or financial ground for any quantifiable, acceptable aspects and thereby bring the prices to justified level sufficient to protect the Employer's interest, before taking a decision on the bid

If during the execution of the works, any deviation/variation takes place for amount exceeding the accepted contract value, the Contractor at the written request of Engineer-In-Charge, shall promptly increase the value of the Performance Bank Guarantee proportionately in terms of **clause 4.4.1.2 of G.C.C.**

17. Award of Contract

17.1 The Employer shall issue a Letter of Award to the selected Bidder. It may also notify all other Bidders who submitted their bids about the decision taken.

- 17.2 The Contractor will sign the Contract Agreement after fulfilling all the formalities/pre-conditions mentioned in the Standard Form of Contract in Section V, within 45 days (in case of JV) & 28 days (in case of Single Entity) from the date of issuance of the Letter of Award.
- 17.3 The Contractor is expected to commence the Assignment/job on the date and at the location specified in Section III Data Sheet.

18. Mobilization of Equipment, Men & Materials

18.1 Mobilization Site

The Contractor shall mobilize all the equipment, materials, and manpower at Karimganj/Badarpur site as required for “**DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16**” as specified in Clause 18 of Data Sheet.

18.2 Mobilization Time

The Contractor shall mobilize the desired equipment and manpower within the time frame as specified in Clause 18 of Data Sheet to start the works of “**DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16**” in full capacity.

19. Ownership of Document and Copyright

All the deliverables and study outputs including primary data shall be compiled, classified, and submitted by the Contractor to the Employer in hard copies and editable soft copies in addition to the requirements for the reports and deliverables indicated in the Terms of Reference.

The study outputs shall remain the property of the Employer and shall not be used for any purpose other than that intended under these Terms of Reference without the prior written permission of the Employer. In the case of any deliverables by Contractor consisting of any Intellectual Property Rights ("IPR") rights of the Contractor, the Contractor shall provide the Employer with necessary irrevocable royalty-free license to use such IPR. Further, for the avoidance of any doubt, it is clarified that any intellectual property developed during the course of, or as a result of, the services rendered in relation to the Works, shall be and shall remain property of the Employer.

20. Instructions to the Contractors/Bidders for the e-submission of the bids online through the Central Public Procurement Portal for eProcurement <https://eprocure.gov.in/eprocure/app>

- i. Possession of valid Digital Signature Certificate (DSC) and enrolment/registration of the contractors/bidders on the e-procurement/e-tender portal is a prerequisite for e-tendering.
- ii. Bidder should do the enrolment in the eProcurement site using the <https://eprocure.gov.in/eprocure/app> option available on the home page. Portal enrolment is generally free of charge. During enrolment/registration, the bidders should provide the correct/true information including valid email-id. All the correspondence shall be made directly with the contractors/bidders through email-id provided.
- iii. Bidder need to login to the site through their user ID/ password chosen during enrolment/registration.
- iv. Then the Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by SIFY/TCS/nCode/e-Mudra or any Certifying Authority recognized by CCA India one Token/Smartcard, should be registered.
- v. The DSC that is registered only, should be used by the bidder and should ensure safety of the same.
- vi. Contractor/Bidder may go through the tenders published on the site and download the required tender documents/schedules for the tenders he/she is interested.
- vii. After downloading / getting the tender document/schedules, the Bidder should go through them carefully and then submit the documents as asked.
- viii. If there are any clarifications, this may be obtained online through the tender site, or through the contact details. Bidder should take into account of the corrigendum published before submitting the bids online.
- ix. Bidder then logs into the site through the secured login by giving the user id/password chosen during enrolment/registration and then by giving the password of the eToken/Smartcard to access DSC.
- x. Bidder selects the tender which he/she is interested in by using the search option & then moves it to the 'my favourites' folder.
- xi. From the favourite's folder, he selects the tender to view all the details indicated.
- xii. It is construed that the bidder has read all the terms and conditions before submitting their offer. Bidder should go through the tender schedules carefully and upload the documents as asked, otherwise, the bid will be rejected.
- xiii. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF/xls/rar/jpg/formats.

- xiv. If there is more than one document, they can be clubbed together and can be provided in the requested format. Each document to be uploaded through online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip/rar and the same can be uploaded, if permitted.
- xv. If there are any clarifications, this may be obtained through the site, or during the pre-bid meeting if any. Bidder should take into account the corrigendum published from time to time before submitting the online bids.
- xvi. The Bidders can update well in advance, the documents such as certificates, annual report details etc., under My Space option and these can be selected as per tender requirements and then send along with bid documents during bid submission. This will facilitate the bid submission process faster by reducing upload time of bids.
- xvii. The details of proof of accepted payment instrument, physically sent, must tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise submitted bid will not be acceptable.
- xviii. The bidder has to digitally sign and upload the required bid documents one by one as indicated. Bidders to note that the very act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read all sections and pages of the bid document including General conditions of contract without any exception and have understood the entire document and are clear about the requirements of the tender requirements.
- xix. The bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid will be rejected.
- xx. If the price bid format is provided in a spread sheet file like BoQ_xxxx.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Price Bid/BOQ template must not be modified/replaced by the bidder, else the bid submitted is liable to be rejected for this tender.
- xxi. The bidders are requested to submit the bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock). The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.
- xxii. After the bid submission, the acknowledgement number, given by the e-tendering system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender and will also act as an entry pass to participate in the bid opening date.
- xxiii. The bidder should ensure/see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is likely/liable to be rejected.
- xxiv. 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-tender system. The bidders should follow this time during bid submission.
- xxv. 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 viewable by

unauthorized persons during bid submission & not be viewable by any one until the time of bid opening.

- xxvi. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to a symmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- xxvii. 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.
- xxviii. The bidder should logout of the tendering system using the normal logout option available at the top right-hand corner and not by selecting the (X) exit option in the browser.

SECTION – III
DATA SHEET

DATA SHEET

| CLAUSE NO. OF DATA SHEET | REF. OF ITB | PARTICULARS | DESCRIPTION |
|--------------------------|-------------|--------------------------------------|---|
| 1. | - | Employer | The Chairman, Inland Waterways Authority of India (IWAI), A-13, Sector- 1, Noida-201301 |
| 2. | 2.2 | Name of the Assignment/job | “Design, construction, delivery and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16 having satisfactory performance with one year builder warranty.” |
| 3. | 2.1 | Method of Selection | CBS (Cost Based Selection) – L1 |
| 4. | 2.3 | Date & time for submission of Bid | Date: 08.03.2025 Time: Latest by 15:00 Hrs (IST) Submission: online submission Address: Chief Engineer (NER & Oth WWs.), Inland Waterways Authority of India (IWAI), A-13, Sector-1, Noida (U.P.)-201301 |
| 5. | 4 | A Pre-Bid meeting will be held on | Date: 21.02.2025 Time: 15:00 hrs. Venue: Conference Hall, Inland Waterways Authority of India (IWAI), A-13, Sector-1, Noida (U.P.)-201301 VC Link for Pre-Bid Meeting will be shared separately. |
| 6. | 5.1 | Last date for seeking clarifications | Date: 19.02.2025 Time: 18:00 Hrs. Email Id: ssingh.iwai@nic.in |
| 7. | 6.1 | EMD | INR 11.70 Lakhs |
| 8. | 6.2 | Cost of Tender Document | INR 5900/- (Rupees Five Thousand Nine Hundred) Including GST. |
| 9. | 6.3 | Bank Solvency | Rs 2.34 Cr (40% of the estimated cost of this work. Solvency Certificate issued not before 6 months from the date of closing of this NIT from Nationalized/ Scheduled Bank included in the second schedule of the RBI Act.) |
| 10. | - | Estimated Cost (Cost put to tender) | INR 5.85 Crores excluding GST. |

| CLAUSE NO. OF DATA SHEET | REF. OF ITB | PARTICULARS | DESCRIPTION |
|--|-------------|--|---|
| 11. | 6.7 | Bid Validity | 120 days after Bid submission date |
| 12. | 3.2 | Similar Works | As stipulated in Clause 16.4.4 of ITB |
| 13. | 3.1 & 6.1.1 | JV/consortium & MSME allowed | Yes |
| 14. | 3.7 | The estimated number of Key Personnel Required | As per Form 4E |
| 15. | - | The formats for the Technical Bid | FORM 4A: Form of Tender |
| | | | FORM 4B: Eligible Projects |
| | | | FORM 4C: Average Annual Turnover |
| | | | FORM 4D: Power of Attorney (for authorized representative of the bidder) |
| | | | FORM 4E: List of Key Personnel |
| | | | FORM 4F: List of Ongoing assignments |
| | | | FORM 4G: Declaration by the Bidders |
| | | | FORM 4H: Bidder Information Form |
| | | | FORM 4I: Availability of Vessel building facility including infrastructural facility, equipment, machineries etc to be used for tender work |
| | | | FORM 4J: Format for pre-bid queries |
| | | | FORM 4K: Power of Attorney for Lead Member of JV/Consortium |
| | | | FORM 4L: Statement of Legal Capacity |
| | | | FORM 4M: Joint Bidding Agreement |
| | | | FORM 4N: General Construction Experience |
| | | | FORM 4O: Bid Capacity |
| FORM 4P: Bid Security Declaration | | | |
| FORM 4Q: Output of the Shipyard During Preceding 7 Years | | | |
| FORM 4R: Contract Non-Performance (During Preceding 7 Years) | | | |
| FORM 4 S: Financial Performance (During Preceding 7 Years) | | | |

| CLAUSE NO. OF DATA SHEET | REF. OF ITB | PARTICULARS | DESCRIPTION |
|--------------------------|-------------|-------------------|---|
| 16. | 10.3 | Contract Duration | 08 months from the date of Letter of Award as stipulated in Clause 3(a) of Scope of Work, Section VI Terms of Reference. |
| 17. | 15.3 | Bid Opening date | Date: 10.03.2025 Time: 15:30 hrs Venue: Inland Waterways Authority of India (IWAI), A-13, Sector-1, Noida (U.P.)-201301 |
| 18. | 18.1 | Mobilization Site | Karimganj /Badarpur (NW-16) |
| 19. | 18.2 | Mobilization Time | As stipulated in Clause 4 of Scope of Work, Section VI Terms of Reference |
| 20. | - | Price Preference | Price Preference and Split in scope of work shall not be applicable for this Tender even in case of MSME Registered Bidders also. |

SECTION-IV
FORMS OF BID, INTEGRITY AGREEMENT & BANK
GUARANTEE AND COST SCHEDULE

PART-I:
TENDER ACCEPTANCE LETTER

(Form of bid/ tender acceptance to be given on Company Letter head along with Technical bid)

Date:

To,

The Chief Engineer (NER & Oth. WWS)

A-13, Inland Waterways Authority of India

Noida Sector-1 (UP)

Sub: Acceptance of Terms & Conditions of Tender. Tender Reference No.:

Name of Tender/Work: Design, Construction, Delivery and Commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16 having satisfactory performance with one year builder warranty.

Dear Sir,

1. I/We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

As per your advertisement, given in the above-mentioned website(s).

2. I/We hereby certify that I/we have read the entire terms and conditions of the tender documents from Page No. ___ to ___ (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I/we shall abide hereby by the terms /conditions/ clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/organization too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s) /corrigendum(s) in its totality / entirety.

5. In case any provisions of this tender are found violated, then your department/organization shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.
6. Having examined the Bid Documents, Instructions to Bidders, General Conditions of Contract, Special Conditions of Contract, Technical Specifications, Cost schedule for the execution of the above-named works, we, the undersigned offer to execute and complete such works and remedy defects therein in conformity with the said bid documents.
7. We undertake, if our Bid is accepted, to commence the work immediately on receipt of the order to commence, and to complete and deliver a survey vessel comprised in the Contract within the period stated in the bid hereto.
8. Bid Security of Rs..... in the form of is enclosed herewith.
9. If after the tender is accepted, we fail to execute the contract deed within 15 days of the receipt of the order to do so, I/We agree that IWAI shall without prejudice to any terms and conditions of the tender, forfeit the Bid Security absolutely.
10. If our Bid is accepted, we will furnish Performance Security (ies) in the form of a Bank Guarantee/FDR to be jointly and severally bound on us, in accordance with the Conditions of Contract.
11. We agree to abide by this Bid for the period of One Hundred and Twenty
12. (120) days from the date of Bid opening and it shall remain binding upon us and may be accepted at any time before the expiry of that period.

We confirm our agreement to treat the Bid documents and other records connected with the works as secret and confidential documents and shall not communicate information contained therein to any other person other than the person authorized by the Owner or use such information in any manner prejudicial to the safety and integrity of the works.

Unless and until an agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding Contract between us, but without prejudice to your right to withdraw such acceptance without assigning any reasons thereof.

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

Dated this _____ day of _____ 20.....

Signature

in the capacity of duly certified

authorizedwith official seal**

To sign Bid for and on behalf of

(In block capital letters)

Address:

Signature of Witness

Name of witness

Address of witness

** Certified copy of Power of Attorney/authorization for signature shall be furnished by the bidder.

**PART-II:
INTEGRITY AGREEMENT**

(To be signed by the bidders' and same signatory competent/authorized to sign the relevant contract on behalf of IWAI.)

This Integrity Agreement is made at..... on this..... day of20.....

BETWEEN

Chairperson, Inland Waterways Authority of India represented through Chief Engineer (Technical), Inland Waterways Authority of India, A-13, Sec. -1, Noida.

IWAI, (Here in after referred as the 'Principal/Owner', which expression shall unless repugnant to the meaning or context here of include its successors and permitted assigns)

AND

.....

(Name and Address of the Individual/firm/Company)

through (Here in after referred to as the

(Details of duly authorized signatory)

"Bidder/Contractor" and which expression shall unless repugnant to the meaning or context here of include it successors and permitted assigns) Preamble

WHEREAS the Principal / Owner has floated the Tender No IWAI/GHY/NC16/4(152)/2024-25 (herein after referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for "Design, construction, delivery and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16 having satisfactory performance with one year builder warranty" herein after referred to as the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s)and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (herein after referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties here by agree as follows and this Pact witnesses as under:

Article1: Commitment of the Principal/Owner

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
 - (c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code(IPC)/ Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles here in mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

1. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the IWAI all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and through out the negotiation or award of a contract.
2. The Bidder(s)/Contractor(s) 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:
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the tender process or execution of the contract or to any third person any material or other 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.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) 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 cartelize in the bidding process.

- c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Bidder(s)/Contractor(s) 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.
3. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
 4. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a wilful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
 5. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may be fall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the bidder/contract or accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/ Contractor(s) from the tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by this verity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
2. Forfeiture of EMD/Performance Guarantee/Security Deposit : If the Principal/Owner has disqualified the Bidder(s) from the tender process prior to the award of the contract or terminated/determined the contract or has accrued the right to terminate/determine the contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
3. Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a bidder or Contractor, or of an employee or a representative or an associate of a bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for

further investigation.

Article 4 : Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5 : Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub contractors/ sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6 : Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contractor till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, IWAI.

Article 7 : Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.

- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/Pact or interpretation thereof shall not be subject to arbitration.

Article 8 : LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties here to shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/ or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....
(For and on behalf of Principal/Owner)

.....
(For and on behalf of Bidder/Contractor)

WITNESSES:

1.....
(Signature, name and address)

2.....
(Signature, name and address)

Place:

Date:

SCHEDULES:

SCHEDULE 'A': Salient Features of the work.

Name of Work: Design, construction, delivery and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16 having satisfactory performance with one year builder warranty.

Estimated cost of work: The estimated cost of the work is Rs.5.85 Cr. Excl. GST

(a) **Earnest Money:** Rs. 11.70 lakhs

Performance Guarantee: Rs. 29.25 Lakhs; 5% of tendered value.

(b) **Security deposit: is applicable amounting to 5 % of the contract value.** A sum of @10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as EMD in the form of RTGS/ NEFT will amount to Security Deposit of 5% of the contract value of work.

SCHEDULE 'B': General Rules & Directions with reference to General Conditions of Contract:

- (i). Officer inviting tender: - Chief Engineer (NER & Oth. WWs)
A-13, Inland Waterways Authority of India
Noida Sector-1 (UP)
- (ii). Tender Accepting Authority: - Chairperson, IWAI
- (iii). Time allowed for submission of Performance Guarantee as per clause 4.4.1.1 of GCC from the date of issue of letter of acceptance: - 21 days for Single entity & 30 days for JV.
- (iv). Specifications to be followed: - As per the technical specification and other clause in the tender

FORM OF BANK GUARANTEE FOR BID SECURITY

The Chairperson,

Inland Waterways Authority of India, A-13,
Sector 1,

Noida – 201 301.

WHEREAS _____ (Name of Tenderer) (herein after called the Tenderers) wishes to submit his tender for work ofin the state/s of herein called “the Tender” KNOW ALL PEOPLE by these present that we..... (Name of Bank) of _____ (Name of country) having our registered office at (_____) (herein after called the ‘Bank’) are bound unto the Inland Waterways Authority of India (hereinafter called “the Owner”) in the sum of the Rs. _____ (Rupees _____) *for which payment can truly be made to the said Owner. The Bank bind themselves, their successors and assigns by these presents with the common seal of the Bank this day ___ of 2024 and undertake to pay the amount of _Rs.

_____ To the employer upon receipt of this written demand without the employer having no substantiate his demand.

The conditions of this obligation are:

If the tenderer withdraws his tender during the period of Tender validity specified in the Form of Tender.

Or

If the Tenderer having been notified of the acceptance of his Tender by the Employer during the period of tender validity fails or refuses to execute the Form of Agreement in accordance with the instructions to bidders, if required; or fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders.

We undertake to pay Owner up to the above amount upon receipt of his classification society written demand, without the Owner having to substantiate his demand, provided that in his demand the Owner will note that the amount claimed by his is due to his owing to the occurrence of any one of the above conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including the date 45 days beyond the validity of the bid as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, at any time prior to the closing date for submission of the Tenders Notice of which extension to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date of expiry of this guarantee.

SIGNATURE OF AUTHORISED REPRESENTATIVE OF THE BANK

NAME AND DESIGNATION

SEAL OF THE BANK

SIGNATURE OF THE WITNESS

NAME OF THE WITNESS

ADDRESS OF THE WITNESS

FORM OF BANK GUARANTEE FOR PERFORMANCE SECURITY

To

The Chairperson

A-13, Inland Waterways Authority of India

Noida Sector-1 (UP)

In consideration of the (herein after called “**Employer**”) having to enter into an Agreement with M/s.....(herein after called the “**Contractor**”) as a follow up to the Letter of Acceptance no.....dated.....

Issued by the Employer for “**Construction and Commissioning of one survey vessel for NW-16**”, on production of Performance security in the form of Bank Guarantee for INR

.....(Rupees.....only), at the request of.....**Contractor**, We,

(Bank) do hereby undertake to pay to the Employer an amount not exceeding INR.....(Rupees ----- only) against any default or failure on

The part of Contractor to perform the contract in accordance with terms & conditions or any breach of the said Agreement.

1. We, **(Bank)** do hereby undertake to pay the amount due and payable under this Guarantee without any demur, merely on a demand from the Employer stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Employer by reason of breach by the said **Contract** or any of the terms or conditions contained in the said time frame or by reason of the **Contractor’s** failure to perform the said Agreement. 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 an amount not exceeding INR

.....(Rupees.....only).

2. We, **(Bank)** undertake to pay the Employer any money so demanded not withstanding any dispute or disputes raised by the

Contractor in any suit or proceeding pending before any court or Tribunal relating there to, liability under this

Present being absolute and unequivocal. The payment so made by us under this guarantee shall be valid discharge of our liability for payment there under and the **Contractor** shall have no claim against us for making such payment.

3. We, **(Bank)** further agree that the guarantee herein contained shall remain in full force and effect till completion of project work to the complete satisfaction of the Employer in terms of conditions of contract and Letter of Acceptance and that it shall continue to be in force till all the dues of the employer under or by virtue of the said Agreement have been fulfilled and its claim satisfied or till the scheduled date of completion of Works as per the Agreement. We(**Bank**) shall consider that the terms and conditions of the said Agreement have been fully and properly carried out by the said **Contractor** and accordingly discharge this Guarantee after 90 days beyond the completion period of the said contract unless a demand or claim under this Guarantee is served by the Employer in writing on the bank but before the expiry of the said period in which case it shall be enforceable against the bank notwithstanding the fact that the same is enforced after the expiry of the said period or after the extended period as the case maybe.

4. We **(Bank)** further agree with the Employer that the Employer shall have fullest liberty without our consent and without affecting in any manner our obligations here under to vary any of the terms and conditions of the said Agreement or to extend time or performance by the said **Contractor** from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said **Contractor** and to for bear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said **Contractor** or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said **Contractor** or by any such matter or thing whatsoever which under the law relating to sure ties would, but for the provision, have effect of so relieving us.

It shall not be necessary for the Employer to proceed against the **Contractor** before proceeding against the Bank and the guarantee herein contained shall be enforceable against the bank notwithstanding any security which the Employer may have obtained or obtain from the **Contractor** at the time when proceedings are taken against the bank here under be outstanding or unrealized.

5. Notwithstanding anything contained herein above our liability under the guarantee is restricted to INR.....(Rupees... only) and shall remain in force until.....or otherwise until the extended date by the Employer. Unless a claim or suit under this guarantee is filed with us on or before or the extended date

.....ALL OUR RIGHTS UNDER THE GUARANTEE SHALL BE FORFEITED and the bank shall be relieved and discharged from all liabilities therein.

6. This Guarantee will not be discharged due to the change in the constitution of the Bank or the **Contractor**.

7. We, **(Bank)** lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Employer in writing.

Dated theof..... 20**

for

(Indicate the name of bank)

Signature

Name of the Officer

.....

Designation Code No.

.....

Name of the bank and Branch (SEAL)

AGREEMENT FORM

PROCUREMENT OF ONE SURVEY VESSEL FOR NW-16

AGREEMENT

BETWEEN

INLAND WATERWAYS AUTHORITY OF INDIA AND CONTRACTING FIRM

This agreement made on this.....day of... Two thousand.....between Inland Waterways Authority of India, A – 13, Sector – 1, Noida - 201 301, U.P. (herein after called the “IWAI” which expression shall unless excluded by or repugnant to the context be deemed to include their success or in office) on the one part and M/S.....having its office at (herein after

called “ Contractor “which expression shall unless excluded by or repugnant to the context be deemed to include their heirs, executors, administrators, representatives and assigns or successor in office) on the other part.

WHEREAS IWAI is desirous of giving contract for **Design, Construction, Delivery and Commissioning of One Survey Vessel for NW-16** as per the work Order No.

.....dated.....in accordance to the Technical specifications conduits of the agreement attachment hereto all of with form part if the agreement.

WHEREAS THE CONTRACTING FIRM has agreed to undertake the Procurement of one survey vessel for NW-16 on Terms and Conditions herein after set forth.

NOW THEREFORE THESE PRESENTS WITNESS, and it is hereby agreed, declared by and between the parties hereto as follows:

The Contractor shall undertake the **Design, construction, delivery and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16 having satisfactory performance with one year builder warranty.**

as per the work Order No.dated.....in accordance to the Technical specifications of the agreement attachment here to all of which form part of the agreement.

The following documents shall be deemed to form and to be read and construed as part of the agreement
i.e.

- a) Notice inviting E-Tender
- b) Integrity Agreement
- c) Letter of Acceptance
- d) Condition of contract
- e) Schedule of the price bid
- f) Agreement form
- g) Technical Bid No. with Date.
- h) Addendums/Corrigenda
- i) Minutes of Pre-bid Meeting
- j) All Correspondence

In WITNESS where of the IWAI has caused Shri.....on their behalf To hereunto set his hand and the Contractor has caused Shri.....on their behalf to Hereunto set his hand and the firm has caused its common seal to be affixed hereunto the day and year first above written.

On behalf of IWAI

On behalf of Contractor

Name & Signature of the Authorized Representative

Name & Signature of the Authorized Representative

Witnesses, IWAI

- 1)
- 2)

And this deed was duly executed by Shri... ..for

The Contractor above named in the presence of

Witnesses of Contractor

- 1)
- 2)

Cost Schedule

(Design, Construction, Delivery and Commissioning of One Survey Vessel for NW-16 with hydrographic survey instruments)

| Tender Inviting Authority: Inland Waterways Authority of India, Noida | | | | | | |
|---|---|---------------|------|---|--------|-----------------|
| Name of Work: Design, Construction, Delivery and Commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16 having satisfactory performance with one year builder warranty | | | | | | |
| Tender No: IWAI/GHY/NC16/4(152)/2024-25 | | | | | | |
| Bidder Name: | | | | | | |
| <u>COST SCHEDULE</u> | | | | | | |
| (This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bid is liable to be rejected for this tender. Bidders are allowed to enter the Bidders Name and Values only) | | | | | | |
| S. No. | Description of work | Qty. | Unit | RATE for SURVEY VESSEL In Figures To be entered by the Bidder excl GST (in INR) | | AMOUNT (in INR) |
| | | | | Figures | Words | |
| | | | | | | |
| 1.00 | Design, construction, delivery and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16 (at Badarpur/Karimganj) having satisfactory performance with one year builder warranty with the attached technical specification | 1.00 | No. | | Rupees | 0.00 |
| Total in Figures | | 0.00 | | | | |
| Total in Words | | Rupees | | | | |

Note:

The bidder must quote the prices of equipment and spares on landed price basis inclusive of all taxes, trial and other terms and conditions mentioned in this document.

The Bidder shall quote for net DDP (delivery duty paid) at Assam.

**SECTION-V:
TECHNICAL BID STANDARD FORMS**

FORM 4A: Form of Tender

(To be submitted on the letter head of the Bidder)

To

Chief Engineer (NER & Oth. WWs),
Inland Waterways Authority of India (IWAI),
A-13, Sector-1,
Noida (U.P.)-201301

Sub: DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16

Sir,

1. Having visited the site and examined the information and instructions for submission of tender, General Conditions of Contract (GCC), Special Conditions of Contract (SCC), Technical, General and Detailed specifications, Bill of Quantities (BoQ) agreement and Bank Guarantee forms, etc. for the above-named works, I/ We(Name of Bidder) hereby tender for execution of the works referred to in the tender document in conformity with the said GCC, SCC, Schedule of quantities for the sum as stated in BoQ of this tender document or such other sum as may be ascertained in accordance with the said conditions of contract.
2. I/ We undertake to complete and deliver the whole of the work comprised in the Contract within the time as stated in the tender and also in accordance with all respects with the specifications, Scope of work and instructions as mentioned in the tender document.
3. I am tendering for the works mentioned in the table below and submitting the EMD vide RTGS / BG in IWAI Account as per the details given therein:

| Sl. No | RTGS / NEFT | | Bank Guarantee | | Total EMD (INR) |
|--------|--------------|---|----------------|---|-----------------|
| | Amount (INR) | Details of RTGS / NEFT (No. and Date) and details of the bank (Name of bank, branch, address) | Amount (INR) | Details of the Bank Guarantee (No and Date) and details of the bank (Name of bank, branch, address) | |
| 1 | | | | | |

4. I/ We agree to abide by this tender. I/ We agree to keep the tender open for a period of 120 days from the date of opening of technical bids or extension thereto as required by the IWAI and not to make any modifications in its terms and conditions.

5. I/ We agree, if I/ we fail to keep the validity of the tender open as aforesaid or I/ we make any modifications in the terms and conditions of my/ our tender if I/ We fail to commence the execution of the works as above, I/ We shall become liable for forfeiture of my/ our Earnest money, as aforesaid and IWAI shall without any prejudice to another right or remedy, be at the liberty to forfeit the said Earnest Money absolutely otherwise the said earnest money shall be retained by IWAI towards part of security deposit to execute all the works referred to in the tender document upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered. Should this tender be accepted, I/ We agree(s) to abide by and fulfil all the terms and conditions and provisions of this tender. No interest is payable on earnest money deposit and/ or security deposit.
6. I/ We have independently considered the amount of Liquidated Damages shown in the tender here to and agree that it represents a fair estimate of the loss likely to be suffered by IWAI in the event of works not being completed in time.
7. If this tender is accepted, I/ We undertake to enter into execute at my/ our cost when called upon by the employer to do so, a contract agreement in the prescribed form. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereto shall constitute a binding contract.
8. If my/ our tender is accepted, I/We am/are to be jointly and severely responsible for the due performance of the Contract. **I/We also declare that the firm has not been banned or blacklisted by any Govt. or its department or any Quasi Govt. agency or Public Sector Undertaking or Multilateral or International Aid Agency/Development Bank.** Any such discovery by IWAI at any stage of the tender/contract may result in disqualification of the firm or cancellation of the contract.
9. I/ We understand that you are not bound to accept the lowest or any tender you may receive and may reject all or any tender without assigning any reason.
10. I/ We certify that the tender submitted by me, us is strictly in accordance with the terms, conditions, specifications etc. as contained in the tender document, and it is further certified that it does not contain any deviation to the aforesaid documents.

Date

Signature

Name

Designation

Duly authorized to sign & submit tender for an on behalf of
(Name and address of firm)

M/s

Telephone no's.....FAX No.....

FORM 4B: ELIGIBLE PROJECTS

Format for Responsiveness of Bid (Eligible Projects) Project Specific Experience

[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually or as a corporate entity or as one of the major companies within a Joint Venture (JV) for carrying similar works under this assignment.]

The **similar work** means design, construction and supply of inland/sea-going vessels particularly survey vessels/ Ro-Ro/Ro-pax/ferry vessels, Workboats, Cargo vessels, Self-propelled barge and other vessels of propelled type duly certified by any classification society/ IRS/ any statutory body under state government and registered by any registering authorities under Inland Vessel Act 2021 or any other relevant act / regulation.” (Escalation factor as specified in the appendix shall be used to bring the value of such completed works at the level of current financial year i.e. 2024-25)

| S. No. | Client Name, Name of work & location of project | Contract Value in INR | Date of start of work | Scheduled completion date | Actual completion date | Details of work (including Similar Work) | Remarks |
|--------|---|---|-----------------------|---------------------------|------------------------|--|---------|
| | | Financial ³ value of similar work satisfactorily completed / substantially completed | | | | | |
| | | | | | | | |

¹ Exhibit only those projects completed in the last Seven (7) years from the Last Date of Bid Submission.

² The Bidder shall submit proof of experience from the Client for meeting the minimum qualification details. The Client Certificate submitted by the Client shall contain the details as enlisted in Clause 3.2 of ITB. The works claimed by the Bidder, if not supported with proof of completion / substantial completion as laid down under Clause 3.2 of ITB and defined hereinafter in Footnote 4 below from the Client will not be considered.

³ Against the Contract of works having several components other than the Similar Works, only the relevant component shall be evaluated for contract value, payment value and the actual execution period for the relevant component only should be submitted / specified.

⁴ Substantially completed projects as defined in Clause 3.2 of ITB shall be supported by client certificates with the name of the work including component breakup of relevant work to the extent of similar work, work order value, start date, percentage of similar work completed till date of issue of the Tender in Financial terms (Net Payment received against the Contract).

Firm's Name :

Authorized Signature :

Notes:

1. For the calculation of cost of completed, works in last 7 years, Bidders should follow note of Clause 16.4.4 of ITB
2. Bidders should mention the maximum value of similar works as defined in Clause 16.1.1 of ITB executed during the last seven years (adjusted last day of the month before the one in which this Tender is invited).
3. In case of foreign currency, it should first be escalated at the rate mentioned above and then the amount so derived shall be converted to INR at the exchange rate prevailing last day of the month previous to the one in which this Tender is invited.
4. Exchange rate should be taken from official website of RBI (<https://www.rbi.org.in/scripts/ReferenceRateArchive.aspx>)
5. In case, exchange rate for the currency in consideration, is not available on RBI website (mentioned above), Bidders shall quote exchange rates from websites such as www.xe.com, www.oanda.com, along with copy of the exchange rate used by the Bidder for the conversion.
6. Any additional comments / information to substantiate that the said work conforms to the specified similar works can also be indicated by the bidder, as deemed fit.

Please limit the description of each project in two A4 size sheet of paper. Descriptions exceeding two (02) A4 size sheet of paper may or may not be considered for evaluation.

FORM 4C: Average Annual Turnover of the Bidder Along with Loss & Profit Statement

Name of Work: DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16

| S. No. | Financial Years | Average Annual Turnover & loss & profit statement of Applicant (INR) in Last Three Financial Years |
|--------------------------------|-----------------|--|
| 1. | 2021-2022 | |
| 2. | 2022-2023 | |
| 3. | 2023-2024 | |
| Average Annual Turnover | | [indicate sum of the above figures divided by 3] |

Certificate from the Statutory Auditor/ Chartered Accountant

This is to certify that..... [Name of the Firm] [Registered Address] has received the payments shown above against the respective years.

Name of Authorized Signatory

Designation:

Name of Firm:

(Signature of the Statutory Auditor Seal of the Firm)

Note:

1. This Form shall be submitted on the letter head of Statutory Auditor.

FORM 4 D: Power of Attorney

(for authorized representative of the bidder)

(To be executed on Non-Judicial Stamp Paper of Rs.100 and duly notarized)

Know all men by these presents, We,(name of organization and address of the registered office) do hereby constitute, nominate, appoint and authorise Mr. /Ms.son/daughter/wife and presently residing at ... who is presently employed with/retained by us and holding the position of.....,as our true and lawful attorney (hereinafter referred to as the "**Authorized Representative**"), with power to sub-delegate to any person, to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Bid for **DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16 (strike out whichever is not applicable)**. The selection of Contractor for Inland Waterways Authority of India (the "**Employer**") including but not limited to signing and submission of all applications, Bids and other documents and writings, participating in pre-bid and other conferences and providing information/responses to the Employer, representing us in all matters before the Employer, signing and execution of all contracts and undertakings consequent to acceptance of our Bid and generally dealing with the Employer in all matters in connection with or relating to or arising out of our Bid for the said Project and/or

pon award

thereof to us till the entering into of the Contract with the Employer.

AND, we do hereby agree to ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Authorized Representative pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Authorized Representative in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS.....DAY OF....., 2025.

For

(Signature, Name, Designation and Address)

Witnesses:

1.....

2.

Accepted

(Signature, name, designation and address of the Attorney)

Notes:

1. *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.*
2. *Wherever required, the Applicant should submit for verification the extract of the charter documents and other documents such as a resolution / power of attorney in favour of the person executing this Power of Attorney or the delegation of power hereunder on behalf of the Applicant.*
3. *For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Applicants from countries that have signed The Hague Legislation Convention, 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate.*

FORM 4E: List of Key Personnel

DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16

| S. No. | Position / Role | No. |
|--------|----------------------------|-----|
| 1 | Site In-charge / Manager | |
| 2 | Structural Design Engineer | |
| 3 | Fabrication Engineer | |
| 4 | Electrical Engineer | |
| 5 | Surveyor | |
| 6 | Supervisors | |
| 7 | Carpenter | |
| 8 | Labourer | |

Note:

1. The list of key personnel is tentative and indicative only. The Bidder can propose the key personal required for works as per the scope defined in the Tender Document. It may be noted that the key personnel proposed, and the number of personnel required must also meet the statutory requirement.
2. During the tenure of contract if need arise, then the Bidder is allowed to change / replace the Key Personnel with a prior written approval from EIC.

FORM 4G: Declaration by the Bidders

To,

Date:.....

Chief Engineer (NER & Oth. WWs),
Inland Waterways Authority of India (IWAI),
A-13, Sector-1,
Noida (U.P.)-201301

Kind Attention: Chief Engineer (NER & Oth. WWs),

Sub: Declaration from the Bidder.

Tender Reference No:.....

Dear Sir,

This is with reference to the above-mentioned Tender document.

I/We hereby make the following declarations:

| | | |
|----|--------------------------|--|
| 1. | <input type="checkbox"/> | No alteration has been made in any form in the downloaded Tender document. |
| 2. | <input type="checkbox"/> | I/We have not been banned or de listed by any Government or quasi-Government agency or public sector undertaking. |
| 3. | <input type="checkbox"/> | I/We accept the payment terms of clause 15.2 of General Conditions of Contract. |
| 4. | <input type="checkbox"/> | I/We provide our acceptance to all Tender Terms and Conditions. |
| 5. | <input type="checkbox"/> | Acknowledgment by Bidder as per Clause 8 of ITB |
| 6. | <input type="checkbox"/> | I/We confirm that neither we have failed, nor we have been expelled from any project or agreement during the last 03 years |
| 7. | <input type="checkbox"/> | I/We agree to disqualify us for any wrong declaration with respect to the submissions made by us for this tender and reject my/our tender summarily |
| 8. | <input type="checkbox"/> | I/We agree to disqualify us from this tender and blacklist us for tendering in IWAI projects in future, if it comes to the notice of IWAI that the documents/submissions made by me/us are not genuine |

Yours Faithfully
(Signature of the Bidder, with Official Seal)

FORM 4H: Bidders Information Form

Bidder name:

[insert full name]

Bidder's Party name:

[insert full name of Applicant's Party]

Bidder's Party country of registration:

[indicate country of registration]

Bidder's year of constitution:

[indicate year of constitution]

Bidder's legal address in country of constitution:

[insert street/ number/ town or city/ country]

Bidder's authorized representative information Name: *[insert full name]*

Address: *[insert street/ number/ town or city/ country]*

Telephone/Fax numbers: *[insert telephone/fax numbers, including country and city codes]*

E-mail address: *[indicate e-mail address]*

1. Attached are copies of original documents of

- Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above
- In case of a Government-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and absence of dependent status

2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Note:

This Form shall be supplied with Identity proof of the authorized representative

**FORM 4I: AVAILABILITY OF VESSEL BUILDING FACILITY INCLUDING
INFRASTRUCTURAL FACILITY, EQUIPMENT, AND MACHINERIES ETC., TO
BE USED FOR TENDER WORK**

| Name & Address of the Ship Builder | Detailed Particulars |
|---|---------------------------|
| (i) Building Dock / Slipway (if any) including fabrication/ construction bays (details including number, dimension, location and layout of shipyard to be given). Whether covered or open. | |
| (ii) Skids / Mould loft for modular construction (details including number, dimension and location to be given). Whether covered or open. | |
| (iii) Design and drawing office of own or tie up with experienced Design Consultant/ Naval Architect with brief resume | |
| (iv) List of workshop machinery, equipment. a) Welding Sets b) Gas Cutting Sets c) Grinding / Bending machines d) Shot Blasting equipment e) Material handling equipment f) Machine Shop Machineries g) Paint Shop h) Any other details | Description Make Quantity |
| (v) Source of electric power, whether captive power unit available, if so, the details thereof. | |
| (vi) Facilities for doing outfitting job in afloat condition indicating location and area. | |

Note:

- 1. If owned, the registration certificates and year of procurement for the proposed machinery should be appended with this Form**
- 2. In case of hired equipment, the consent letter from the owner of the equipment is to be appended.**
- 3. In case of equipment to be procured, status of timelines of procurement to be included.**
- 4. If required, separate / additional sheets can be used.**

(Signature of authorized representative)

FORM 4J: Format for Pre-Bid Queries by Bidders

(To be submitted in Bidders Letter head)

DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16

Name of Bidder:

Date of Submission:

Pre – Bid Queries

| S. No. | Section No. Clause, Sub Clause No and Page No. of Tender | Tender clause description | Query |
|--------|--|---------------------------|-------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| . | | | |
| . | | | |
| . | | | |
| . | | | |

FORM 4K: Power of Attorney for Lead Member of JV/Consortium

(To be executed on Non-Judicial Stamp Paper of Rs.100 and duly notarized. For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the undertaking is being issued.)

Whereas the Inland Waterways Authority of India (the “Authority”) has invited Bids from interested parties for the “**DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16. (hereinafter referred to as “The Work”)**” and Whereas,.....,and (collectively the “JV/Consortium”) being Members of the JV/Consortium are interested in bidding for the Project in accordance with the terms and conditions of the tender document and other connected documents in respect of the Project, and

Whereas it is necessary for the Members of the JV/Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the JV/Consortium, all acts, deeds, and things as may be necessary in connection with the JV/Consortium’s Bid for the Project and its execution.

tion with the JV/Consortium’s Bid for the Project and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We,having our registered office at, M/s. having our registered office at, M/s. having our registered office at, and having our registered office at, (hereinafter collectively referred to as the “Principals”) do hereby irrevocably designate, nominate, constitute, appoint and authorize M/s having its registered office at, being one of the Members of the JV/Consortium, as the Lead Member and true and lawful attorney of the JV/Consortium (hereinafter referred to as the “Attorney”). We hereby irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the JV/Consortium and any one of us during the bidding process and, in the event the JV/Consortium is awarded the contract, during the execution of the Project and in this regard, to do on our behalf and on behalf of the JV/Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the pre-qualification of the JV/Consortium and submission of its Bid for the Project, including but not limited to signing and submission of all, Bid and other documents and writings, participate in bidders and other conferences, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of the Bid of the JV/Consortium and generally to represent the JV/Consortium in all its dealings with the Authority, and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the JV/Consortium’s Bid for the “**The Work**”.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds, and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/ Consortium and shall be legally binding upon us/Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF 2025.

For.....(Signature)
..... (Name & Title)

For.....(Signature)
..... (Name & Title)

For.....(Signature)
..... (Name & Title)

Witnesses:

- 1.
- 2.

..... (Executants)

(To be executed by all the Members of the JV/Consortium)

Notes:

- *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
- *Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*
- *For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostil certificate.*

FORM 4L: Statement of Legal Capacity

(To be forwarded on the letterhead of the Bidder/ Lead Member of JV/Consortium)

Ref.

Date:

To,

Chief Engineer (NER & Oth. WWs),
Inland Waterways Authority of India (IWAI),
A-13, Sector-1,
Noida (U.P.)-201301

Dear Sir,

We hereby confirm that we/ our members in the JV/Consortium (constitution of which has been described in the Bid) satisfy the terms and conditions laid out in the tender document.

We have agreed that (insert member's name) will act as the Lead Member of our JV/consortium. *

We have agreed that (insert individual's name) will act as our representative/ will act as the representative of the consortium on its behalf* and has been duly authorized to submit the tender document. Further, the authorized signatory is vested with requisite powers to furnish such letter and authenticate the same. All actions/representations of the Lead Member/Authorized Signatory shall be legally binding on the Consortium.

Thanking you,

Yours faithfully,

(Signature, name and designation of the authorized signatory) For and on behalf of.....

**Please strike out whichever is not applicable.*

FORM 4M: Joint Bidding Agreement

(To be executed on Stamp paper of appropriate value)

THIS JOINT BIDDING AGREEMENT is entered into on this the day of 2025

AMONGST

1. {... Limited, a company incorporated under the Companies Act, 1956} and having its registered office at (hereinafter referred to as the “**First Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

2. {... Limited, a company incorporated under the Companies Act, 1956} and having its registered office at (hereinafter referred to as the “**Second Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

3. {... Limited, a company incorporated under the Companies Act, 1956} and having its registered office at (hereinafter referred to as the “**Third Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above-mentioned parties of the FIRST, SECOND and THIRD PART are collectively referred to as the “**Parties**” and each is individually referred to as a “**Party**”

WHEREAS,

- (A) Inland Waterways Authority of India (the “**Authority**”), has invited Bids (the “**Bids**”) by its Request for Bid dated (The “**tender Document**” for “**DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16.**” (The “**Work**”)
- (B) The Parties have read and understood the TENDER Document and are interested in jointly bidding for the Project as members of a JV/Consortium and in accordance with the terms and conditions of the TENDER document and other TENDER documents in respect of the Project, and
- (C) It is a necessary condition under the TENDER document that the members of the JV/Consortium shall enter into a Joint Bidding Agreement and furnish a copy thereof with the Bid.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalized terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the TENDER.

2. JV/Consortium

2.1 The Parties do hereby irrevocably constitute a JV/consortium for the purposes of jointly participating in the Bidding Process for the Project.

2.2. The Parties hereby undertake to participate in the Bidding Process only through this JV/Consortium and not individually and/ or through any other JV/consortium constituted for this Project, either directly or indirectly or through any of their Associates.

3. Covenants

The Parties hereby undertake that in the event the JV/Consortium is declared the Preferred Bidder and awarded the Project, it shall incorporate a wholly owned special purpose company under the provisions of Indian Companies Act, 1956, as the O&M Contractor; in whose subscribed and paid-up capital, the Preferred Bidder i.e. the parties herein shall collectively hold 100% equity during the License Period.

4. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

- (a) Party of the First Part shall be the Lead member of the JV/Consortium and shall have the power of attorney from all Parties for conducting all business for and on behalf of the JV/Consortium during the Bidding Process and until the signing of the tender for “**The Work**” when all the obligations shall become effective;
- (b) Party of the Second Part shall be assisting the Lead member in the manner as recorded herein for carrying out the entire scope of work awarded under the tender for “**The Work**”. Notwithstanding anything contained in this agreement, party of the second part shall not be absolved of any of its obligations /liabilities/responsibilities merely because party of the first part has been designated as the lead member and shall be individually equally liable / responsible to the same extent as the Lead Member.
- (c) Parties shall jointly and severally endeavour to carry out the works, if awarded to them pursuant to the bidding process conducted by the Authority, in accordance with the terms and conditions specified in the TENDER Documents and such other agreements/Contracts/Work Orders as may be executed from time to time between the Authority and the JV/Consortium’s Special Purpose Company.

5. Joint and Several Liabilities

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the TENDER and the tender for “**The Work**”, till such time as prescribed in accordance with the tender for “**The Work**”.

6. Shareholding

- 6.1 The Lead Member of such Preferred Bidder JV/consortium shall at all times during the License Period hold equity equivalent to(as per clause 6.9.2) of the subscribed and paid-up capital in the special purpose company incorporated by the parties to work as the contractor. Further, other consortium members whose technical/financial eligibility shall have been used for the purpose of qualification under this TENDER shall hold (as per clause 6.9.3) equity in the subscribed and paid-up capital contract or during the License Period; Provided however that Authority may in its sole and absolute discretion permit a JV/consortium member to divest [in full/partially] its equity shareholding in the subscribed and paid-up capital of the contractor.
- 6.2 The Parties undertake that they shall comply with all equity lock-in requirements set forth in the tender for “**The Work**”.

7. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- (a) Such Party is duly organized, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement;
- (b) The execution, delivery and performance by such Party of this Agreement has been authorized by all necessary and appropriate corporate or Governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member is annexed to this Agreement, and will not, to the best of its knowledge:
 - (i) Require any consent or approval not already obtained;
 - (ii) Violate any Applicable Law presently in effect and having applicability to it;
 - (iii) Violate the memorandum and articles of association, by-laws or other applicable organizational documents thereof;
 - (iv) Violate any clearance, permit, concession, grant, license or other Governmental authorization, approval, judgment, order or decree or any mortgage agreement, indenture, or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or

- (v) Create or impose any liens, mortgages, pledges, claims, security interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, e
- (vi) cumbrances, or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;
- (c) This Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- (d) There is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfilment of its obligations under this Agreement.
- (e) Such Party has read and understood the tender Documents and is executing this Agreement for the purposes as recorded hereinabove out of its own free will;

8. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect at all times during the subsistence of the tender for “**The Work**” is achieved under and in accordance with the tender for “**The Work**” in case the Project is awarded to the JV/Consortium. However, in case the JV/Consortium is either not prequalified for the Project or does not get selected for award of the Project, the Agreement will stand terminated in case the Bidder is not pre-qualified or upon return of the Bid Security by the Authority to the Bidder, as the case may be.

9. Miscellaneous

- 9.1 This Joint Bidding Agreement shall be governed by laws of India.
- 9.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of the Authority.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED

For and on behalf of For and on behalf of the LEAD MEMBER

(Signature)

(Name)

(Designation)

(Address)

SIGNED, SEALED AND DELIVERED

For and on behalf of For and on behalf of SECOND PART

(Signature)

(Name)

(Designation)

(Address)

In the presence of:

1)

2)

Notes:

- *The mode of the execution of the Joint Bidding Agreement should be in accordance with the procedure, if any, laid down by the Applicable Law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
- *Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member.*
- *For a Joint Bidding Agreement executed and issued overseas, the document shall be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney has been executed.*

FORM 4N: General Construction Experience

(Each Bidder or member of a JV must fill in this form)

Name of the Bidder / Members JV Consortium:

| General Experience | | | | |
|---|------------------------|-------------------|-------|----------------|
| Contract Identification and Name Name and Address of Employer Brief Description of the similar Works Executed by the Bidder | Starting Month Year | Ending Month Year | Years | Role of Bidder |
| | | | | |
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FORM 40: Bid Capacity

| Eligibility and Qualification Criteria | Compliance Requirements | | | Documentation |
|---|-------------------------|--------------------------------------|----------|-------------------------|
| | Single Entity | Joint Venture (existing or intended) | | Submission requirements |
| | | Member 1 | Member 2 | |
| Available Bid Capacity should be More than value of contract/ contracts applied for | | | | Form 4F & Form 4N |

Bid Capacity= $[(A*N*2)-B]$, where

A= Maximum value of works executed in any one year during the last five years (updated to the current price level), in INR

B= Value at current price level of the existing commitments and ongoing works to be completed during the period of completion of work for which the bids have been invited

N= No. of years prescribed for completion of works for which bids are invited (i.e. 1)

FORM 4 P: Bid Security Declaration

(On Bidders Letter head)

Tender No:

Date:

To

Chief Engineer (NER & Oth. WWs),
Inland Waterways Authority of India (IWAI),
A-13, Sector-1,
Noida (U.P.)-201301

Subject: DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16.

I/We undersigned declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.
2. I/We accept that I/We may be disqualified / debarred from bidding Inland Waterways Authority of India tenders for a period of 02 (Two) years from the date of notification if I/We are in a breach of any obligation under the bid conditions, because I/We
 - a) have withdrawn/modified/amended, impairs, or derogates from the tender, my/our bid during the period of bid validity specified in the form of Bid; or
 - b) having been notified of the acceptance of our Bid by the employer during the period of bid validity (i) fail or refuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security within the timeline, in accordance with the instructions to Bidders & as per tender terms & conditions.
3. I/We understand this Bid Security Declaration shall cease to be valid on the 45th day from following,
 - a) If I am/we are not the successful Bidder, the receipt of your notification of the name of the successful Bidder; or
 - b) The expiration of the validity of my/our Bid or any extension thereof.

(Signature)

Authorized Signatory

Name:

Designation:

**FORM 4 Q:
OUTPUT OF THE SHIPYARD DURING PRECEDING 7 YEARS**

| S. No. | Name of the contract | Name and Address of employer | Cost of Work | Date of Award | Date of completion | | Type of survey vessel and specification |
|--------|----------------------|------------------------------|--------------|---------------|--------------------|--------|---|
| | | | | | Schedule | Actual | |
| | | | | | | | |

FORM 4 R:
CONTRACT NON-PERFORMANCE (DURING PRECEDING 7 YEARS)

| S. No. | Name of Contract | Name and Address of employer | Date of award | Date of completion as per contract | Physical status | Reason for non-completion | Any revised date fixed for completion | Whether under Litigation |
|---------------|-------------------------|-------------------------------------|----------------------|---|------------------------|----------------------------------|--|---------------------------------|
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FORM 4 S:
FINANCIAL PERFORMANCE (DURING PRECEDING 7 YEARS)

| S. No. | Name of Contract | Name and Address of employer | Date of award | Cost of contract | Date of completion as per contract | Actual date of completion | Any cost overrun allowed indicating reasons | Revised cost if any |
|---------------|-------------------------|-------------------------------------|----------------------|-------------------------|---|----------------------------------|--|----------------------------|
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FINANCIAL BID STANDARD FORMS

FORM FIN – 1: FINANCIAL BID SUBMISSION FORM

[Location....., Date.....]

To:

Chief Engineer (NER & Oth. WWs),
Inland Waterways Authority of India (IWAI),
A-13, Sector-1,
Noida (U.P.)-201301

Subject: DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16

Dear Sir:

We, the undersigned, offer to provide the services for the Assignment/Job for [Insert title of Assignment/Job] in accordance with your Request for Bid dated [Insert Date] and our Technical Bid. Our attached Financial Bid is for the sum of [Insert amount(s) in words and figures]. This amount is inclusive of all types of taxes (such as GST, Income tax, duties, fees, levies etc.). We hereby confirm that the financial Bid is unconditional, and we acknowledge that any condition attached to financial Bid shall result in rejection of our financial Bid.

Our Financial Bid shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Bid, i.e. before the date indicated in..... Clause.....

We understand you are not bound to accept any Bid you receive.

Yours sincerely,

Authorized Signature [In Full and initials]:

Name and Title of Signatory:

Name of Firm:

Form Fin – 2: Summary of Cost

(All amount in INR)

(To Be Quoted Online)

I. BoQ 1

| S. No. | Particulars | DESIGN, CONSTRUCTION, DELIVERY AND COMMISSIONING OF SURVEY VESSEL FOR NW-16. |
|--------------|---|--|
| 1. | Design, Construction, Delivery and Commissioning of Survey Vessel for NW-16 | (To be Quoted Online) |
| 2. | GST as applicable | |
| Total | | |

*Refer clause 12 of SCC

Signature of Authorized Signatory

Name:

Designation:

Name of Firm:

Address:

SECTION – VI
TERMS OF REFERENCE (TOR)

PART I – DETAILED SCOPE OF WORK

1. Background and brief about Project

- 1.1 Inland Waterways Authority of India (IWAI) came into existence in Oct'1986 by an Act of Parliament with mandate to develop, regulate and maintain the waterways declared as National Waterways for shipping and navigation purpose. The main component of works undertaken by IWAI to fulfil the given mandate are fairway development, installation of navigational aids and establishment of permanent (RCC)/ floating jetties at strategic location for berthing of vessels, loading/unloading to/from the vessels through manual, mechanical means etc.

For fairway development of required depth & width and for providing floating jetties along the National Waterway-16, IWAI has procured number of dredgers, survey launches, tugs, barges, and other allied vessels.

IWAI possess 19 state-of-the-art survey vessels fitted with automated hydrographic survey system and modern communication equipment. channel monitoring is being done by taking up fortnight thalweg survey during lean season and monthly surveys during flood season and IWAI promulgates latest navigational information in the form of river notices for the use of mariners/ IWT operators

As such, it is the endeavour of IWAI to continue to provide such navigational tools to the mariners/ users/ operators for ensuring safe navigation in National Waterways and to make the inland water transport an alternative mode of transportation.

To strengthen the existing fleet of survey Vessels for waterways in Assam and to establish safe, reliable & economical last mile connectivity through different river routes, the DIWT proposes “**Design, construction, delivery, and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16**” for facilitating to maintain the fairway for ferry services on the river Barak, under the 100 % Central Sector Scheme (CS Scheme).

Survey vessels are used to perform hydrographic surveys of harbours and ports, and to determine navigational routes.

2. Scope of Work

After declaration of River Barak (NW-16) by the Govt. of India in April 2016, Inland Waterways Authority of India (IWAI), to develop IWT as a supplementary mode of transport has initiated activities for development of water transport on River Barak. IWAI/ Govt. of Assam intends to procure the vessels under cited tender for **Design, construction, delivery, and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16** from the reputed Contractors/Companies/Firms. The reputed Contractors/Companies/Firms.

The detailed scope of work includes **Design, construction, delivery, and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16** are to be designed, constructed & supplied. The details are provided in technical specifications. This survey vessel is primarily to be used for bathymetry survey. The vessel shall have appropriate arrangement to accommodate all survey equipment, accommodation for crew & survey staff &

allied facilities The appearance of the vessel shall be aesthetically good and shall have superior finish.

2.1 Preliminary Works

- (a) The Contractor shall review the available data and reports pertaining to the Works and shall carry out all the survey, design and approval of drawings and detailed design of survey vessel as detailed in Technical Specifications.
- (b) Deleted
- (c) The Contractor based upon the surveys and detailed analysis shall submit periodically Work plan / methodology for carrying out the execution of Work to the Engineer in Charge (EIC) or his representative for this approval. The contractor shall bear all the cost arising out of surveys and detailed analysis.
- (d) The Work plan to be submitted by the Contractor shall include
The Works Program.
Health & Safety Plan.

3. Timelines

- (a) The Contract duration for the entire scope of work for **Design, construction, delivery, and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16.** as detailed out in this clause shall be 8 (eight) months from the date of signing of the Letter of Award to this effect.
- (b) The Contractor shall submit a detailed work plan indicating the timelines for main and miscellaneous activities to the EIC for approval.
- (c) The Contractor, in the course of the work, after deliberations with the EIC, shall agree and incorporate the necessary changes in within timelines. The Contractor shall get the macro and micro level activity plan and methodology statement(s) approved by the EIC.
- (d) The Contractor shall abide with the timelines in the Work Plan.
- (e) No idle time charges on any account shall be paid to the contractor during the contract period.

4. Milestones

- 4.1 The Contractor shall carry out **Design, construction, delivery, and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16.** within a period of 8 months till satisfaction of engineer in charge and handing over the completed facility to owner's representative.

| Activity | Time (T= from the date of Letter of Award) | Liquidated damages |
|---|--|---|
| Submission and approval of final detailed design (approved by authorized classification society / agency / institute & EIC) along with sectional drawings (Good for Construction (GFC) drawings), work plan & methodology with updation/modifications if any and complete mobilization at site. | T+45 days | The penalty for late delivery phase wise shall be ½ % of the cost of the vessel per week subject to a max of 10%. |
| Completion of Keel laying | T+60 days | |
| After completion of 50% of hull fabrication and erection is completed | T+90 days | |
| After completion of 100% of hull fabrication and erection of all machineries are completed | T+150 days | |
| Successful launching of the survey vessel at the shipyard, its transportation from shipyard to the respective site and satisfactory installation of the same. | T+180 days | |
| Testing, commissioning and trial of survey vessel at the respective site along with the certification of inspection authority i.e. classification society/ agency/ institute & EIC and final handing over of the same to the Employer. | T+210 days | |
| Final acceptance: shall be paid within thirty (30) days after the date of the Acceptance Certificate issued by the Employer's representative. | T+240 days | |

- 4.2 The contractor, within 15 days from the Letter of award, should submit detailed Schedule of activities including procurement and fabrication schedule, supply and testing schedule, installation and commissioning schedule, method statements, QC Manual including all data and reporting formats, for comment from EIC and should include all comments and observations to get the same approved by EIC.
- 4.3 The Contractor shall during the execution of works adhere to the Project Milestone set forth for the work on monthly basis so as to ensure the completion of Works within the stipulated duration.
- 4.4 It may be noted that the milestones defined above are for the complete scope of the work. The Contractor shall ensure to adopt all necessary means during execution of works to achieve all the milestones. Failure of achieving milestones would attract LD as defined in Clause 8.12 of GCC.

5. Deliverables and Payment Schedule

- 5.1 The Contractor shall submit stage wise Bills for performing the works, from the Date of Commencement of Work, which will be verified by the Engineer-in-charge subject to deductions as applicable, and recovery towards repayment of Mobilization Advance & other recoveries, if any.
- 5.2 Subject to any deduction, recovery towards repayment of mobilization advance and other recoveries if any and addition authorized by and to the other provisions of this contract, Employer shall pay to the contractor for the design, building, equipment, testing and delivery at specified destination, for the vessels including inspection of underwater components at delivery destination as per approved methodology by EIC (import and customs Duty) and for all other works, matters, things and obligations to be executed, done, supplied and performed by the contractor under this contract including the provision of the hull inventory.
- 5.3 The total Contract Price payable under the Contract shall be stipulated in the Letter of Award and there upon shall become part of this Contract and be paid in accordance with the terms ref. 6.5 hereon. The price quoted will squarely and totally include all the charges to be paid to the contractor by the Employer
- 5.4 Total Contract Price shall be firm and fixed and shall not be subject to any escalation during the period of the Contract except for any adjustment in accordance with the terms of the Contract.
- 5.5 The Contractor shall submit Running Account Bills (RA Bills) on or before the milestone dates fixed by Engineer-In-Charge (EIC) for the quantity and/or work executed with respect to the work progress requirements. The Contractor shall be paid as per the RA Bills submitted for the work done within one month from submission of correct claim of bill. The contractor will submit the RA Bill in triplicate accompanied with 3 sets of supporting documents. Subject to deduction and other changes authorized by and to the other provisions of this contract, employer shall pay to the contractor for the Design, construction, delivery, and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16. at specified destination, for the vessels including inspection of underwater components at deliver site as per approved methodology by EIC and for all other works, matters, things and obligations to the executed,

done, supplied, and performed by the contractor under this contract including the provision of the hull inventory as specified by the time and manner with respect to the contract price. Unless otherwise agreed in writing between Chairperson on behalf of Authority and the Contractor payment for the works shall be made by Chairperson on behalf of Authority, by electronic system i.e. RTGS in stages upon production of the certificate of the inspector and Engineer In-charge appointed by owner for the inspection of the construction of the vessel(s) against the stages due subject to the condition that the amount of an instalment payment shall in no case exceed the value of the work done as per following stages.

5.6 Stages of Payment

| Payment Terms for Survey Vessel | | |
|---------------------------------|-----|---|
| i. | 15% | when keel is laid against irrevocable Bank Guarantee. |
| ii. | 15% | when 50% Hull Fabrication and erection is completed |
| iii. | 20% | when 100% Hull fabrication and erection is completed. |
| iv. | 20% | on Integration of major machineries i.e. main engines, pumps, propellers, auxiliary engines, windlass, etc of the vessels. |
| v. | 15% | on launching of the Survey Vessel |
| vi. | 15% | on successful tests and trials and delivery of the Survey vessel at designated place & issuance of Final Acceptance Certificate |

6. Manpower

The Contractor shall deploy the manpower and mention the experience summary for vessels as tabulated below:

| S. No. | Position / Role | No. | Remarks |
|--------|-------------------------------|-----|---------|
| 1 | Site In-charge / Manager | | |
| 2 | Structural Design Engineer | | |
| 3 | Fabrication Engineer | | |
| 4 | Electrical Engineer | | |
| 5 | Surveyor | | |
| 6 | Supervisors | | |
| 7 | Class Tested Qualified Welder | | |
| 8 | Skilled Mechanic | | |
| 9 | Carpenter | | |

| | | | |
|----|--------------------|--|--|
| 10 | Skilled Labourer | | |
| 11 | Unskilled Labourer | | |

Note:

- (a) The above list need not be exhaustive. The Contractor shall however undertake that all the time required number of personnel necessary for efficient execution of contract and as required by applicable law.
- (b) The number of personnel mentioned is indicative as may be required for the Works. The Contractor shall engage persons with necessary qualification / experience during the entire period of the Contract.
- (c) The list of all the personnel engaged in the Contract will be submitted to EIC before commencement of work. Personnel will be replaced only after approval of EIC.

7. Equipment

7.1 The Contractor shall have the vessel fabrication facility along with all necessary equipment to carry out the work, such as cutting, grinding, blasting, painting, welding etc. The contractor shall provide required list of owned / hired equipment which are to be used for the work.

| S. No. | Equipment type and characteristics | | | | Minimum number required |
|--------|------------------------------------|------|----------------|------------------|-------------------------|
| | Equipment | make | Rated Capacity | Max. Age (Years) | |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |

8. Organization

The selected Contractor shall depute well-qualified officers/team having sufficient experience in execution of similar works as indicated in this Tender Document. If the progress of work is found unsatisfactory during the currency of the contract, Contractor/Bidder shall promptly mobilize additional personnel/resources for ensuring satisfactory progress and timely completion of the proposed work, as per direction of and satisfaction of Engineer-In-Charge under the contract without extra cost to IWAI.

9. Duties & Responsibilities of the Contractor

9.1 The primary responsibility of the Contractor is to undertake “**Design, construction, delivery, and commissioning of Survey Vessel under IRS/other IACS empanelled classification society for NW-16**” as per terms and conditions of this tender and directions of EIC during the entire period of the contract. Correction of Defects If any defects including workmanship of hull, structure, machineries, or any other part of the structure appears within twelve (12) Months of taking over certificate, the owner shall give notice to the contractor of any defect before the end of the defects liability period which begins at completion and is for Twelve (12) Months thereafter. The defects liability shall be extended for as long as defects remain to be corrected.

When the notice regarding the defect is given, the contractor shall correct the notified defect at his own cost within the length of time specified by the owner in notice issued by him. If the contractor is in default, the owner shall cause the same to be made good by other workmen and deduct the expense from any sum that may be due to the contractor.

If the contractor has not corrected a defect, to the satisfaction of the engineer-in-charge, within the time specified in the notice, the owner will assess the cost of having the defect corrected and the contractor will pay this amount.

10. Supervision and Monitoring

Monitoring shall be undertaken by the employer; this shall be done by IWAI representative or an appointed supervision consultant or EIC (engineer in charge). Any supervision and monitoring shall not relieve the contractor from his contractual obligations, including his duty of quality control, survey and all such factors.

11. Penalties

The liquidated damages for delay in delivery shall be of ½% per week on prorata basis upto a maximum of 10% of the contract value after which the purchaser have the right to cancel the contract.

Additionally, penalty for following deficiencies up to a max of 10% of contract value shall be imposed if there is a

- i. **Deficiency in specification**
- ii. **deficiency in performance – Speed.**
- iii. **deficiency in performance – Draft.**

Penalty for deficiency in Specification – 5 % of the contract value

The Ship Builder shall give full guarantee in every respect in accordance with the provisions of the specifications for the construction of the fully river worthy vessel constructed out of the best material of international shipbuilding quality and workmanship with good stability as also for faultless execution of work in all its details.

The total contract price of the vessel shall have to be affected or changed, by reason of the actual speed, as determined by trial runs, in accordance with the specifications, being less than the guaranteed speed under the terms of the attached specifications, if the actual speed is less than

three-tenth (3/10) of knot below aforementioned guaranteed speed.

However, commencing with and including a decrease of three-tenth (3/10) of knot in actual below the trail of the vessel. The total contract price of the vessel shall be reduced for deficiency as follows (but dis-regarding fractions of less than one-tenth (1/10)):

- For three-tenths (0.3) of a knot ½ % of the basic cost of the vessel
- For four-tenths (0.4) of a knot 1.5 % of the basic cost of the vessel
- For five-tenths (0.5) of a knot 5 % of the basic cost of the vessel

If the deficiency in actual speed of the vessel upon said trial runs, is more than 0.5knot below the trial as provided herein above, and the builder is notable to rectify even by an extension of the delivery period, then the owner at his option may reject the vessel and rescind this contract or may accept the vessel at a reduction in the price as may be agreed between the parties.

Penalty for deficiency in draft of the vessel- 5 % of the contract value

The total contract price of the vessel must be affected or changed by reason of the actual max. draft with full bunker, water, personnel, and stores as determined by actual measurement in accordance with specification being more than that specified in the attached specifications if the actual draft is more than 25mm.

However, commencing with and including an increase of 25mm in actual draft the total contract price of the vessels shall be reduced for deficiency in draft as follows:

Draft > 25mm and up to 50mm: **2.5 % of the contract value of the vessel**

Draft > 50mm of draft: **5 % of the contract value of the vessel**

If the actual draft of the vessels is more than 50mm and builder is not able to rectify even by an extension of delivery period, then the owner at his option may reject the vessels and rescind the contract or may accept the vessel at a reduction of the price as may be agreed between the parties

Note: Any additional requirement of class/ IWT surveyor other than above shall also be complied by the manufacturer.

12. Association of Part I of ToR

The technical specifications detailed in Part II of ToR shall be read in conjunction with Part I – scope of work.

Part II
TECHNICAL SPECIFICATIONS OF SURVEY VESSEL

DETAILED TECHNICAL SPECIFICATION OF SURVEY VESSEL

1. GENERAL

1.1 Intent

This specification is intended to describe the construction of one survey vessel completely outfitted and equipped 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 as stipulated under section 1.4.

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 requirements on capacity, loads, speed and minimum deck area would remain applicable.

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

The capacities given in the specification are minimum values, compliance with Rules & Regulations and performance are responsibility of the Bidder.

Any modification or alteration to this specification shall be executed under mutual agreement of the Owner and the Builder. IWAI 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.

Plans to be submitted together with the Quotation:

- a) General Arrangement
- b) Midship including scantlings
- c) Powering calculations
- d) Electrical load analysis

The General Arrangement enclosed is only for Guidance.

Any material/fitting/equipment or procedure not described or left out of these specifications but considered as normal and necessary for intended services of this vessel shall be supplied and fitted by the builder without extra charge.

The builder shall be responsible for all the extra work, which arises out of the recommendations, and remarks made by the Classification Society as well as IWT surveyors.

1.2 Objectives

The vessel shall be a survey cum inspection launch (hereinafter called "the vessel") suitable for doing hydrographic survey and inspection of the underwater areas in (inland) waters, such as Karimganj/Badarpur area of National Waterway - 16. The vessel shall have facilities for

accommodation for officers and crew on board. The vessel shall be designed and equipped for operation in National Waterways – 16 river system.

The following ambient conditions can be considered for the selection of equipment and machinery: -

- Maximum outside air temperature of 45°C with 90% relative humidity.
- Air temperature of 50°C with 90% relative humidity in the engine room.
- Maximum river water temperature of 32°C.
- Atmospheric pressure of 760 mm Hg.
- Occasionally occurring sandstorms with wind speeds up to 40m/sec.

The vessel shall be built and classed under Indian Register of shipping for Inland Waterway operation. The vessel shall comply with Inland vessel Act'2021 and following rules notified under the act & as amended:

| | |
|-----|---|
| 1. | Inland Vessels (Manning) Rules, 2022 |
| 2. | Inland Vessels (Insurance, Limitation of liability, inquiry and investigations, Obligation of service providers and service user) Rules, 2022 |
| 3. | Inland Vessels (Registration and Other Technical Issues) Rules, 2022 |
| 4. | Inland Vessels (Survey and Certification) Rules, 2022 |
| 5. | Inland Vessels (Safe Navigation, communication, and signals) Rules, 2022 |
| 6. | Inland Vessels (Firefighting appliances) Rules, 2022 |
| 7. | Inland Vessels (Life savings appliances) Rules, 2022 |
| 8. | Inland Vessels (Prevention and containment of pollution) Rules, 2022 |
| 9. | Inland Vessels (Crew and passenger accommodation) Rules, 2022 |
| 10. | Inland Vessels (Design and construction) Rules, 2024 |
| 11. | Inland Vessels (Central Database) Rules, 2024 |

1.3 **Principal Particulars**

The particulars given below are to be followed. However, there should not be any deviations in the draught requirements (Both air and design draught).

- Length over all : 25-27 m
- Breadth moulded : 7.0 to 8.0 m
- Depth at side : 2.4m – 2.6m
- Maximum draught : 1.0 m loaded with full bunkers
- Maximum air draught : 6.0 m
- Trial speed : 9 knots
- Endurance : 15 days
- F. O. Capacity : 14 KL
- Freshwater Capacity: 6 KL with onboard drinking water generation unit through reverse osmosis systems

Deviation allowed from specified principal particulars shall be 5% only, except the maximum draught and trial speed. The place of performance for trials would be at Badarpur/Karimganj in NW-16. The vessel is to be delivered at Badarpur/Karimganj in NW-16.

1.4 **Classification**

The vessel with her equipment and machinery shall be constructed in accordance with the rules of Indian Register of Shipping (IRS) applicable for inland vessels and classed as

⚡ IWL, Zone 2 ⚡ IY

Descriptive Note: —Survey cum Inspection Launch

The Vessel is to be built under the class survey of any IACS society and specification survey of owner's inspectors.

The vessel shall also be designed, constructed and equipped as per the Inland Vessels Act 2021 and IV Rules 2022/2024. Statutory requirements like lifesaving appliances, fire-fighting appliances, navigational lights and sound signals shall conform to the rules and regulations under the Inland vessel act 2021

1.5 **Registration**

The vessel shall be registered at Guwahati with Inland Water Transport Directorate, Govt. of Assam as per relevant rules and regulations of I.V. Act 2021

1.6 **Trim and Stability**

The vessel shall comply with IMO's stability requirements.

The vessel shall not have any trim by forward in any of the operating loading conditions. Permanent ballasting will not be allowed.

An inclining experiment is to be conducted by the builder in the presence of the class surveyor(s), IWT surveyors and the Owner. A detailed trim and stability booklet duly approved by IRS shall be submitted to the owner.

1.7 **Drawings**

The Builder will supply Class approved drawings and supply other design information as listed below within 8 weeks of placing the order. The list given below is a preliminary list and the final list of plans will be submitted to the shipyard with the agreement.

Classification charges for approved of drawings shall be borne by the builder.

Class approved drawings / Information:

2. Midship section
3. Deck and profile and bottom construction plans
4. Transverse Bulkheads
5. Typical Transverse Section
6. Rudder and Rudder Stock
7. Propeller shafting
8. Schematic piping arrangements of all the system
9. Single line Electrical Diagram
10. Trim and Stability booklet (Preliminary and Final)
11. Lines Plan
12. General Arrangement
13. Hydrostatic tables & cross curves
14. Electrical load chart
15. General Machinery Layout
16. Weight Estimate
17. Major Equipment list
18. Inclining Experiment Plan

Any additional drawings required for construction shall also be prepared by the builder and submitted for the approval of the owner and classification society.

1.8 **Materials and Workmanship**

The hull shall be constructed of good quality mild steel plates and sections tested and approved by the Classification Society. Test certificates shall be supplied. The deck house shall be constructed of aluminium or composite material for weight reduction to reduce the light ship weight.

All steel plates and sections shall be shot blasted to SA 2.5 and primed with an approved primer before fabrication.

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

All smith work or fabricated fittings shall be of neat design, strong, smooth and free from defects and to be galvanized as required. All castings shall be of good quality, close grained and free from cracks, blowholes and other defects. The castings shall be manufactured to Classification requirements and approval as applicable.

All cables, fastenings, shackles, rigging, ropes, etc. shall be of materials that have been tested, approved and certificates supplied prior to commencing the work.

Workmanship shall be of good quality and shall be to the satisfaction of the Owner and the Classification Society surveyor.

1.9 **Inspection and Supervision**

The Owner will appoint their supervisory staff for monitoring the construction of the vessel in accordance with the accepted tender. Owner's representatives, the class surveyor and IWT surveyors shall have free access to the yard and the subcontractors' premises where the vessel or parts of it are being constructed during working hours.

The Vessel, its machinery, outfit and equipment shall be inspected and tested by the various governing bodies concerned in accordance with the requirements of their respective rules. The inspections and tests shall be in accordance with the rules and regulations of the Class.

The Builder shall submit a monthly report of the progress of the construction of the vessel to the Owner or their consultants who shall carry out Specification survey and shall inspect the work at any stage during the construction of the vessel.

The reports of inspection and testing shall be submitted to the Classification Society and the Owner or their consultants/specification surveyors. The Classification Society or the Owners consultants are entitled to reject and refuse work and material which do not comply with the specified requirements. The Contractor will admit the Surveyors to all places where work related to this Contract is being carried out and shall grant free access to any premises where equipment is stored, where work is stored or where work is being sub-contracted. The Contractor shall also give all necessary information and render assistance to enable the Classification Society to carry out their inspections efficiently. Supervision by the Classification Society does not release the Contractor from any of his obligations under the Contract.

No major construction alteration or modification shall be permitted without specific written approval from the Owner's or their authorized representative.

The Contractor will put at the disposal of Owners Consultants /specification surveyors one room of a suitable size with telephone connection for site office at shipyard. At least two tables and chairs to be provided along with requisite cupboards for files/documents. Appropriate facilities are also to be provided.

The Contractor shall enforce his own effective inspection and quality control of materials and

workmanship including that of his sub-contractors during the execution of the Contract.

All tests shall be pre-arranged and shall be conducted in the presence of the concerned authorities and a report approved by the authorities shall be submitted to the owner. Any defect found by the surveyors or the owner's representative, during the tests and trials shall be rectified by the builder at no extra cost.

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

Two copies of all statutory and test certificates of materials and the equipment shall be supplied.

1.10 **Tests and Trials**

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 Owner's representatives as per the agreed tests and trials plan.

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 manufacturers' premises as per their 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.

1.11 **Welding**

Welding shall be of high quality and shall be performed by Classification Society approved personnel. Welding procedures shall be in accordance with the rules and regulations of IRS. Necessary precautions shall be taken to eliminate deformations. Approved manual, semi-automatic or automatic welding techniques should be adopted for the construction. Aluminium/steel transition joints to be used for connecting aluminium structures to steel plating. Transition joints are to be manufactured by approved producer in accordance with an approved specification which is to include the maximum temperature allowable at the interface during welding. Marine grade aluminium alloys are to be used. A welding schedule will be approved by the class society, incorporating the material, scantling and weld factors. The NDT test plan will be seen by class surveyors at site.

1.12 **Tank Testing**

A suitable tank-testing scheme to check for water-tightness is to be prepared and submitted to the Owners and Classification Society for approval. All tanks and watertight or oil tight compartments are to be tested in accordance with the class requirements. The tests must be carried out after the completion of construction and before painting.

1.13 **Dock Trials**

The Dock Trials shall be conducted in accordance with a programme to be agreed to, by the Owner or their representative to check the operation of the machinery. Main engine and other auxiliary machinery are to be in operation during dock trials. A report on the performance of various machinery and equipment during the dock trials is to be submitted to owner.

1.14 **River Trials**

River trials shall be carried out as per the recommendations of IRS and Owner. A detailed programme is to be submitted to Owner/IRS for approval, prior to the trials.

1.15 **Survey Equipment Trials**

An actual plot of tile topography of the riverbed shall be obtained with the help of all the survey and navigation equipment and processed later and presented to the Owners.

1.16 **Instruction Manual and Books**

Three sets of instruction books, operation and maintenance manuals, spares catalogues given by the original machinery suppliers for all the equipment /machinery and instrumentation installed on board, shall be supplied to the Owners / handed over to the Owner's representative.

Three copies of the list of suppliers of all the fittings and equipments used on board with their addresses and phone / fax numbers shall be supplied to Owners' representative.

1.17 **Hull Preservation /Painting**

The hull is to be cleaned of mill-scale by blast cleaning and coated with an approved good quality primer prior to fabrication. After installation of engines, auxiliary's etc. damaged paintwork is to be repainted in original colours and quality.

Painting work shall be executed in accordance with paint manufacturers' recommendations. Copper alloy, aluminium, aluminium alloy, stainless steel, non-ferrous materials and galvanised surfaces shall not be painted unless otherwise specifically required.

Painting scheme shall be based on epoxy coating system and is to be guaranteed by the paint manufacturer for a period of 5 years.

Paint specification and scheme are to be approved by the Owners.

Colour scheme is to be approved by Owners. All small parts, which are exposed to climate, such as railings, sheaves, grating, and parts of rigging are to be galvanised.

Galvanised surfaces are to be degreased and coated with a self-etching primer before painting. The paint specifications for galvanised surface are to be the same as for steel.

Prior to launching, Anti-fouling paints are to be applied to the hull outside, up to boot toping area. Non-slip paint is to be applied on the main deck open areas and passages.

Fixed sacrificial Aluminium anodes of sufficient number in accordance with class requirement /IS 8062 shall be provided as cathodic protection.

Standard colour coding is to be used for pipes.

2. Hull Structure

2.1 General

The hull shall be of steel and shall be divided from Aft to forward as follows:

- Aft peak / steering gear room
- Engine-room
- Accommodation space including Galley, Store and Sanitary spaces
- Galley /sanitary spaces
- Fore peak

Hull Design should be Monohull type. The steel should be of shipbuilding quality and shall be IRS Grade A or equivalent. Scantlings of all structural members shall be as per IRS/Class requirements. Approved shipbuilding quality material is to be used throughout the construction. Sharp corners are to be avoided. Good continuity of structural members in basic hull structure should be maintained.

Before the steel plates and rolled sections are used for construction, rust and mill-scale must be removed by means of sand/grit-blasting. Immediately after the steel sand/grit-blasting, one coat of epoxy shop primer with a thickness of approximately 25-40 microns is to be applied as a temporary protection.

2.2 Hull Construction

The plating shall have a thickness as per Class requirement. The bottom structure shall be strengthened in way of the propeller units. In way of hawse pipes, deck machinery, mooring fittings, spuds, pumps, winch and elsewhere as required insert plates of increased thickness shall be inserted and the structure in way shall be strengthened.

The keel is to be of a flat plate type with thickness as per Class requirements. Plate floors are to be constructed in accordance with the Rules.

Longitudinal girders shall be fitted in the engine-room in such a way that they form part of the foundations for the main and auxiliary engines, else longitudinal girders to be provided as required by the Class. A sufficient number of drain and air holes to be provided in floors and girders.

2.3 Bulkheads

All watertight bulkheads shall be plated horizontally.

Vertical stiffening shall be provided by the stiffeners spaced evenly.

2.4 Aft End Arrangement

The vessel shall be provided with a transom stern.

Adequate clearance as recommended by the designers shall be provided in the stern to house the twin propellers and the two rudders.

The propeller shafts shall be properly supported with "A" brackets.

A double plate skeg of adequate size is to be fitted, on the centre line forward of the propellers.

Propeller rope guards shall be fitted for both the propellers.

2.5 Decks

The Main deck will have no camber or sheer. The main deck will form the base of the deck house (about 2.8m above base). Thickness of the deck plating shall be as per IRS Class requirement.

2.6 Deck House (Wheelhouse / Survey Room / Accommodation)

The deck house shall house the wheelhouse / survey room. It shall be of Aluminium construction welded to steel deck by means of transition joints. The materials, stiffening and deck connections are to be approved by IRS.

Access to the wheelhouse shall be provided from outside as well as from below deck accommodation. Weather tightness of the joint between Hull and Deck house to be to Class requirement.

2.7 Miscellaneous

2.7.1 Mast

A collapsible type of mast on the wheelhouse deck shall be provided.

2.7.2 Hull Opening, Watertight Doors and Hatches

All hull openings wherever provided shall be in accordance with IRS rules. Sills on the main deck for all doors are to satisfy rule requirements of Class.

Watertight doors and Hatches are to be provided wherever necessary and shall comply with the rule requirements. The escape hatches are to be operated from either side.

2.7.3 Ladders and Railings

In general, all ladders shall comply with the rule requirements. Ladders shall be placed under each manhole and escape hatch. Chequered Aluminium plate ladders are to be provided in accommodation.

Railing of 1.0m height shall be provided wherever required after galvanising.

2.7.4 Bollards and Fenders

Two pairs of doubled bollards of dia. 200mm shall be provided in the aft and forward as shown in the G.A. plan. One pair of single bollard of 200mm dia., shall be provided at the mid ship.

Half round steel pipe 200mm dia. 6mm thick fenders with adequate stiffening shall be provided all around the hull.

2.7.5 Name and Draught Marks

The name of the vessel, the place of registry and the draught marks should be executed in welded characters and the letters and figures should be cut out of 5mm thick steel plate. (as per IS 14449: 1997)

The name of the vessel should be executed on bow and stem. In addition, the place of registry should be indicated on the stem.

A 3mm thick brass plate with the name of the vessel and the owner's mark shall be fixed through screws on both sides of the wheelhouse.

2.7.6 Life Saving Appliances

LSA as per the relevant rules under the IV Act'2021 and Inland Vessels (Life savings appliances) Rules, 2022 as amended.

2.7.7 Fire Fighting Appliances

FFA as per the IV Act'21 and Inland Vessels (Firefighting appliances) Rules, 2022 as amended and class requirements shall be supplied and installed on board the vessel. However, the following items shall be provided on board as minimum.

- One fire pump operated on power- 25 cum/hr with necessary piping
- Fire hydrant with hoses- 2 nos. (one on deck and one E/r)
- Fire buckets
- 2 nos. 9 litres, Foam fire extinguisher in E/room
- 3 nos. 5 kg soda acid portable fire extinguishers in crew accommodation
- 1 no. DCP in the wheelhouse

2.7.8 Fasteners

Stainless steel bolts, nuts & washer shall be used as fastener all over as per requirement.

2.8 Rudder and Steering Gear:

Propulsion Type: Fixed pitch azimuth thruster/propellers with Kort nozzle.

Design Speed: Minimum 9 knots+5%

Service Speed: Minimum 9 knots

The propellers can be operated from the wheelhouse with joystick control and shall be provided in accordance with the class requirement. Suitable helm indicators shall be provided.

2.9 Anchor and Mooring Equipment

Two anchors with sufficient length of chain as recommended by IRS with necessary arrangement for effective operation is to be provided on deck. The electrical driven anchor windlass of suitable capacity is to be provided with double drum to handle the anchor chains. Two chain lockers are to be provided in the aft of the Forepeak.

2.10 Work Boat & Davit

One FRP boat fitted with OBM of 25 hp with seating capacity of 6 persons and a max draught of 0.5(m) shall be provided onboard. Two davits for handling the Boat shall be provided with all accessories.

Davits shall be of minimum 1 t capacity, manually operated. The davit also shall be used to collect water samples with the help of grabs. This work boat is to be utilized as a survey boat in very shallow waters. A provision for the placement of an echo sounder is to be also provided in the work boat. The davits shall be provided with lifting accessories. Boat is to be placed at deck properly on stand as per class requirements.

2.11 Awning

GRP awning covering the raised deck aft and forward of wheelhouse shall be provided.

2.12 Drain Plugs

S.S drain plugs shall be provided in way of tanks.

3. Accommodation

3.1 General

The deckhouse shall be aesthetically designed and shall accommodate 9 persons (4 officers & 5 crews) tentatively as following:

Above Main deck:

-2 nos. Single bunk cabins for Officers with attached modular toilets.

-01 Double bunk cabin for 2 nos. Surveyors/officials with common attached toilet cum shower.

The accommodation is to be properly air conditioned.

Below Main deck:

One cabin for Master & Driver

Suitable Cabin with bunks to accommodate 3 nos. GP Rating Crew.

Galley & Stores

1 no. Mess room to seat 6 persons

1 no. Common sanitary facilities

Clear height in accommodation shall be 2000mm.

All the accommodation facilities shall comply with Inland Vessels (Crew and Passenger Accommodation) Rules, 2022 in coherence with Inland Vessels (Manning Rules)'2022 as amended.

Note: The location of cabins is suggestive and can be modified to meet aesthetics/statutory requirement with approval of EIC & Class.

3.2 **Furniture:**

The accommodation space shall be equipped as per standard shipbuilder's practices and in compliance with statutory requirements. The same are also to be approved by the Owner.

All wooden furniture shall be made of good marine quality teakwood. All furniture supplied must be of good standard.

Crockery, utensils, pillows, mattresses are to be supplied by the yard. Provision for hot and cold water is to be provided in galleys and toilets.

Single Berth Cabins (Officers) 2 nos. to be aesthetically designed and shall each include:

- a) Berths of 2000x1000 mm
- b) LED TV
- c) Table with cushioned chairs
- d) Attached modular bio - toilets
- e) One bookshelf
- f) lockers
- g) Curtains for berths and windows

Master and Driver Cabin with two bunks shall include:

- a) Bunk of 2000x900 (mm)
- b) Table with 2 chairs
- c) One toilet cabinet with mirror
- d) Common bio - toilet for Master and Driver
- e) One book shelf
- f) lockers
- g) Curtains for berths and windows

Double bunk cabins for Survey teams shall include:

- a) One two tier berths of 2000X 900 mm
- b) One table with 2 chairs

- c) Two toilet lockers with mirrors
- d) One bookshelf
- e) Lockers suitable for 2 persons

Cabins for GP Rating Crew shall include:

- a) Three berths of 2000X 900 mm
- b) One table with 2 chairs
- c) Two toilet lockers with mirrors
- d) One bookshelf
- e) Lockers suitable for 2 persons

Mess room:

- a) 2 nos. dining tables with hard plastic top
- b) 10 nos. FRP chairs
- c) One wash basin
- d) One waste basket
- e) Two ashtrays
- f) 42" LED TV
- g) One Refrigerator (300lt.)

Galley:

- a) One cooking range with 2 hot plates
- b) One dresser with stainless steel top and sink with plug and siphon
- c) Lockers and drawers shall be provided underneath.
- d) One 300 liters refrigerator
- e) Built in almirahs
- f) Sufficient number of plates and crockery
- g) One Preparation table
- h) One water boiler
- i) One Oven
- j) One water cooler (30lt.)
- k) One RO FW unit

Wheelhouse cum Survey Room:

The furniture, as a minimum shall consist of:

- a) Navigational equipment
- b) Manoeuvring desk with propulsion control, steering wheel, navigational equipment

- c) One helmsman chair
- d) One settee
- e) Chart table approx. (2 .0m x 1m) with at least four chart drawers
- f) 2 Nos. survey tables (2 .2m x 0.6m) with telescopic table light
- g) One set of roller blinds and curtains
- h) One portable fire extinguisher
- i) One VHF-set
- j) One clock
- k) Two double coat hooks
- l) Two window wipers
- m) One clear view screen
- n) One corner cupboard
- o) One chart rack against ceiling – one binocular box

3.3 Flooring

All floors and deck covering shall be of excellent, approved marine quality and fire resistant and anti-skid nature.

Wheelhouse:

Flooring in the wheelhouse shall be covered with 8mm latex cement (or epoxy) and then shall be covered with vinyl tiles.

In toilets /showers steel deck to be covered with 8mm thick latex cement on which unglazed antiskid ceramic tiles to be glued. Glazed ceramic tiles are to be provided on all four walls upto height of 300mm in toilets and 1.5 m in showers.

Engine room:

In Engine room, 4mm steel chequered plate removable flooring shall be fitted with counter sunken SS screws, covering piping and other fittings.

Accommodation:

Under deck accommodation except the toilets shall have 4 mm thick Aluminium chequered plate removable false flooring at a height of approx. 400-mm from the base line.

3.4 Bio-toilet:

Bio-toilets are to be provided.

All the bio-toilet fittings shall be provided as per rules and shall be approved by the Owner. All toilets shall be provided with sleek and rugged storage flush tanks and shall properly secured. Toilet shall have mirrors fitted over the washbasin with lockable cupboards, cloth rails/hooks and towel rails.

3.5 Partition bulkheads, linings and ceilings

The partition lining and ceiling, and insulation work for the crew and surveyors accommodation space shall be carried out in such a way that the minimum clear height between the floors and ceiling of 1.8 m is maintained.

Partition bulkheads are to be fitted between sleeping rooms, mess rooms, galleys and toilets.

In the crew's and surveyors' accommodation and the wheel house room, linings and ceilings to be fitted.

The linings and ceilings are to be fitted in easily removable panels. All fixing materials such as screws and bolt are to be of stainless steel.

The materials of the linings, partition bulkheads and ceiling are to be:

Lining: 10mm marine plywood of waterproof and fire retarding quality, both sides covered with plastic laminate (Formica or-similar approved).

Partition bulkhead: 20mm marine plywood of waterproof and fire retarding quality both sides covered with plastic laminate (Formica or similar approved).

Bulkheads separating galley from toilet are to be of steel and to meet statutory requirements.

Ceilings: 6mm marine plywood, both sides covered with plastic laminate (Formica or similar approved).

Thickness of plastic laminate in general should not be less than 1.5 mm. Borders of linings, around windows, doorframes etc. are to be of first-class tropical hardwood.

3.6 Insulation

Thermal insulation in accommodation spaces is to be provided.

Acoustic insulation in accommodation spaces:

The bulkheads of the accommodation spaces adjacent to the engine room to be provided with acoustic compound insulation and then with perforated GI sheet. A dust proof foil is to be provided between the glass wool and the perforated plate.

Acoustic insulation in engine room:

In the engine room, the forward bulkhead shall be covered with sound absorbing acoustic compound insulation and then with perforated GI sheet. A dust proof foil is to be provided between the glass wool and the perforated plate. Further engine room is to be insulated by A-60 insulation from adjacent spaces.

3.7 Doors and Windows

Doors are to be provided in accordance with the Rules. Wooden doors, if provided, are to be of good quality teak. Other doors in accommodation are to be of fire-retardant type.

Wheelhouse doors shall be sliding / hinged type to provide un-obstructed passage on either side of the wheelhouse.

A 350mm Dia. Dead light made of marine toughened glass may be provided on wheelhouse doors.

Windows & Scuttles:

The hull side bulkheads of the following rooms shall be fitted with 350mm dia. opening type scuttles with dead light.

Wheelhouse shall have windows all around. Window in front of the helms man chair shall be fitted with window wipers. All windows shall be of approved marine quality type with steel framing. Curtains shall be provided for all dead lights and windows.

A joiner's plan shall be submitted to owner for approval before construction.

Note: All the accommodation facilities shall comply with Inland Vessels (Crew and Passenger Accommodation) Rules, 2022 and other related rules.

4. Electrical

4.1 General

The complete electrical installation and workmanship on board shall be in accordance with the rules and regulations of the Classification Society and statutory authorities applicable to this class of vessel.

The electrical rotating machinery, transformers and other electrical equipments shall work satisfactory at the ambient temperature as defined in 1.2.

All the electrical equipment shall be arranged for easy accessibility for repair and replacement. The equipment installed shall work satisfactorily at voltage and frequency variations as specified by IRS.

Each control panel shall be provided with relevant drawing, wherein the fuse ratings of feeders shall be clearly mentioned. Due care is to be taken while installing the survey equipment to avoid Radio interference and for satisfactory operation of the equipment during vibration.

In general, all the electrical motors, control panels and generators, unless specified by the supplier, shall be earthed as per the rules.

Ingress protection of the electrical equipment shall be as per the area of installation.

4.2 Power Supply

A 415 V, 3 Ph AC, 50 Hz electrical systems shall be used for normal power supplies. 24V DC system shall be used for feeding the following loads.

- Main engines and Genset engines starting

- Emergency lighting, Navigational and communicational equipment.
- Survey equipment.

Provision for shore supply connection shall be made for powering the main switchboard through a shore supply box. In general squirrel cage marine type induction motors of direct on-line starting type shall be used. The motors shall be dripping proof or weatherproof as required by the location and shall be of approved type.

4.2.1 Generators

The system shall have as a minimum 25 KVA, 3 pH 415 V.A.C. marine type, and drip proof diesel engine (water-cooled) driven alternator with electrical starting. The capacities are to be finalized subsequent to approval of the electrical load analysis. The generator shall be capable of taking the entire load with 15% reserve. The generator shall be continuously rated and shall have class F insulation, suitable for tropical environment and shall be designed for temperature rise after continuous full load working not exceeding the temperature limits of a minimum as specified by IRS. One Harbour Generator 10 KVA, minimum (water cooled engine) shall be provided to take the load of Galley and lighting.

4.2.2 Battery

Lead acid batteries of adequate capacity with suitable charging arrangements, shall be provided for main engine and generator engine starting as per the rules. 2 numbers of additional batteries should be provided above the main deck level for emergency lighting, navigational and communicational equipment.

Battery charging arrangement with a tickle charging system is to be provided.

All batteries should be enclosed in well-ventilated battery box so as to protect the batteries from the weather.

4.3 Power Distribution

4.3.1 Main Switch Board

One main switchboard of metal clads, drip proof, dead front type shall be fitted in engine room. The switchboard shall be completely closed at the rear and is to be serviceable from the front. All the sides of the MSB should be accessible.

The alternator panels shall have meters for the measurement of voltage, current power factor, power separately for Auxiliary generator and Harbour generator. The alternator shall be protected through, circuit breakers of adequate capacity and shall have under voltage, over current and short circuit protection. All the out-going feeders and the shore supply shall be protected through suitable circuit breakers. Switchboard Earth leakage shall be provided.

The switchboard shall be installed and designed with ample space for repairs and maintenance.

Remote stop arrangement for vent fans and oil pumps to be as per Rules. All the motors shall

be protected through fuse and breaker of adequate capacity. Unless specified by the maker, motors with low starting current shall be of direct online starting type.

4.3.2 Distribution Board

Suitable number of lighting distribution boards and power distribution boards shall be provided. All the panels shall be of drip proof type; galvanized sheet metal enclosed and is to be provided with suitable schematic drawings.

4.4 Cables

All the cables shall be flame retardant and comply with rules of IRS. The voltage rating of the cables is to be as per the specific requirement of the installation and in accordance with the rules of IRS.

Cables passing through decks and bulkheads shall be led through individual watertight glands. The piercing shall be filled with approved filling material for water tightness. Cables passing close to Radio and Navigation equipment shall be properly screened.

The control cables, power cables and communication cables are to be separated from each other. Fire resistant cables to be provided as per Class Rules.

4.5 Lighting

4.5.1 General

The lighting installation consists of two networks - one of 220 V.A.C. and another of 24 V DC.

Light fittings are to be of LED Type. Light fittings inside the accommodation and wheel house are to be of decorative LED, Illumination levels in various areas shall comply with relevant statutory authorities directions as applicable to this class of vessel.

Four numbers 40W, 220V portable hand lamps shall be provided with watertight sockets and 8 meters flexible cable.

Sufficient numbers of rechargeable battery lights operating on 220 V AC shall be fitted at the following places.

Mess rooms

- Survey room
- Wheelhouse
- Engine room

Sufficient number of switch sockets shall be provided in Engine room, Mess rooms and wheelhouse as per the Owners requirement.

4.5.2 Navigational and Signal Lights

Navigational lights, NUC lights, anchor lights and other equipment shall be fitted as per regulations.

4.5.3 Floodlights and Searchlights

A 1000 W search light of rotating and adjustable type is to be fitted on top of the wheelhouse. The open decks are to be illuminated by sufficient number of LED floodlights for operation at night.

4.6 Navigational Equipment

The following equipment shall be provided:

- a) Magnetic Compass
- b) Search light -1000 W
- c) LED Flood light
- d) Electric horn
- e) Foghorn
- f) Navigational lights
- g) Thermometer
- h) Barometer
- i) Anemometer
- j) Radar
- k) GPS
- l) Electronic Navigational Charts and Reader
- m) 4 Nos. battery operated Clocks

Any other navigational equipment as per applicable rules for this class of vessel are also to be provided.

4.7 Survey Equipment

For survey operations the vessel is to be equipped with:

One no. echo sounder (including survey software and related hardware). The builder is to make appropriate arrangement for fitting of the same. Also to make arrangement for fitting of transducer duly protected from damages on grounding of vessels.

For future installation of electronic position fixing systems with the belonging peripherals the builder is to provide in the survey room, 5 socket outlets for 220VAC and 5 socket outlets for 24 VDC.

Facilities for the laying of cables from the survey room to the steering desk have to be installed from the survey room to the steering desk.

4.8 Communication Equipment

Following communication equipment shall be provided onboard.

- External VHF Radiotelephone
- Loudspeaker
- Signals and Alarm as per statutory rules.
- Portable VHF(Walkie-Talkie)- one set

4.9 Navigational Console

One navigational console shall be erected in the wheelhouse and all the navigational and survey equipment shall be fitted on it.

5. Machinery & Piping Systems

5.1 General

All the engine room units shall be of marine grade and the installation should be in accordance with the rule and regulations of the Classification Societies and suitable for working in the following condition:

| | | | |
|---|------|---------|-------|
| Maximum ambient temperature in engine room: | 50°C | Maximum | River |
| water temperature: | 40°C | | |

| | |
|------------------------------|-----|
| Relative humidity (average): | 95% |
|------------------------------|-----|

In general shop and installation tests shall be conducted as per the rules of the Classification Society and on an agreed program with Owners or their authorized representatives.

5.2 Main Engine for Propulsion

The broad specifications of the engine shall be as follows:

Type: Two (2) 4-stroke marine engines (preferably dual fuel) of minimum 240 bhp each, to meet the speed / performance requirements are to be provided. Powering calculations are to be submitted along with the quotations.

The shop test of the propulsion diesel engine shall be done as per the Class requirement. The specific fuel consumption is to be recorded during the trials.

The main engines and gearboxes should be selected in such a way that they not only meet the design requirement but also smaller in size and lighter in weight.

5.3 Reverse Reduction Gear Box

The gearboxes shall be coupled to each main engine flywheel by means of highly elastic couplings. Each gearbox is to be provided with roller type thrust bearings and suitable for transferring the continuous engine power at rated rpm with a suitable reduction ratio.

The direction of rotation of the input and output shaft shall be such that the propeller will

rotate outboard when facing stern. The gearboxes shall be provided with independent oil system for clutch control and lubrication. The gearboxes shall be controlled from wheelhouse and locally.

5.4 Propeller & Stern Gear

2 nos. fixed pitch propellers made of manganese bronze with suitable diameter and pitch shall be fitted. The propeller shafts shall be of stainless steel, SS 316L. The diameter is to be 5mm in excess on the diameters according to Classification Rule requirements.

Both shafts shall be identical. The stern tube shall be of mild steel construction with suitably lubricated bushes. An air vent plug to be fitted to the stern tube at suitable position.

5.5 Auxiliary Engine

Two auxiliary diesel generators (25 KVA & 10 KVA minimum) set shall be installed, consisting of a heat exchanger cooled marine type diesel engine, flexibly coupled to a 415 V, three phase, 50 Hz. Alternator. The diesel engine is to have adequate capacity.

Shop trial for generator engines shall be carried as per Class requirement.

5.6 Engines Starting

Starting of all engines shall be by battery. Adequate batteries shall be provided as per class requirements.

5.7 Lifting arrangement

Sufficient lifting arrangement for Main Engine, gearbox, Genset etc. shall be provided in the Engine room

5.8 Exhaust System

Every engine shall have a separate exhaust pipe; the exhaust pipe lay out shall be approved by the engine maker's recommendation. The exhaust pipes shall be of steel. Exhaust pipe layout shall be designed such that, it is detachable at main deck level. A protection against rainwater entry is to be provided at the end. Necessary drains shall be fitted in the pipes to drain any water in the pipes.

Each engine shall be provided with suitable exhaust gas silencer.

5.9 Insulation

In general, the surface machinery, equipment, pipes and tanks whose surface temperature is more than 60°C shall be insulated.

Pipe shall be tested and painted (when necessary), before insulation is applied. The exhaust gas piping and silencers are to be insulated with rock wool blankets on wire gauze finished with a glued layer of glass fibre cloth and the whole to be covered with aluminium sheets. The flanges and expansion joints have to be covered, with insulating mattresses filled with glass wool. The application of asbestos as insulating material is not permitted.

In general, the insulating materials shall be fire resistant and shall be arranged in such a way that operation and maintenance are not hindered.

5.10 Fuel oil system

The fuel oil shall be stored in two storage tanks provided in the engine room. In addition, two F.O. day tanks of suitable capacity shall be provided for the engine, such that sufficient head is available for engines.

Each diesel engine will draw the fuel oil directly from fuel oil day tank. A fuel oil transfer / supply pump 5 m³/h is to be installed in the engine room for transferring the fuel oil from storage tanks to day tanks.

Piping must be fitted below floor level as far as possible.

5.11 Lube Oil System

The following installations shall have their own independent lube oil system

- Each diesel engine
- Each reverse reduction gearbox.

As far as possible all systems should use the same lubricant. The yard will be required to furnish a list of lubricants to be used on machinery and equipment installed in the vessel, in accordance with the manufacturer's recommendation for Owners reference.

One service tank shall be provided with a tap cock and drip tray for filling oil can and having a capacity of at least 300 liters.

All piping is to be executed with steel tubes.

5.12 Cooling Water System

The main parts of the cooling water system of the diesel engines are to be built on the respective engines. The oil coolers of the reverse / reduction gearbox shall be connected to the cooling water system of the concerned diesel engine.

5.13 Bilge / Deck wash and Fire-Fighting system

Two Bilge cum General Service pumps driven by main engines shall be installed in the engine room. The pumps shall be of the self-priming centrifugal type and to have a capacity of 25 m³/h at 2 bars. Further, two hand operated portable bilge pumps shall be installed, one in the steering gear compartment and one in the fore peak. One double acting head operated pump is to be provided in the suitable place, for emergency fire-fighting purpose.

All piping shall be galvanized after fabrication. Pipe sizes shall be as per the requirements of the Classification rules. Over boards discharge valves shall be screwed down non-return type (SDNRV) Valves.

Sufficient number of the fire hydrants shall be arranged on deck and in engine room satisfying Classification/statutory regulations.

5.14 Ventilation system

Engine room:

Supply of fresh air and exhaust for the engine room shall be provided through two axial flow fans of suitable capacity, out of which one is of reversible type.

Sufficient ducting has to be provided to ensure the air supply at required locations.

Accommodation

Accommodation to be air-conditioned.

Sufficient ducting has to be provided to ensure the air supply at other required locations.

Galley & Toilets:

Galley and two-toilet space shall be provided with one exhaust fan each. Supply is natural. All axial fans shall be mounted on the deck as shown in the GA Plan.

The capacity of the system is to be calculated on the basis of International Standards and in general to maintain ISO's specified conditions inside the engine room.

All fans should have emergency stop facility from the wheelhouse.

Cabin Fans

All bunks and mess rooms are to be provided with bulkhead mounted fans.

5.15 Fire Fighting System

In general, fire-fighting system shall be in accordance with class / statutory requirements. Portable foam fire extinguishers in engine room and other places in the ship, fireman's outfit, dry powder extinguisher in engine room and wheelhouse and fire main and hydrants complete with hoses and nozzles satisfying various class / statutory requirements shall be provided. A general service / firefighting pump of capacity 25 cbm/hr at 3 bar, as a minimum is to be provided.

5.16 Sanitary Water System

A gravity water tank of 200 lt. shall be installed on the wheelhouse deck. The tank shall be filled by a separate pump. Toilet space shall have a river water flushing system.

5.17 Potable Water System

A gravity water tank is to be installed on the wheelhouse top. The tank shall be filled by a centrifugal pump of suitable capacity. Necessary connection is to be given to washbasins, galley and toilets.

5.18 Sewage discharge system

Sewage from the toilets and galley shall be collected in two holding tanks located below the toilets. There shall be a pumping arrangement to discharge this sewage to shore reception facilities. One power driven pump of sufficient capacity exclusively for this purpose in addition to hand pump along with necessary piping systems is to be provided.

Sewage treatment plant is to be provided and the same is to be of approved type for 15 persons.

5.19 Vent, Sounding and Filling Pipes

All air sounding and filling pipes for water tanks and void spaces are to be of galvanized steel. For pipes on oil tanks only the parts above open decks to be of galvanized steel.

All structural and loose tanks to be provided with a vent pipe connected to the highest point of the tank.

Vent pipes of fuel tanks shall be fitted with flameproof wire gauge. Upper ends of vent pipes to be provided with air pipe hoods.

Air vents for freshwater tank shall be provided with insect proof net. Flush and thief proof sounding caps shall be provided on the upper deck. Sleeve joints shall be used for pipes passing through decks.

Tanks in the engine room shall be provided with a short sounding pipe with a self-closing sounding cock.

Filling connections to various tanks shall be arranged at least 300 mm above deck. They shall be suitable for coupling to standard supply hoses. Shut off by brass caps with chains should be provided.

Air and sounding pipes shall be arranged near bulkheads and behind stiffeners wherever possible.

6. ULL INVENTORY AND TOOLS

6.1 General

Standard Hull inventories and tools including tools recommended by the manufacturers shall be provided.

6.2 Tools and Inventory

- Tools and inventory must be of good standard and approved type.
- The tools and inventory shall consist of:

Maker's standard tools and special tools necessary for overhauls during the life of the vessel are to be delivered by all the manufacturers with their supply.

6.3 Spares

Spares of main engine, gearbox, generators and other machineries required for 5000 hrs of operation as recommended by manufacturers as well as Class Surveyor is to be supplied with vessel.

7 EQUIPMENT & FITTINGS

7.1 Instruments

In the National Waterway -2, the River Information Service System is being established. To keep the standard of survey vessel to meet the minimum fleet management requirement, the following equipment as being installed in other survey launches of IWAI are to be fitted on

board:

| S. No. | Items | Qty. |
|--------|--|------|
| 1 | AIS Transponder Inland Class - A | 01 |
| 2 | VHF Sets with Antenna with VoIP facilities | 01 |
| 3 | Echo Sounder with RS232 facilities | 01 |
| 4 | DGPS Receiver | 01 |
| 5 | High resolution Radar | 01 |
| 6 | MFD Multi-Function Display 19" size (Multi-touch LCD wide display along with Transas MFD software (18.5")) | 01 |
| 7 | Hypack software | 01 |

Note: The above equipment have to be supplied as per approval oof technical specification by EIC.

The scales of instruments for pressures, temperatures etc, are to be such that the working range is not more than 70% to 80% of the full scales. The maximum allowed values to be marked with a red line on the scale. Instruments shall have a minimum scale length of at least 8 cm.

The pressure gauges shall be marked in Bars. They shall have connections of 16mm pipes threaded on the outside. The temperature gauges shall be provided with scales marked in degrees centigrade. Gauges for temperatures over 300°C shall be of the pyrometer type.

Other gauges shall be of glass thermometers with blue coloured alcohol in steel tubes /brass tubes.

RPM meters with hours counter shall be provided in both Engine room and wheelhouse.

7.2 Name plates

On each pump, engine, valve, loose tank and where necessary for safety and control, the function and the medium used in that respective place shall be indicated on nameplates.

The nameplates shall be of brass with engraved letter, the nameplates fitted on weather decks and on Aluminium parts shall be of stainless steel. The lettering on nameplates shall be black, however on safety and emergency valves red coloured lettering shall be adopted.

7.3 Registration

Vessel Shall be registered as per Inland Vessels (Registration and Other Technical matters) Rules 2022 and as amended. Owner will extend necessary support in this regard; however, primary responsibility of registration lies with ship builder.

SECTION – VII

CONDITIONS OF CONTRACT

PART-I GENERAL CONDITIONS OF CONTRACT (GCC)

AND

PART-II SPECIAL CONDITIONS OF CONTRACT (SCC)

PART-I GENERAL CONDITIONS OF CONTRACT (GCC)

1. GENERAL PROVISIONS

1.1 Definitions

- 1.1.1 **Employer** **Employer** means the Chairman, Inland Waterways Authority of India and his successors.
- 1.1.2 **Authority/ Department / Owner** **“Authority/ Department/ Owner”** shall mean the Inland Waterways Authority of India, which invites tenders on behalf of the Chairman, IWAI and includes therein-legal representatives, successors and assigns.
- 1.1.3 **Chairman** **Chairman** means Chairman of Inland Waterways Authority of India.
- 1.1.4 **Chief Engineer** **Chief Engineer** means the Chief Engineer of the Authority.
- 1.1.5 **Director** **Director** means the Director of the Authority, as the case may be.
- 1.1.6 **Deputy Director** **Deputy Director** means the Deputy Director of the Authority, as the case may be.
- 1.1.7 **Contractor** **Contractor** means the successful Bidder who is awarded the contract to perform the work covered under this tender document and shall be deemed to include the Contractor’s successors, executors, representatives approved by the Engineer-in-charge.
- 1.1.8 **Contractor's Representative** **"Contractor's Representative"** means the person named by the Contractor in the Contract or appointed from time to time by the Contractor, who acts on behalf of the Contractor.
- 1.1.9 **Employer's Personnel** **"Employer's Personnel"** means the Engineer, the assistants and all other staff, labour and other employees of the Engineer and of the Employer; and any other personnel notified to the Contractor, by the Employer or the Engineer, as Employer's Personnel.
- 1.1.10 **Contractor's Personnel** **"Contractor's Personnel"** means the Contractor's Representative and all personnel whom the Contractor utilises on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the works

- 1.1.11 **Engineer-In-Charge/Engineer** Engineer-In-Charge (EIC) or Engineer means the Employers personnel authorized to direct, supervise and be in-charge of the works on behalf of the Employer.
- 1.1.12 **“Subcontractor”** “Subcontractor” means any person named in the Contract as a Subcontractor for a part of the Works or any person to whom a part of the Works has been subcontracted by the Contractor with the consent of the EIC and the legal successors in title to such person, but not any assignee of any such person.
- 1.1.13 **Engineer-in-charge representative/ as assistant** Engineer-in-charge representative/assistant shall mean any officer of the Authority nominated by the Engineer-in-charge for day-to-day supervision, checking, taking measurement, checking bills, ensuring quality control, inspecting works and other related works for completion of the project.
- 1.1.14 **"Contract"** "Contract" means the Contract Agreement, the Letter of Award, the Form of Tender, the Conditions (GCC & SCC), the ToR, the Specifications, the Drawings, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Award.
- 1.1.15 **“Specification”** “Specification” means the technical specifications and special conditions of the Works included in the Contract and any modification thereof or addition thereto made or submitted by the Contractor and approved by the Engineer.
- 1.1.16 **Party** Party means either the employer or the contractor as the case may be and “parties” means both of them.
- 1.1.17 **Commencement Date** "Commencement Date" means the date notified under clause 8.1 of GCC.
- 1.1.18 **Time for Completion** "Time for Completion" means the time for completing the execution of and passing the Tests on Completion of the Works or any Section or part thereof as stated in the Contract (or as extended under Clause 8.6 of GCC) calculated from the Commencement Date
- 1.1.19 **Day** "Day" means a calendar day and "Year" means 365 days.
- 1.1.20 **GCC** “GCC” means the General Conditions of Contract.
- 1.1.21 **SCC** “SCC” means the Special Conditions of Contract.
- 1.1.22 **Work Order** “Work Order” means a letter from the Authority conveying the acceptance of the tender/offer subject to such reservations as may have been stated therein.
- 1.1.23 **Letter of Award** “Letter of Award” means the formal letter issued by the employer to successful bidder to notify award of contract and shall specify including other terms and conditions, total contract price in consideration of execution & completion of works and the remedying of any defect therein by the contractor in accordance with the terms and conditions of the contract.

- 1.1.24 **Bill of Quantities** "Bill of Quantities" means the priced and completed bill of quantities forming part of the Tender.
- 1.1.25 **Tests on Completion** "Tests on Completion" means the tests specified in the Contract or otherwise agreed by the Engineer and the Contractor which are to be made by the Contractor before the Works or any Section or part thereof are taken over by the Employer.
- 1.1.26 **Interim Completion Certificate** "Interim Completion certificate" means a certificate issued on completion of work.
- 1.1.27 **Final Completion Certificate** "Final Completion Certificate" means a certificate issued after completion of work as per the SOW
- 1.1.29 **Cost** "Cost" means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.
- 1.1.30 **Accepted contract Amount** "Accepted contract Amount" means the amount accepted in the Letter of Award for the execution and completion of the Works including remedying of any defects.
- 1.1.31 **Final Payment Certificate** "Final Payment Certificate" means the payment certificate issued under Sub-Clause 14.10 of GCC.
- 1.1.32 **Goods** "Goods" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- 1.1.33 **Contractor's Equipment** "Contractor's Equipment" means all apparatus, machinery, vehicles, and other things required for the execution and completion of the works and the remedying of any defects However, Contractor's Equipment excludes Temporary Works, Employer's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.34 **Site** "Site" means the places where the Permanent Works are to be executed and to which Plant and materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.
- 1.1.35 **Permanent Works** "Permanent Works" means the permanent works to be executed by the Contractor under the Contract.
- 1.1.36 **Temporary Works** "Temporary Works" means all temporary works of every kind (other than contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.

1.1.37 **Applicable Law** “Applicable Law” means the laws and any other instruments having the force of law in India for the time being.

1.1.38 **Approval** “Approval” means consent by the employer in writing

1.1.39 **Drawings** “Drawing” means the drawings and plans specified in the specifications: The expression “Work” means all the works specified or set forth and required in and by the said specifications, drawing and schedule or to be implied there from or incidental thereto or to be hereafter specified or required in such explanatory instructions and drawings (being in conformity with the said original specifications, drawing and schedule) and also in such additional instructions and drawings not being in conformity as aforesaid as shall from time to time, during the progress of the work hereby contracted for, be supplied by the owner.

1.2 **Interpretations**

1.2.1 Where the contract so requires, words imparting the singular only shall also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.

1.2.2 Heading and marginal notes in these General Conditions shall not be deemed to form part thereof or be taken into consideration in the interpretation of construction thereof of the contract.

1.2.3 Wherever in the Contract provision is made for the giving or issuing of any notice, consent, approval, certificate or determination by any person, unless otherwise specified such notice, consent, approval, certificate or determination shall be in writing and the words “notify”, “certify” or “determine” shall be construed accordingly. Any such consent, approval, certificate or determination shall not unreasonably be withheld or delayed.

1.3 **Law and Language**

The Contract shall be governed by Indian Law.

The language for communications shall be English as stated in SCC.

1.4 **Priority of Documents**

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- a) The contract agreement (if completed)
- b) Integrity Agreement
- c) Letter of Acceptance/ Notice to proceed with the work
- d) Conditions of contract
- e) Schedule of the price bid.
- f) Technical Bid No. with Date
- g) Addenda/Corrigenda
- h) Minutes of Pre-bid Meeting.
- i) Post bid correspondences and any other document listed in the contract data as forming part of the contract.

If any ambiguity or discrepancy is found in the documents, the EMPLOYER / ENGINEER shall be the sole authority to issue any necessary clarification or instruction in this regard.

1.5 **Contract Agreement**

In terms of ITB 6.9, Section II of the Tender Document pertaining to JV / Consortium, the registration under Companies Act 2013 is mandatory after award of work and before signing of Agreement. Hence, the formality of incorporation of company under Registrar of Companies (as per the mission of Letter of Intent for JV / Consortium) including submission of Performance Bank Guarantee, PAN, GST registration & any other required additional document in favour of the registered company shall be submitted to the Employer within 30 days from the date of issuance of Letter of Award for Joint Venture Bidder, the Parties shall enter into a Contract Agreement within 45 days after the issue of the Letter of Award & for single entity Bidder, the Party shall enter into a Contract Agreement within 28 days after the issue of the Letter of Award. The Contract Agreement shall be in the format annexed to the bid. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Bidder.

1.6 **Assignment/sub-contracting**

The Contractor shall not assign the whole or any part of the work to any other Party/Firm/Individual without prior written consent of the Employer.

1.7 Employer's Use of Contractor's Documents

- a) The Specification and Drawings shall be in the custody and care of the Employer. Unless otherwise stated in the Contract, four copies of the Contract and of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor. Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Contractor shall supply to the EMPLOYER/ENGINEER six copies of each of the Contractor's Documents.
- b) The Contractor shall keep on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times. If a Party becomes aware of an error or defect of a technical nature in a document, which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.
- c) As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other project documents made by/or on behalf of the Contractor. The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free Licence to copy, use and Communicate the Contractor's Documents, including making and using modifications of them for the same work or other works under IWAI.

This Licence shall:

- 1) Apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- 2) Entitle any person in authorized possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works,
- 3) In the case of Contractor's Documents, which are in the form of computer programs and other software, permit their use on any computer on the Site and

other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

The Contractor's Documents and other documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.

1.8 Contractor's use of Employer's Documents

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

1.9 Disclosure of Confidential Details

The Contractor shall disclose all such confidential and other information as EMPLOYER may reasonably require in order to verifying the Contractor's compliance With the Contract.

1.10 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise:

- a) the Employer shall have obtained (or shall obtain) the planning, zoning or similar permission for the Permanent works, and any other permissions described in the Specification as having been (or being) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
- b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals for his equipment and manpower as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.

1.11 Joint and Several Liability

If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other

unincorporated grouping of two or more persons/ companies

- a) each such persons/ companies shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract.
- b) each such persons/ companies shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons/ companies shall provide a parent company guarantee as a part of bid submission.
- c) The Contractor shall not alter its composition or legal status without the prior consent of the Employer.

1.12 **Contract Details to be Confidential**

The Contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable laws. The Contractor shall not publish, permit to be published or disclose any particulars of the works in any trade or technical paper or elsewhere without written approval of the Employer.

2. **Employer**

2.1 **Employer's responsibility**

The Employer shall ensure that the work carried out by the Contractor on the Site with:

- (a) full regard to the safety of all persons entitled to be upon the Site, and
- (b) keep the Site in an orderly state appropriate to the avoidance of danger to such persons.

If under Clause 4.29 and 4.30 the Employer shall employ other contractors on the Site, he shall require them to have the same regard for safety and avoidance of danger.

2.2 **Employer's Risks**

The Employer's risks are, in so far as they directly affect the execution of the Works in the country where the permanent works are to be executed:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, revolution, insurrection, or military or usurped power, or civil war,

- (c) ionising radiations, or contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof,
- (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (e) riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the Works,
- (f) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent Works, except as may be provided for in the Contract,
- (g) loss or damage to the extent that it is due to the design of the Works, and
- (h) any operation of the forces of nature (insofar as it occurs on the Site) that an experienced contractor:
 - (i) could not have reasonably foreseen, or
 - (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:
 - (a) prevent loss or damage to physical property from occurring by taking appropriate measures, or
 - (b) insure against such loss or damage.

2.3 **Right of Access to the Site**

The Employer shall give the Contractor right of access to and possession of, all parts of the Site within the time (or times) stated in the SCC. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Specification. However, the Employer may withhold any such right or possession until the Performance Security has been received

If no such time is stated in the SCC, the Employer shall give the Contractor right of access to, and possession of, the Site within such times as may be required to enable the

Contractor to proceed in accordance with the programme submitted. The same shall be handed over to the employer

If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the EMPLOYER/ ENGINEER and shall be entitled to

- a. an extension of time for any such delay, if completion is or will be delayed
- b. Payment of any such Cost-plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the EMPLOYER/ENGINEER shall proceed to agree or determine these matters.

However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time Cost or profit.

2.4 **Permits, Licenses or Approvals**

The Employer shall (where he is in a position to do so) provide reasonable assistance to facilitate the Contractor at the request of the Contractor but without holding any liability to do so towards the contractor:

- a. by obtaining copies of the Laws of the Country which are relevant to the Contract but are not readily available, and
- b. for the Contractor's applications for any permits, Licences or approvals required by the Laws of the Country:
- c. for the delivery of Goods, including clearance through customs, and
- d. for the export of Contractors Equipment when it is removed from the Site.

All cost related to obtaining of such permits, licenses and approvals shall be borne by the contractor.

2.5 **Employer's Claims**

If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, the Employer or the Employer

shall give notice and particulars to the Contractor. However, notice is not required for payments due. The notice shall be given as soon as practicable after the Employer became aware of the event or circumstances giving rise to the claim.

The particulars shall specify the Clause or other basis of the claim and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. Employer shall then proceed in accordance with the amount (if any) which the Employer is entitled to be paid by the Contractor. This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor.

3 Engineer / Engineer-in-charge / EIC

3.1 Engineer's Duties and Authority

The Employer shall appoint the Engineer who shall carry out duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out his duties. The Engineer shall have no authority to amend the Contract. The Engineer shall have the following roles and responsibilities.

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

3.1.2 The Engineer may exercise the authority specified in or necessarily to be implied from the Contract. However, he should obtain the specific approval of the Employer before exercising any such authority; particulars of such requirements are as follows:

3.1.2.1 consenting to the sub-contracting of any part of the Works under Clause 5;

3.1.2.2 certifying additional cost determined under Clause 4.7.

3.1.2.3 determining an extension of time under sub clause 8.6, 8.7 and 8.8 of Clause 8;

3.1.2.4 issuing a variation under sub clause 12.1 and 12.2 of clause 12, except:

(i) in an emergency situation, as reasonably determined by the Engineer; or

(ii) if such variation would increase or decrease the quantity of allied items by less than the percentage permitted as per SCC or;

3.1.2.5 Fixing rates or prices under sub clause 12.3, 12.4 and 12.5 of clause 12.

Provided further that any requisite approval shall be deemed to have been given by the

Employer for any such authority exercised by the Engineer.

3.1.2.6 Except as expressly stated in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract.

3.2 Engineer's Representative

The Engineer's Representative shall be appointed by and be responsible to the Engineer and shall carry out such duties and exercise such authority as may be delegated to him by the Engineer under Sub-Clause 3.3.

3.3 Engineer's Authority to Delegate

Any communication given by the Engineer's Representative to the Contractor in accordance with such delegation shall have the same effect as though it had been given by the Engineer. Provided that:

- (a) Any failure of the Engineer's Representative to disapprove any work, materials or Plant shall not prejudice the authority of the Engineer to disapprove such work, materials or Plant and to give instructions for the rectification thereof, and
- (b) If the Contractor questions any communication of the Engineer's Representative he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communication.

3.4 Appointment of Assistants

The Engineer or the Engineer's Representative may appoint any number of persons to assist the Engineer's Representative in the carrying out of his duties under Sub-Clause 3.2. He shall notify to the Contractor the names, duties and scope of authority of such persons. Such assistants shall have no authority to issue any instructions to the Contractor save in so far as such instructions may be necessary to enable them to carry out their duties and to secure their acceptance of materials, Plant or workmanship as being in accordance with the Contract, and any instructions given by any of them for those purposes shall be deemed to have been given by the Engineer's Representative.

3.5 Instructions in Writing

Instructions given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction given by the

Engineer, whether before or after the carrying out of the instruction, shall be deemed to be an instruction within the meaning of this Sub-Clause. Provided further that if the Contractor, within 7 days, confirms in writing to the Engineer any oral instruction of the Engineer and such confirmation is not contradicted in writing within 7 days by the Engineer, it shall be deemed to be an instruction of the Engineer.

3.6 Engineer to Act Impartially

Wherever, under the Contract, the Engineer is required to exercise his discretion by:

- (a) Giving his decision, opinion or consent,
- (b) Expressing his satisfaction or approval,
- (c) Determining value, or
- (d) Otherwise taking action which may affect the rights and obligations of the Employer or the Contractor

He shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances. Any such decision, opinion, consent, expression of satisfaction, or approval, determination of value or action may be opened up, reviewed or revised as provided in Clause 16.3.1.

3.7 Engineer at liberty to object

The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person provided by the Contractor who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without the consent of the Engineer. Any person so removed from the Works shall be replaced as soon as possible.

4 Contractor

4.1 Contractor's General Responsibilities

The Contractor shall, with due care and diligence, execute and complete the Works and remedy any defects therein in accordance with the provisions of the Contract. The Contractor shall provide all superintendence, labour, materials, Plant, Contractor's Equipment and all other things, whether of a temporary or permanent nature, required in

and for such execution, completion and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

The Contractor shall give prompt notice to the Engineer, with a copy to the Employer, of any error, omission, fault or other defect in the design of or Specification for the Works which he discovers when reviewing the Contract or executing the Works.

4.2 Site Operations and Methods of Construction

The Contractor shall take full responsibility for the adequacy, stability and safety of all Site operations and methods of construction. Provided that the Contractor shall not be responsible (except as stated hereunder or as may be otherwise agreed) for the design or specification of Permanent Works, or for the design or specification of any Temporary Works not prepared by the Contractor. Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall be fully responsible for that part of such Works, notwithstanding any approval by the Engineer.

4.3 Contract Agreement

The Contractor shall, if called upon so to do, enter into and execute the Contract Agreement, to be prepared and completed at the cost of the Employer, in the form annexed to these Conditions with such modification as may be necessary. For Joint Venture Bidder, the Parties shall enter into a Contract Agreement within 45 days after the date of issue of the Letter of Award & for single entity Bidder, the Party shall enter into a Contract Agreement within 28 days after the date of issue of the Letter of Award.

4.3.1 The Contractor shall be furnished free of charge certified true copy of the contract document.

4.3.2 A copy of the Contract Document furnished to the Contractor as aforesaid shall be kept by the Contractor on the Site in good condition and the same shall at all reasonable time be available for inspection and use by the Engineer-in-Charge, his representatives or by other Inspecting officers of the Authority.

4.3.3 None of these Documents shall be used by the Contractor for any purpose other than that of this contract.

4.4 Performance Guarantee and security deposit

4.4.1 Performance Guarantee

4.4.1.1 For all Bidders including MSME Registered Firms

The contractor shall be required to deposit an amount equal to 5% of the contract value of the work as performance guarantee in the form of irrevocable bank guarantee bond of any scheduled bank or State Bank of India in accordance with the form prescribed within 21 days of the issue of the work order/LOA for single entity and within 30 days of the issue of the work order/LOA for JV. The performance guarantee shall be issued by a scheduled or nationalized bank in India.

4.4.1.2 Without limitation to the provisions of the preceding paragraph, whenever the Engineer determines an addition to the Contract Price as a result of a change in cost and/or legislation or as a result of a variation amounting to more than 20 percent of the portion of the Contract Price, the Contractor, at the Engineer's written request, shall promptly increase the value of the performance security proportionately and furnish additional performance security, if any, arising out of provisions mentioned herein. The cost of complying with the requirements of this clause shall be borne by the contractor.

4.4.1.3 Additional Performance Bank Guarantee against unbalanced rate quotations

For Tenders having financial quote up to $\pm 10\%$ of the estimated contract value, no additional security deposit is required. But for tenders having financial quote within $\pm 10\%$ and $\pm 20\%$ of the estimated contract value, the contractor is liable to provide additional BG against unbalanced rate which would be communicated in LOA.

The additional BG defined herein shall be over and above the performance security and shall be return after issuance of completion certificate by EIC. The additional performance bank guarantee shall be valid one month beyond the completion of work. However, non-furnishing of additional BG within the stipulated time of LOA shall be treated as default and consequently, the tender shall be cancelled with forfeiture of EMD.

For tenders having financial quote beyond $\pm 20\%$ of the estimated contract value, the bidder shall furnish justification for the quote to satisfy that rates quoted are workable, however decision of the Authority in this regard shall be final and binding upon the bidder with conditions imposed if any (Other than additional BG) and offer for consent would be given to the bidder.

4.4.1.4 The Performance Guarantee shall be valid one month beyond the work period until the Contractor has executed & completed the Works, remedied any defects therein in accordance with the Contract. No claim shall be made against such security, and such security shall be returned to the Contractor within 21 days after completion of Defect

Liability Period. In case the extension of time for completion with or without LD, the contractor shall get the validity of the performance guarantee extended to cover such extension of time of the work.

4.4.2 Security Deposit

4.4.2.1 A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited in cash/RTGS as the earnest money, will amount to security deposit of 5% of the contract value of work. The earnest money deposited in the form of Bank guarantee shall be returned to the contractor after receiving the Performance Bank Guarantee.

In case of MSE registered firms, deduction of a sum of 10% of the gross amount of the bill from each running bill till that amount reaches 5% of the contract value of the work as Security Deposit will also be made.

4.4.2.2 The total security deposit shall remain with IWAI till the completion of the contract or the payment of the final bill payable in accordance with agreement condition whichever is later, provided the Engineer-in-Charge is satisfied that there is no demand outstanding against the contractor.

4.4.2.3 No interest will be paid on security deposit.

4.4.2.4 If the contractor neglects to observe or fails to perform any of his obligations under the contract, it shall be lawful for the Employer/ EIC to forfeit either in whole or in part, the security deposit furnished by the contractor. However, if the contractor duly performs and completes the contract in all respects and presents in absolute "NO DEMAND CERTIFICATE" in the prescribed form, IWAI shall refund the security deposit to the contractor after deduction of cost and expenses that the Authority may have incurred and other money including all losses and damages which the Authority is entitled to recover from the Contractor.

4.4.2.5 In case of delay in the progress of work, the Engineer- in-Charge shall issue to the contractor a memo in writing pointing out the delay in progress and calling upon the contractor to explain the causes for the delay within 3 days of receipt of the memo and 10 days from issuance of memo whichever is earlier. If the Engineer-in-Charge is not satisfied with the explanations offered, he may forfeit the security deposit and / or

withhold payment of pending bills in whole or in part and/ or get the measures of rectification of progress of work accelerated to the pre-defined level at the risk and cost of the contractor.

4.4.2.6 All compensation or other sums of money payable by the contractor under the terms of the contract or any other contract or on any other account whatsoever, may be deducted from or paid by the sale of a sufficient part of his security or from any sums which may be due or may become due to the contractor by the Authority on any account whatsoever. Also, in the event of the contractor's security deposit being reduced by reasons of such deductions or sale, as aforesaid the contractor shall, within 14 days of receipt of notice of demand from the Engineer-in-Charge make good the deficit in his security deposit.

4.4.2.7 In case the contractor fails to commence the work or when the contractor has defaulted for more than thirty days or when any amount is to be recovered from the contractor as penalty or deduction and the contractor fails to remit such amount even after due notice is given to him in this regard, IWAI at its own discretion may encash the Bank Guarantee furnished as performance guarantee and /or recover the sum from his security deposit.

4.5 Inspection of Site

The Employer shall have made available to the Contractor, before the submission by the Contractor of the Tender, such available data on hydrological and hydrographical, results of rock testing, surface soil testing, bore hole data at the proposed terminal locations, as have been obtained by or on behalf of the Employer from investigations undertaken relevant to the Works but the Contractor shall be responsible for his own interpretation thereof.

The Contractor acknowledges that it has inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself (so far as is practicable, having regard to considerations of cost and time) before submitting his Tender, as to:

- a) The form and nature thereof, including the sub-surface conditions,
- b) The hydrological, hydrographical and climatic conditions,
- c) The extent and nature of work and materials necessary for the execution and completion of the works and the remedying of any defects therein, and
- d) The means of access to the site and the accommodation he may require,
- e) Power, water, fuel and other supplies he may require

- f) The infrastructure for transportation of men and material along the project corridor
- g) Market rates of the items in the working country
- h) Medical facilities and
- i) General safety & security of project area and
- j) The Laws, procedures and labour practices of the Country

and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Tender. The Contractor shall be deemed to have based his Tender on the data made available by the Employer and on his own inspection and examination, all as aforementioned.

4.6 Sufficiency of Tender

The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Tender and of the rates and prices stated in the Bill of Quantities, all of which shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, Plant or services or of contingencies) and all matters and things necessary for the proper execution and completion of the Works and the remedying of any defects therein.

4.7 Unforeseeable Physical Obstructions or Conditions

If, however, during the execution of the Works the Contractor encounters physical obstructions or physical conditions, other than climatic, sea, river conditions on the Site, such obstructions or conditions were, in his opinion, not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer, with a copy to the Employer. On receipt of such notice, the Engineer shall, if in his opinion such obstructions or conditions could not have been reasonably foreseen by an experienced contractor, after due consultation with the Employer and the Contractor, determine

- a. Any extension of time to which the Contractor is entitled under sub clause 8.6, 8.7 and 8.8 of clause 8, and
- b. The amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price, and shall notify the Contractor

accordingly, with a copy to the Employer. Such determination shall take account of any instruction which the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer.

4.8 Work to be in Accordance with Contract

Unless it is legally or physically impossible, the Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract to the satisfaction of the Engineer. The Contractor shall comply with and adhere strictly to the Engineer's instructions on any matter, whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions only from the Engineer (or his Representatives or Assistants)

4.9 Contractor's Programme

4.9.1 The Contractor shall, within the time stated in the SCC, after the date of issue of the Letter of Award, submit to the Engineer for his consent a programme, in such form and detail as the Engineer shall reasonably prescribe, for the execution of the Works. The Contractor shall, whenever required by the Engineer, also provide in writing for his information a general description of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.

4.9.2 Revised Programme

If at any time it should appear to the Engineer that the actual progress of the Works does not conform to the programme to which consent has been given under Sub- Clause 4.9.1, the Contractor shall produce, at the request of the Engineer, a revised programme showing the modifications to such programme necessary to ensure completion of the Works within the Time for Completion.

4.9.3 Cash Flow Estimate to be submitted

The Contractor shall, within the time stated in the SCC, after the signing of Agreement, provide to the Engineer for his information a detailed 3 months rolling cash flow, of all payments to which the Contractor will be entitled under the Contract and the Contractor shall subsequently supply revised cash flow estimates at quarterly intervals, if required to do so by the Engineer.

4.9.4 Contractor not relieved of Duties or Responsibilities

The submission to and consent by the Engineer of such programmes or the provision of such general descriptions or cash flow estimates shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

4.10 Contractor's Superintendence

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorised representative approved of by the Engineer, which approval may at any time be withdrawn, shall give his whole time to the superintendence of the Works. Such authorised representative shall receive, on behalf of the Contractor, instructions from the Engineer.

If approval of the representative is withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving notice of such withdrawal, remove the representative from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another representative approved by the Engineer.

4.11 Contractor's Employees

The Contractor shall provide on the Site in connection with the execution and completion of the Works and the remedying of any defects therein

- (a) only such technical personnel as are skilled and experienced in their respective callings and such foremen and leading hands as are competent to give proper superintendence of the Works, and
- (b) such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely fulfilling of the Contractor's obligations under the Contract.

4.12 Setting out

The Contractor shall be responsible for:

- (a) the accurate setting-out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing,

- (b) the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of the Works, and
- (c) the provision of all necessary instruments, appliances and labour in connection with the foregoing responsibilities.

If, at any time during the execution of the Works, any error appears in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer.

The checking of any setting-out or of any line or level by the Engineer shall not in any way relieve the Contractor of his responsibility for the accuracy thereof and the Contractor shall carefully protect and preserve all benchmarks, sight-rails, pegs and other things used in setting-out the Works.

4.13 Safety and Security

The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:

- (a) have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons,
- (b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority, for the protection of the Works or for the safety and convenience of the public or others, and

4.14 Electricity, Water and Gas

The Contractor shall be responsible for the provision of all power, water and other services he may require for his execution of the Works.

4.15 Protection of the Environment

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the permissible / acceptable values and shall not exceed the values prescribed by applicable Laws. The Contractor is required to establish and operate with suitably qualified personnel a system for monitoring the environmental factors that may be directly impacted by the Works and make available such records for inspection of Engineer or duly authorized representatives of Government of the country in which Works are executed as and when so required.

4.16 Care of Works

The Contractor shall take full responsibility for the care of the Works and materials and Plant for incorporation therein from the Commencement Date until the date of issue of the Completion certificate for the whole of the Works, when the responsibility for the said care shall pass to the Employer. Provided that:

- (a) if the Engineer issues a Completion certificate for any Section or part of the Permanent Works, the Contractor shall cease to be liable for the care of that Section or part from the date of issue of the Completion certificate, when the responsibility for the care of that Section or part shall pass to the Employer, and
- (b) The Contractor shall take full responsibility for the care of any outstanding Works and materials and Plant for incorporation therein which he undertakes to finish during the maintenance period until such outstanding Works have been completed pursuant to Clause 10.

4.17 Responsibility to Rectify Loss or Damage

If any loss or damage happens to the Works, or any part thereof, or materials or Plant for incorporation therein, during the period for which the Contractor is responsible for the care thereof, from any cause whatsoever, other than the risks defined in Sub- Clause 2.2, the Contractor shall, at his own cost, rectify such loss or damage so that the Permanent Works conform in every respect with the provisions of the Contract to the satisfaction of the Engineer. The Contractor shall also be liable for any loss or damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 11.

4.18 Loss or Damage Due to Employer's Risks

In the event of any such loss or damage happening from any of the risks defined in Sub-

Clause 2.2, or in combination with other risks, the Contractor shall, if and to the extent required by the Engineer, rectify the loss or damage and the Engineer shall determine an addition to the Contract Price in accordance with Clause 12.3, 12.4 and 12.5 and shall notify the Contractor accordingly, with a copy to the Employer. In the case of a combination of risks causing loss or damage any such determination shall take into account the proportional responsibility of the Contractor and the Employer.

4.19 Compliance with Statutes, Regulations

The Contractor shall conform in all respects, including by the giving of all notices and the paying of all fees, with the provisions of:

- (a) any National or State Statute, Ordinance, or other Law, or any regulation, or byelaw of any local or other duly constituted authority in relation to the execution and completion of the Works and the remedying of any defects therein, and
- (b) the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works, and the Contractor shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such provisions. Provided always that the Employer shall be responsible for obtaining any planning, zoning or other similar permission required for the Works to proceed and shall indemnify the Contractor in accordance with Sub-Clause 20.7.

4.20 Fossils

The Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging all fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site. The Contractor immediately upon discovery thereof and before removal, acquaint the Engineer of such discovery and carry out the Engineer's instructions for dealing with the same. If, by reason of such instructions, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under sub clause 8.6, 8.7 and 8.8 of clause 8, and
- (b) the amount of such costs, which shall be added to the Contract Price, and shall

notify the Contractor accordingly, with a copy to the Employer.

4.21 Patent Rights

The Contractor shall save harmless and indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Contractor's Equipment, materials or Plant used for or in connection with or for incorporation in the Works and from and against all damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.

4.22 Copy Right

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 suppliers of materials, the copyright in such materials shall remain vested in such third-party indemnity of the employer.

4.23 Royalties

Except where otherwise stated, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works as per governing laws.

4.24 Interference with Traffic and Adjoining Properties

All operations necessary for the execution and completion of the Works and the remedying of any defects therein shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) the access to, use and occupation of public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person.

The Contractor shall save harmless and indemnify the Employer in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to, any such matters insofar as the Contractor is responsible therefor.

4.25 Avoidance of Damage to Roads and navigation aids, temporary

structure/permanent structure.

The Contractor shall use every reasonable means to prevent any of the roads or bridge jetties, wharfs or river channels, temporary berths for inland vessels, communicating with or on the routes to the Site from being damaged or injured by any traffic of the Contractor or any of his Subcontractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of materials, Plant, Contractor's Equipment or Temporary Works from and to the Site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such roads and bridges or other structures. However, if any claim arise regarding damage, maintenance/repairs/reconstruction/replacement would be contractor's liability.

4.26 Transport of Contractor's Equipment or Temporary Works

Save insofar as the Contract otherwise provides, the Contractor shall be responsible for and shall pay the cost of strengthening any bridges, jetties, wharfs or altering or improving any road or river channels, temporary berths for inland vessels, communicating with or on the routes to the Site to facilitate the movement of Contractor's Equipment or Temporary Works and the Contractor shall indemnify and keep indemnified the Employer against all claims for damage to any such road or bridge or other structures caused by such movement, including such claims as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage, the costs of which are deemed to be included in the contract price. The Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works

4.27 Transport of Materials or Plant

If, notwithstanding Sub-Clause 4.25, any damage occurs to any bridge or road or structure jetties, wharfs or river channels, temporary berths for communicating with or on the routes to the Site arising from the transport of materials or Plant, the Contractor shall notify the Engineer with a copy to the Employer, as soon as he becomes aware of such damage or as soon as he receives any claim from the authority entitled to make such claim. In such cases the Contractor shall negotiate the settlement of and pay all sums due in respect of such claim and shall indemnify the Employer in respect thereof and in respect of all claims, proceedings, damages, costs, charges and expenses in relation

thereto. Provided that if and so far as any such claim or part thereof is, in the opinion of the Engineer, due to any failure on the part of the Contractor to observe and perform his obligations under Sub-Clause 4.25, and the Contractor fails to take adequate steps to settle any claims arising, the Engineer will be at liberty to negotiate with such claimant and pay for damages which shall be recoverable from the Contractor by the Employer and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. The Contractor shall give the Employer not less than 21 days' notice of the date on which any Equipment, Plant or a major item of other Goods will be delivered to the Site

4.28 Waterborne Traffic

Where the nature of the Works is such as to require the use by the Contractor of waterborne transport, the foregoing provisions of this Clause shall be construed as though "road" included a lock, dock, sea wall or other structure related to a waterway and "vehicle" included craft and shall have effect accordingly.

4.29 Opportunities for Other Contractors

The Contractor shall, in accordance with the requirements of the Engineer, afford all reasonable opportunities for carrying out their work to:

- (a) any other contractors employed by the Employer and their workmen
- (b) the workmen of the Employer, and
- (c) the workmen of any duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works.

4.30 Facilities for Other Contractors

If, however, pursuant to Sub-Clause 4.29 the Contractor shall, on the written request of the Engineer:

- (a) make available to any such other contractor, or to the Employer or any such authority, any roads or ways for the maintenance of which the Contractor is responsible,
- (b) permit the use, by any such, of Temporary Works or Contractor's Equipment on the Site, or
- (c) provide any other service of whatsoever nature for any such, the Engineer

- shall determine an addition to the Contract Price in accordance with Clauses
- (d) 12.3,12.4 and 12.5 and shall notify the Contractor accordingly, with a copy to the Employer.

4.31 Contractor to Keep Site Clear

During the execution of the Works the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose off any Contractor's Equipment and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required.

4.32 Clearance of Site on Completion

Prior to the issue of any Completion certificate the Contractor shall clear away and remove from that part of the Site to which such Completion certificate relates all Contractor's Equipment, surplus material, rubbish and Temporary Works of every kind, and leave such part of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer. Provided that the Contractor shall be entitled to retain on Site, until the end of the maintenance period, such materials, Contractor's Equipment and Temporary Works as are required by him for the purpose of fulfilling his obligations during the maintenance period.

4.33 Language Ability of Superintending Staff

A reasonable proportion of the Contractor's superintending staff shall have a working knowledge of the local language of the Site and English language, or the Contractor shall have available on site at all times a sufficient number of competent interpreters to ensure the proper transmission of instructions and information.

4.34 Employment of Local Personnel

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour with appropriate qualifications and experience from sources within the country of the Employer and the country/place where the Work is executed.

4.35 Boreholes and Exploratory Excavation

In respect of Works which the Contractor is required to execute, install and construct to the requirements of Employer, any boreholes or exploratory excavation that may be required to be undertaken before commencement or during execution of Works will have to be carried out by the Contractor at no extra cost.

4.36 Contractor's Equipment, Temporary Works and Materials

4.36.1 Contractor's Equipment, Temporary Works and Materials; Exclusive Use for the Works

All Contractor's Equipment, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Site to another, without the consent of the Engineer. Provided that consent shall not be required for vehicles, floating crafts engaged in transportation of staff, labour, Contractor's Equipment, Temporary Works, Plant or materials to or from the Site.

4.36.2 Employer not Liable for Damage

The Employer shall not at any time be liable, as mentioned in Clauses 2.2, 4.16, 4.17, 4.18 and 13, for the loss of or damage to any of the said Contractor's Equipment, Temporary Works or materials.

4.36.3 Customs Clearance

The Employer will use his best endeavours in assisting the Contractor, where required, in obtaining clearance through the Customs of Contractor's Equipment, materials and other things required for the Works. The provisions contained in the Framework Agreement shall apply.

4.36.4 Re-export of Contractor's Equipment

In respect of any Contractor's Equipment which the Contractor has imported for the purposes of the Works, the Employer will use his best endeavours to assist the Contractor, where required, in procuring any necessary Government consent to the re-export of such Contractor's Equipment by the Contractor upon the removal thereof pursuant to the terms of the Contract and in accordance with the provisions contained in the Framework agreement.

4.36.5 Conditions of Hire of Contractor's Equipment

With a view to securing, in the event of termination under Clause: 17, the continued availability, for the purpose of executing the Works, of any hired Contractor's Equipment, the Contractor shall not remove or withdraw any of such equipment, materials, temporary works or plant from the site without obtaining written permission to do so issued by the Engineer. Employer shall be entitled to permit the use thereof by any

other contractor employed by him for the purpose of executing and completing the Works and remedying any defects therein, under the terms of the said Clause 17.

4.36.6 Costs for the Purpose of Clause 16

In the event of the Employer invoking provisions of sub clause 4.36.5, for the purpose of executing and completing the Works and the remedying of any defects therein for the purpose of clause 16, the costs thereof will be determined by the Engineer in consultation with the employer and same shall form the cost of executing and completing same as incomplete obligation and liability of the Contractor and notice to that effect will be issued to the Contractor by the Engineer.

4.36.7 Incorporation of Clause in Subcontracts

The Contractor shall, where entering into any subcontract for the execution of any part of the Works, incorporate in such subcontract (by reference or otherwise) the provisions of sub clauses 4.36.5 and 4.36.6 in relation to Contractor's Equipment, Temporary Works or materials brought on to the Site by the Subcontractor and employer shall be kept indemnified against any claim arising out of such sub- contractor.

4.36.8 Co-operation

The Contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:

- a) the Employer's Personnel,
- b) any other contractors employed by the Employer, and
- c) the personnel of any legally constituted public authorities,

who may be employed in the execution on or near the Site of any work not included in the Contract. Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements, which are the responsibility of the Contractor.

If, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the EMPLOYER/ENGINEER in the time and manner stated in the Specification.

5 Assignment and Subcontracting

5.1 Assignment of Contract

The Contractor shall not, without the prior consent of the Employer (which consent shall be at the sole discretion of the Employer), assign the Contract or any part thereof, or any benefit or interest therein or thereunder.

5.2 Subcontracting

The Contractor shall not subcontract the whole of the Works. Except where otherwise provided by the Contract, the Contractor shall not subcontract any part of the Works without the prior consent of the Employer conveyed through the Engineer. A subcontractor under the Contract must be a firm or person or entity that satisfies the relevant provisions of the Framework Agreement. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. The work sub-contracted shall not be more than 15% of the contract value. If the Engineer gives his consent to the contractor to subcontract part of the work and the value of such work is more than 10% of the contract amount, the sub-contractor shall have to submit all relevant documents, as stipulated in ITB of this tender document which in turn shall be evaluated to check the capacity/capability of the proposed sub-contractor to execute the work assigned to him. Failing to do so, the Engineer may, at his discretion, reject contractor's claim to subcontract the work to such sub-contractor.

Provided that the Contractor shall not be required to obtain such consent for:

- (a) The provision of labour,
- (b) The purchase of materials which are in accordance with the standards specified in the Contract, or
- (c) The subcontracting of any part of the Works for which the Subcontractor is named in the original Contract.

In all other cases, the Contractor shall give the Employer not less than 14 days' notice of ;

- (a) The intended appointment of the Subcontractor, with detailed particulars which shall include his relevant experience,

- (b) The intended commencement of the Subcontractor's work, and
- (c) The intended commencement of the Subcontractor's work on the site.

5.3 Assignment of Subcontractors' Obligations

In the event of a Subcontractor having undertaken towards the Contractor in respect of the work executed, or the goods, materials, Plant or services supplied by such Subcontractor, any continuing obligation extending for a period exceeding that of the maintenance period under the Contract, the Contractor shall at any time, after the expiration of such Period, assign to the Employer, at the Employer's request and cost, the benefit of such obligation for the unexpired duration thereof.

5.4 Nominated Subcontractors

5.4.1 Definition of "Nominated Subcontractors"

All specialists, merchants, tradesmen and others executing any work or supplying any goods, materials, Plant or services included in the Contract, who may have been or be nominated or selected or approved by the Employer or the Engineer, for the execution of such work or the supply of such goods, materials, Plant or services, be deemed to be subcontractors to the Contractor and are referred to in this Contract as "nominated Subcontractors".

5.4.2 Nominated Subcontractors, Objection to Nomination

The Contractor shall not be required by the Employer or the Engineer, or be deemed to be under any obligation, to employ any nominated Subcontractor against whom the Contractor may raise reasonable objection or who declines to enter into a subcontract with the Contractor containing provisions:

- (a) that in respect of the work, goods, materials, Plant or services the subject of the subcontract, the nominated Subcontractor will undertake towards the Contractor such obligations and liabilities as will enable the Contractor to discharge his own obligations and liabilities towards the Employer under the
- (b) terms of the Contract and will save harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection therewith, or arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities, and

- (c) that the nominated Subcontractor will keep harmless and indemnify the Contractor from and against any negligence by the nominated Subcontractor, his agents, workmen and servants and from and against any misuse by him or them of any Temporary Works provided by the Contractor for the purposes of the Contract and from all claims as aforesaid.

5.4.3 Design Requirements to be Expressly Stated

If in connection with any services to be provided in relation to execution of Works include any matter of design or specification of any part of the Permanent Works or of any Plant to be incorporated therein, such requirement shall be expressly stated in the Contract and shall be included in any nominated Subcontract. The nominated Subcontract shall specify that the nominated Subcontractor providing such services will keep harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities.

5.4.4 Payments to Nominated Subcontractors

For all work executed or goods, materials, Plant or services supplied by any nominated Subcontractor, the Contractor shall be entitled to:

- (d) the actual price paid or due to be paid by the Contractor, on the instructions of the Engineer, and in accordance with the subcontract;
- (e) in respect of labour supplied by the Contractor, the sum, if any, entered in the Bill of Quantities or, if instructed by the Engineer pursuant to paragraph (a) of Sub-Clause 16.2.2, as may be determined in accordance with Clause 12.3, 12.4 and 12.5; and
- (f) in respect of all other charges and profit, a sum being a percentage rate of the actual price paid or due to be paid calculated, where provision has been made in the Bill of Quantities for a rate to be set against the relevant Provisional Sum, at the rate inserted by the Contractor against that item or, where no such provision has been made, at the rate inserted by the Contractor in the SCC and repeated where provision for such is made in a special item provided in the Bill of Quantities for such purpose.

5.4.5 Certification of Payments to Nominated Subcontractors

Before issuing, under Clause 15, any certificate, which includes any payment in respect

of work done or goods, materials, Plant or services supplied by any nominated Subcontractor, the Engineer shall be entitled to demand from the Contractor reasonable proof that all payments, included in previous certificates in respect of the work or goods, materials, Plant or services of such nominated Subcontractor have been paid or discharged by the Contractor. If the Contractor fails to supply such proof, then, unless the Contractor:

- (g) satisfies the Engineer in writing that he has reasonable cause for withholding or refusing to make such payments, and
- (h) produces to the Engineer reasonable proof that he has so informed such nominated Subcontractor in writing,

the Employer shall be entitled to pay to such nominated Subcontractor direct, upon the certificate of the Engineer, all payments, provided for in the nominated Subcontract, which the Contractor has failed to make to such nominated Subcontractor and to deduct by way of set-off the amount so paid by the Employer from any sums due or to become due from the Employer to the Contractor.

Provided that, where the Engineer has certified and the Employer has paid direct as aforesaid, the Engineer shall, in issuing any further certificate in favour of the Contractor, deduct from the amount thereof the amount so paid, direct as aforesaid, but shall not withhold or delay the issue of the certificate itself when due to be issued under the terms of the Contract.

6 Staff & Labour

6.1 Engagement of Staff and Labour

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport. In engagement of labour, the provisions in that respect contained in the Framework Agreement shall be fully complied with by the Contractor.

6.2 Foreign staff, labour and Repatriation.

The Contractor may import to the country where Works are executed any personnel who are necessary for the execution of Works. The Contractor must ensure that these

personnel are provided with the required residence visas and work permits. The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of all such persons as he recruited and employed for the purposes of or in connection with the contract and he shall maintain such persons as are to be so returned in a suitable manner until they shall have left the site.

6.3 Housing for Labour

Save insofar as the contract otherwise provides, the Contractor shall provide and maintain such accommodation and amenities as he may consider necessary for all his staff and labour, employed for the purposes of or in connection with the Contract, including all fencing, water supply (both for drinking and other purposes), electricity supply, sanitation, cookhouses, fire prevention and fire-fighting equipment, air conditioning, cookers, refrigerators, furniture and other requirements in connection with such accommodation or amenities. On completion of the Contract, unless otherwise agreed with the Employer, the temporary camps / housing provided by the Contractor shall be removed and the site reinstated to its original condition, all to the approval of the Engineer.

6.4 Health and Safety

Due precautions shall be taken by the contractor, and at his own cost, to ensure the safety of his staff and labour and, in collaboration with and to the requirements of the local health authorities, to ensure that medical staff, first aid equipment and store, sick bay and suitable ambulance service to the maximum extent the site conditions permit, are available at the camps, housing and on the Site at all times throughout the period of the contract and that suitable arrangements are made for the prevention of epidemics and for all necessary welfare and hygiene requirements.

6.5 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect all staff and labour employed on the site from insect nuisance, rats and other pests and reduce the dangers to health and the general nuisance occasioned by the same. The Contractor shall provide his staff and labour with suitable prophylactics for the prevention of malaria and take steps to prevent the formation of stagnant pools of water. He shall comply with all the regulations of the local health authorities in these respects and shall in particular arrange to spray thoroughly with approved insecticide all buildings erected on the Site.

Such treatment shall be carried out at least once a year or as frequently as necessary or as instructed by the Engineer. The contractor shall warn his staff and labour of the dangers of hazardous flora and fauna within the project area.

6.6 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 dealing with and overcoming the same.

6.7 Arms and ammunition

The Contractor shall not give, barter or otherwise dispose of to any person, any arms or ammunitions of any kind, or allow Contractor's personnel to do so.

6.8 Fair Wages

The Contractor shall pay to labourer employed by him either directly or through sub-contractor's wages not less than wages as defined in Minimum Wages Act 1948 and Contract Labour (Regulation and Abolition) Act 1970 amended from time to time and rules framed there-under and other labour laws affecting contract labour that may be brought in force from time to time.

In respect of labour directly or indirectly employed in the works, the contractor shall comply with the rules and regulations on the maintenance of suitable records prescribed for this purpose from time to time by the Government.

He shall maintain his accounts and vouchers on the payment of wages to the labourers to the satisfaction of the Engineer. The Engineer shall have the right to call for such record as required to satisfy himself on the payment of fair wages to the labourers and shall have the right to deduct from the contract amount a suitable amount for making good the loss suffered by the worker or workers by reason of the "fair wages" clause to the workers.

The contractor shall be primarily liable for all payments to be made and for the observance of the regulations framed by the Govt. from time to time without prejudice to his right to claim indemnity from his sub-contractors. Equal wages are to be paid for both men and women if the nature of work is same and similar.

6.9 Return of Labour and Contractor's Equipment

The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Contractor's Equipment as the Engineer may require.

6.10 Child labour

The contractor shall not engage children below the age of 14, directly or indirectly, for the execution of this contract. Contractor shall observe compliance to all the acts pertaining to child labour, health & safety and any other such laws existing in the Employers country. If at any time children below the age of 14 are found to be engaged, directly or indirectly, by the contractor or his representatives, the contractor shall pay penalties imposed by concerned regulatory bodies for practicing child labour.

6.11 Removal of Contractor's men

The contractor shall employ for the execution of the works only such persons who are skilled and experienced in their respective trades and Engineer-in-charge shall be at liberty to object and to ask the contractor to remove from the works any persons employed by the contractor for the execution of the works who, in the opinion of the EIC, misconduct themselves or are incompetent or negligent in the proper performance of their duties. The contractor shall forthwith comply with such requisition and such persons shall not be again employed upon the works without the written permission of the EIC.

Any person so removed from the work shall be immediately replaced at the expense of the contractor by a qualified and competent substitute. Should the contractor be requested to repatriate any person removed from the work, he shall do so and shall bear all costs in connection herewith.

6.12 Replacement of Key Personnel

The replacement of the key personnel shall only be on health grounds of the individual or if the personnel ceases to work for the contractor and is no longer an employee of the contractor. The contractor shall not replace any of the key personnel without the written consent of the Engineer-in-charge. In case Contractor engages in such activity i.e.

replacement of key personnel with or without EICs consent, such action shall attract a deduction of 10% of the total amount from the running account bill. However, there shall be no deduction if the replacement is made on health grounds of the personnel. The contractor shall submit medical certificate of such personnel intended to be replaced on health grounds.

6.13 Labour laws

The Contractor shall also comply with the provisions of all Acts, Laws, any Regulation or Bye Laws of any Local or other Statutory Authority applicable in relation to the execution of works such as:

- i) Payment of Wages Act, 1936 (Amended)
- ii) Minimum Wages Act, 1948 (Amended).
- iii) The Contract Labour (Regulation & Abolition) Act, 1970 with Rules framed there under as amended.
- iv) Workmen Compensation Act, 1923 as amended by Amendment Act no.65 of 1976.
- v) Employer's Liability Act 1938 (Amended)
- vi) Maternity Benefit Act. 1961 (Amended)
- vii) The Industrial Employment (Standing orders) Act 1946 (Amended).
- viii) The Industrial Disputes Act. 1947 (Amended)
- ix) Payment of Bonus Act.1965 and Amended Act No. 43 of 1977 and No. 48 of 1978 and any amended thereof:
- x) The Personal Injuries (Compensation Insurance) Act 1963 and any modifications thereof and rules made thereunder from time to time. The Contractor shall take into account all the above and financial liabilities in his quoted rates and nothing extra, whatsoever, shall be payable to him on this account.

The list is indicative only, otherwise the contractor should be aware of all the Acts/Labour Laws and should follow diligently on the work. The contractor shall be fully and personally responsible for the violation of any Act/Labour Law. Notwithstanding any other provision contained herein, the Contractor shall keep the

Employer informed at all times, against all claims/actions that may arise under any applicable labour laws in relation to any labour/staff employed/hired by the contractor and /or its Sub contractor, for the execution of works awarded to the Contractor pursuant to this Contract.

7 Materials, Plant and Workmanship

7.1 Quality of Materials, Plant and Workmanship

All materials, Plant and workmanship shall be:

- (a) of the respective kinds described in the Contract and in accordance with the Engineer's instructions, and
- (b) subjected from time to time to such tests as the Engineer may require at the place of manufacture, fabrication or preparation, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places.

The Contractor shall provide such assistance, labour, electricity, fuels, stores, apparatus and instruments as are normally required for examining, measuring and testing any materials or Plant and shall supply samples of materials, before incorporation in the Works, for testing as may be selected and required by the Engineer.

The Contractor is encouraged, to the extent practicable and reasonable, to use materials, Contractor's Equipment, Plant, and supplies from sources within the country of the Employer and the country where Works are executed.

7.2 Cost of Samples

All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Contract.

7.3 Cost of Tests

The cost of making any test shall be borne by the Contractor if such test is:

- (a) clearly intended by or provided for in the Contract, or
- (b) particularised in the Contract (in cases of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfil) in sufficient

detail to enable the Contractor to price or allow for the same in his Tender.

7.4 Cost of Tests not provided for

If any test required by the Engineer which is:

- (a) not provided for,
- (b) (in the cases above mentioned) not so particularised, or
- (c) (though so intended or provided for) required by the Engineer to be carried out at any place other than the Site or the place of manufacture, fabrication or preparation of the materials or Plant tested, shows the materials, Plant or workmanship not to be in accordance with the provisions of the Contract to the satisfaction of the Engineer, then the cost of such test shall be borne by the Contractor, but in any other case Sub-Clause 7.5 shall apply.

7.5 Engineer's Determination where Tests not provided for

Where, pursuant to Sub-Clause 7.4, this Sub-Clause applies, the Engineer shall, after due consultation with the Contractor, determine any extension of time to which the Contractor is entitled under sub clause 8.6,8.7 and 8.8 of clause 8.

7.6 Inspection of Operations

The Engineer, and any person authorised by him, shall at all reasonable times have access to the Site and to all workshops and places where materials or Plant are being manufactured, fabricated or prepared for the Works and the Contractor shall afford every facility for and every assistance in obtaining the right to such access.

7.7 Inspection and Testing

The Engineer shall be entitled, during manufacture, fabrication or preparation to inspect and test the materials and Plant to be supplied under the Contract. If materials or Plant are being manufactured, fabricated or prepared in workshops or places other than those of the Contractor, the Contractor shall obtain permission for the Engineer to carry out such inspection and testing in those workshops or places. Such inspection or testing shall not release the Contractor from any obligation under the Contract.

7.8 Dates for Inspection and Testing

The Contractor shall agree with the Engineer on the time and place for the inspection or testing of any materials or Plant as provided in the Contract. The Engineer shall give the Contractor not less than 24 hours' notice of his intention to carry out the inspection or to attend the tests. If the Engineer, or his duly authorised representative, does not attend on the date agreed, the Contractor may, unless otherwise instructed by the Engineer, proceed with the tests and forthwith forward to the Engineer duly certified copies of the test readings. The Engineer will at the earliest but not later than 7 days from the date of receipt of such test-report, carryout scrutiny of the test readings and communicate to Contractor his concurrence to same or objections with reasons and instruction on further steps to be taken. If no communication is made by the Engineer within 7 days, the test shall be deemed to have been made in the presence of the Engineer.

7.9 Rejection

If, at the time and place agreed in accordance with Sub-Clause 7.8, the materials or Plant are not ready for inspection or testing or if, as a result of the inspection testing referred to in this Clause, the Engineer determines that the materials or Plant are defective or otherwise not in accordance with the Contract, he may reject the materials or Plant and shall notify the Contractor thereof immediately. The notice shall state the Engineer's objections with reasons.

The Contractor shall then promptly make good the defect or ensure that rejected materials or Plant comply with the Contract. If the Engineer so requests, the tests of rejected materials or Plant shall be made or repeated under the same terms and conditions. All costs incurred by the Contractor by the repetition of the tests shall, after due consultation with the employer, be determined by the Engineer and shall be recoverable from the Contractor by the Employer and may be deducted from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the employer.

7.10 Independent Inspection

The Engineer may delegate inspection and testing of materials, Works or Plant to an independent inspector or inspecting agency of specialised competence, experience or accreditation in carrying out such inspection. Any such delegation shall be effected in accordance with Sub-Clause 3.4 and for this purpose such independent inspector shall be considered as an assistant of the Engineer.

7.11 Examination of Work before Covering up

No part of the Works shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any such part of the Works which is about to be covered up or put out of view and to examine foundations before any part of the Works is placed thereon. The Contractor shall give notice to the Engineer whenever any such part of the Works or foundations is or are ready or about to be ready for examination and the Engineer shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor, accordingly, attend for the purpose of examining and measuring such part of the Works or of examining such foundations.

7.12 Uncovering and Making Openings

The Contractor shall uncover any part of the Works or make openings in or through the same as the Engineer may from time to time instruct and shall reinstate and make good such part. If any such part has been covered up or put out of view after compliance with the requirement of Sub-Clause 7.11 and is found to be executed in accordance with the Contract, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor's costs in respect of such of uncovering, making openings in or through, reinstating and making good the same, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer. In any other case all shall be borne by the Contractor.

7.13 Removal of Improper Work, Materials or Plant

The Engineer shall have authority to issue instructions from time to time, for:

- (a) the removal from the Site, within such time or times as may be specified in the instruction, of any materials or Plant which, in the opinion of the Engineer, are not in accordance with the Contract,
- (b) the substitution of proper and suitable materials or Plant, and
- (c) the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefor, of any work which, in respect of
 - (i) materials, Plant or workmanship, or

- (ii) executed, installed by the Contractor or for which he is responsible, is not, in the opinion of the Engineer, in accordance with the Contract.

7.14 Default of Contractor in Compliance

In case of default on the part of the Contractor in carrying out such instruction within the time specified therein or, if none, within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

8 Commencement, delays and suspensions

8.1 Commencement of Works

The Contractor shall commence the Works as soon as is reasonably possible after the receipt of the Letter of Award. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay

8.2 Possession of Site and Access Thereto

As the Contract may prescribe:

- (a) the extent of portions of the Site of which the Contractor is to be given possession
- (b) the order in which such portions shall be made available to the Contractor, and, subject to any requirement in the Contract as to the order in which the Works shall be executed, the Employer will, with the Engineer's notice to commence the Works, give to the Contractor possession of
- (c) so much of the Site, and
- (d) such access as, in accordance with the Contract, is to be provided by the Employer as may be required to enable the Contractor to commence and proceed with the execution of the Works in accordance with the programme referred to in Clause 4.9, if any, and otherwise in accordance with such reasonable proposals as the Contractor shall, by notice to the Engineer with a copy to the Employer, make. The Employer will, from time to time as the

Works proceed, give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the execution of the Works with due dispatch in accordance with such programme or proposals, as the case may be.

8.3 Failure to Give Possession

If the Contractor suffers delay and / or incurs costs from failure on the part of the Employer to give possession and access in accordance with the terms of Sub-Clause 8.2, the Engineer shall, after due consultation with the Employer and the Contractor, determine:

(a) any extension of time to which the Contractor is entitled under sub clause 8.6, 8.7 and 8.8 of clause 8,

8.4 Rights of Way and Facilities

The Contractor shall bear all costs and charges for special or temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional facilities outside the Site required by him for the purpose of the Works.

8.5 Time for Completion

The Contractor agrees that Time is of essence. The whole of the Works and, if applicable, any Section required to be completed within a particular time as stated in the SCC, shall be completed in accordance with the provisions of Clause 10, calculated from the Commencement Date, or such extended time as may be allowed under sub clause 8.6, 8.7 and 8.8 of clause 8.

8.6 Extension of Time for Completion

In the event of:

- (a) the amount or nature of extra or additional work,
- (b) any cause of delay referred to in these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) any delay, impediment or prevention by the Employer, or
- (e) other special circumstances which may occur, other than through a default of or breach of contract by the Contractor or for which he is responsible, being

such as fairly to entitle the Contractor to an extension of the Time for Completion of the Works, or any Section or part thereof, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of such extension and shall notify the Contractor accordingly, with a copy to the Employer.

8.7 Contractor to Provide Notification and Detailed Particulars

Provided that the Engineer is not bound to make any determination unless the Contractor has

- (a) within 28 days after such event has first arisen notified the Engineer with a copy to the Employer, and
- (b) within 28 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.

8.8 Interim Determination of Extension

Provided also that where an event has a continuing effect such that it is not practicable for the Contractor to submit detailed particulars within the period of 28 days referred to in Sub-Clause 8.7 (b), he shall nevertheless be entitled to an extension of time provided that he has submitted to the Engineer interim particulars at intervals of not more than 28 days and final particulars within 28 days of the end of the effects resulting from the event. On receipt of such interim particulars, the Engineer shall, without undue delay, make an interim determination of extension of time and, on receipt of the final particulars, the Engineer shall review all the circumstances and shall determine an overall extension of time in regard to the event. In both such cases the Engineer shall make his determination after due consultation with the Employer and the Contractor and shall notify the Contractor of the determination, with a copy to the Employer. No final review shall result in a decrease of any extension of time already determined by the Engineer.

8.9 Restriction on Working Hours

Subject to any provision to the contrary contained in the Contract, none of the Works shall, save as hereinafter provided, be carried on during the night or on locally recognised days of rest without the consent of the Engineer. Provided that the provisions of this Clause shall not be applicable in the case of any work which it is customary to

carry out by multiple shifts.

8.10 Progress Reports

Unless otherwise stated, the contractor shall prepare and submit the monthly progress reports concerning to the contract in such a form as may be required by the EIC on behalf of authority. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates. Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Completion certificate for the Works.

The submission, receipt or acceptance of such reports shall not prejudice the right of the owner under the contract, nor shall operate as a stopple against the owner merely by the reason of the fact that he has not taken notice of or objected to any information contained in such report.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of execution, Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection, testing, commissioning and trial operation;
- (b) photographs showing the status of manufacture and of progress on the Site;
- (c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
 - (i) commencement of manufacture,
 - (ii) Contractor's inspections,
 - (iii) tests, and
 - (iv) shipment and arrival at the Site;
- (d) the details of Contractor's Personnel and Equipment deployed during the report period;
- (e) list of Variations, and notices given, if any, under Sub-Clauses related to Employer's Claims and Contractor's Claims;

- (f) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- (g) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.
- (h) One month target to be taken up along with comments to catch up the slipped milestone/target.

8.11 Rate of Progress

If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works or any Section is at any time, in the opinion of the Engineer, too slow to comply with the Time for Completion, the Engineer shall so notify the Contractor who shall thereupon take such steps as are necessary, subject to the consent of the Engineer, to expedite progress so as to comply with the Time for Completion. The Contractor shall not be entitled to any additional payment for taking such steps.

8.12 Liquidated Damages for Delay

8.12.1 Liquidated Damages for Delay

If the Contractor fails to comply with the Time for Completion in accordance with Clause 4.3 Part I of ToR, for the whole of the Works or, if applicable, any Section within the relevant time prescribed by Clause 8.5, then the Contractor shall pay to the Employer the relevant sum stated below in the tabular form as liquidated damages for such default and not as a penalty (which sum shall be the only monies due from the Contractor for such default). The Employer may, without prejudice to any other method of recovery, withheld / deduct the amount of such damages from any monies due or to become due to the Contractor. The amount withheld or deduction against such damages shall not relieve the Contractor from his obligation to complete the Works, or from any other of his obligations and liabilities under the Contract.

| Activity | Time (T= from the date of issue of LoA) | Liquidated damages |
|---|--|---|
| Submission and approval of final detailed design (approved by authorized classification society / agency / institute & EIC) along with sectional drawings (Good for Construction (GFC) drawings), work plan & methodology with updation / modifications, if any | T+45 days | The penalty for late delivery phase wise shall be ½ % of the cost of the vessel per week subject to a max of 10%. |
| Completion of Keel laying | T+60 days | |
| After completion of 50% of hull fabrication and erection is completed | T+90 days | |
| After completion of 100% of hull fabrication and erection of all machineries is completed | T+150 days | |
| Successful launching of the Survey vessel at the shipyard, its transportation from shipyard to the respective site and satisfactory installation of the same. | T+180 days | |
| Testing, commissioning and trial of survey vessel at the respective site along with the certification of inspection authority i.e. classification society/ agency/ institute & EIC and final handing over of the same to the Employer. | T+210 days | |
| Final acceptance: shall be paid within thirty (30) days after the date of the Acceptance Certificate issued by the Employer's representative. | T+240 days | |

* Total maximum LD shall be restricted to 10% of the contract value for respective schedules @ 0.5 % per week of the delay.

8.12.2 Permanent deduction of Liquidated Damages

In case the contractor does not complete the work in time, extension of time shall be given to the contractor to complete the work. It shall be at sole discretion of the EIC, who shall take all causes of delay into account, to provide extension of time withholding the liquidated damages accrued till the completion of commissioning of Survey Vessel. The EIC may even exclude the period for application of liquidated damages in case he finds the causes of delay were attributable to employer or to other reasons for which

the contractor cannot be held accountable. However, after setting aside such delays, LD accrual, balance LD accrual would be finally deducted from the final bill, as recommended by EIC. Total maximum LD shall be restricted to 10% of the contract value for respective schedules.

8.13 Suspension of Work

The Contractor shall, on the instructions of the Employer communicated by the Engineer suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works or such part thereof so far as is necessary in the opinion of the Engineer. Unless such suspension is:

- (a) otherwise provided for in the Contract,
- (b) necessary by reason of some default of or breach of contract by the Contractor or for which he is responsible,
- (c) necessary by reason of climatic conditions on the Site, or
- (d) necessary for the proper execution of the Works or for the safety of the Works or any part thereof (save to the extent that such necessity arises from any act or default by the Engineer or the Employer or from any of the risks defined in Sub-Clause 2.2), Sub-Clause 8.15 shall apply.

8.14 Engineer's Determination following Suspension

Where, pursuant to Sub-Clause 8.14, this Sub-Clause applies the Engineer shall after due consultation with the Employer and the Contractor, determine

- (a) any extension of time to which the Contractor is entitled under sub clause 8.6,8.7 and 8.8 of clause 8, and
- (b) the amount, if any, which shall be added to the Contract Price, in respect of the cost incurred by the Contractor by reason of such suspension, and shall notify the Contractor accordingly, with a copy to the Employer.

8.15 Suspension lasting more than 84 Days

If the progress of the Works or any part thereof is suspended on the instructions of the Engineer and if permission to resume work is not given by the Engineer within a period of 84 days from the date of suspension then, unless such suspension is within paragraph

(a), (b), (c) or (d) of Sub-Clause 8.14, the Contractor may give notice to the Engineer requiring permission, within 28 days from the receipt thereof, to proceed with the Works or that part thereof in regard to which progress is suspended. If, within the said time, such permission is not granted, the Contractor may, but is not bound to, elect to treat the suspension, where it affects part only of the Works, as an omission of such part under Clause 12.1 and 12.2 by giving a further notice to the Engineer to that effect, or, where it affects the whole of the Works, treat the suspension as an event of default by the Employer and terminate his employment under the Contract in accordance with the provisions of Sub-Clause 18.1, whereupon the provisions of Sub-Clauses 18.2 and 18.3 shall apply.

9 Tests On Completion

9.1 Contractor's obligation

Contractor shall carry out all tests as per requirement of this contract. No additional charges on any such account shall be payable by the Employer.

The Contractor shall give to the Engineer not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on completion.

Unless otherwise agreed, Tests on completion shall be carried out within 14 days after this date, on such day or days as the Engineer shall instruct.

In considering the results of the Tests on Completion, the Engineer shall make allowances for the effect of any use of the Works by the Employer on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on Completion, the Contractor shall submit a certified report of the results of these Tests to the Engineer.

9.2 Delayed Test

If the Contractor is prevented, for more than 14 days, from carrying out the survey on Completion by a cause for which the Employer is responsible, the Employer shall be deemed to have taken over the Works on the date when the survey on Completion would otherwise have been completed.

If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the survey on Completion, the Contractor shall give notice to EMPLOYER /

ENGINEER and shall be entitled.

- (a) an extension of time for any such delay, if completion is or will be delayed, and
- (b) Payment of any such Cost-plus reasonable profit, which shall be additional to the Contract Price.

After receiving this notice, ENGINEER / EMPLOYER shall proceed to agree or determine these matters.

9.3 Retesting

If the Works, or a Section, fail to pass the Tests on Completion, the Contractor may require the failed Tests, and Tests of Completion on any related work, to be repeated under the same terms and conditions.

9.4 Failure to Remedy Defects

If the Contractor fails to remedy any damage within a reasonable time, a date may be fixed by (or on behalf of) the Employer, on or by which the damage is to be remedied. The Contractor shall be given reasonable notice of this date.

If the Contractor fails to remedy the damage by this notified date and this Remedial work was to be executed at the cost of the Contractor.

- (a) carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall pay to the Employer the costs reasonably incurred by the Employer in remedying the damage;
- (b) Require ENGINEER / EMPLOYER to agree or determine a reasonable reduction in the Contract Price.

10 Employer's Taking over

10.1 Completion Certificate

When the whole of the Works have been substantially completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer, with a copy to the Employer, accompanied by a written undertaking to finish with due expedition any outstanding work during the maintenance period. Such notice and undertaking shall be deemed to be a request by the

Contractor for the Engineer to issue a Completion certificate in respect of the Works. The Engineer shall, within 21 days of the date of delivery of such notice, either issue to the Contractor, with a copy to the Employer, a completion Certificate, stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract, or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, is required to be done by the Contractor before the issue of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the Works specified therein. The Contractor shall be entitled to receive such Completion certificate within 21 days of completion, to the satisfaction of the Engineer, of the Works so specified and remedying any defects so notified.

10.2 Taking Over of Sections or Parts

Similarly, in accordance with the procedure set out in Sub-Clause 10.1, the Contractor may request and the Engineer shall issue a Completion certificate in respect of:

- (a) any Section in respect of which a separate Time for Completion is provided in the SCC,
- (b) any substantial part of the Permanent Works which has been both completed to the satisfaction of the Engineer and, otherwise than as provided for in the Contract, occupied or used by the Employer, or
- (c) any part of the Permanent Works which the Employer has elected to occupy or use prior to completion (where such prior occupation or use is not provided for in the Contract or has not been agreed by the Contractor as a temporary measure).
- (d) Punch list of the rectifications to be issued by the Engineer to the contractor.

10.3 Substantial Completion of Parts

If any part of the Permanent Works has been substantially completed and has satisfactorily passed any Tests on Completion prescribed by the Contract, the Engineer may issue a Completion certificate in respect of that part of the Permanent Works before completion of the whole of the Works and, upon the issue of such Certificate, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work in that part of the Permanent Works during the maintenance period.

10.4 Approval only by Final Completion Certificate

Only the Final Completion Certificate, referred to in clause 10.5 and 10.6, shall be deemed to constitute final approval of works.

10.5 Final Completion Certificate

The Contract shall not be considered as completed until a Final Completion Certificate shall have been signed by the Engineer and delivered to the Employer, with a copy to, the Contractor, stating the date on which the Contractor shall have completed his obligations to execute and complete the Works and remedy any defects therein to the Engineer's satisfaction. The Final Completion Certificate shall be given by the Engineer within 28 days after the expiration of the Work Period.

10.6 Unfulfilled Obligations

Notwithstanding the issue of the Final Completion Certificate the Contractor and the Employer shall remain liable for the fulfilment of any obligation incurred under the provisions of the Contract prior to the issue of the Final Completion Certificate which remains unperformed at the time such Final Completion Certificate is issued and, for the purposes of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force between the parties to the Contract.

11 Defects Liability

11.1 Defects Liability Period

In these Conditions the expression "Defects Liability Period" shall mean the defects liability period named in the SCC, calculated from:

- (a) the date of completion of the Works certified by the Engineer in accordance with Clause 10, or
- (b) in the event of more than one certificate having been issued by the Engineer under Clause 10, the respective dates so certified, and in relation to the Defects Liability Period the expression "the Works" shall be construed accordingly.

11.2 Completion of Outstanding Work and Remedying Defects

To the intent that the Works shall, at or as soon as practicable after the expiration of the Defects Liability Period, be delivered to the Employer in the condition required by the Contract, fair wear and tear excepted, to the satisfaction of the Engineer, the Contractor shall:

- (a) Complete the work, if any, outstanding on the date stated in the Taking Over Certificate as soon as practicable after such date, and
- (b) execute all such work of amendment, reconstruction, and remedying defects, shrinkages or other faults as the Engineer may, during the Defects Liability Period or within 14 days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to its expiration, instruct the Contractor to execute.

11.3 Cost of Remedying Defects

All work referred to in Sub-Clause 10.2 (b) shall be executed by the Contractor at his own cost if the necessity thereof is, in the opinion of the Engineer, due to:

- (a) the use of materials, Plant or workmanship not in accordance with the Contract,
- (b) where the Contractor is responsible for the design of part of the Permanent works, any fault in such design, or
- (c) the neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's part under the Contract.

If, in the opinion of the Engineer, such necessity is due to any other cause, he shall determine an addition to the Contract Price in accordance with Clause 13.3,13.4 & 13.5 and shall notify the Contractor accordingly, with a copy to the Employer.

11.4 Contractor's Failure to Carry Out Instructions

In case of default on the part of the Contractor in carrying out such instruction within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and if such work is work which, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

11.5 Contractor to Search

If any defect, shrinkage or other fault in the Works appears at any time prior to the end of the Defects Liability Period, the Engineer may instruct the Contractor, with copy

to the Employer, to search under the directions of the Engineer for the cause thereof. Unless such defect, shrinkage or other fault is one for which the Contractor is liable under the Contract, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount in respect of the costs of such search incurred by the Contractor, which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Employer. If such defect, shrinkage or other fault is one for which the Contractor is liable, the cost of the work carried out in searching as aforesaid shall be borne by the Contractor and he shall in such case remedy such defect, shrinkage or other fault at his own cost in accordance with the provisions of Clause 11.

11.6 Approval only by Defects Liability Certificate

Only the Defects Liability certificate, referred to in clause 11.7 and 11.8, shall be deemed to constitute final approval of works.

11.7 Defects Liability Certificate

The Contract shall not be considered as completed until a Defects Liability Certificate shall have been signed by the Engineer and delivered to the Employer, with a copy to, the Contractor, stating the date on which the Contractor shall have completed his obligations to execute and complete the Works and remedy any defects therein to the Engineer's satisfaction. The Defects Liability Certificate shall be given by the Engineer within 28 days after the expiration of the Defects Liability Period, or, if different defects liability periods shall become applicable to different Sections or parts of the Permanent Works, the expiration of the latest such period, or as soon thereafter as any works instructed, pursuant to Clauses 11.1 to 11.5, have been completed to the satisfaction of the Engineer.

11.8 Unfulfilled Obligations

Notwithstanding the issue of the Defects Liability Certificate the Contractor and the Employer shall remain liable for the fulfilment of any obligation incurred under the provisions of the Contract prior to the issue of the Defects Liability Certificate which remains unperformed at the time such Defects Liability Certificate is issued and, for the purposes of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force between the parties to the Contract.

12 Measurement & omissions

12.1 Quantities

The quantities set out in the Bill of Quantities are the estimated quantities for the Works, and they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfilment of his obligations under the Contract.

12.2 Work to be Measured

The Engineer, shall except as otherwise stated, ascertain and determine by measurement the value of the Works in accordance with the Contract and the Contractor shall be paid that value in accordance with Clause 14. The Engineer shall, when he requires any part of the Works to be measured, give reasonable notice to the Contractor's authorised agent, who shall:

- (a) forthwith attend or send a qualified representative to assist the Engineer in making such measurement, and
- (b) supply all particulars required by the Engineer.

Should the Contractor not attend, or neglect or omit to send such representative, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of such part of the Works. For the purpose of measuring such Permanent Works as are to be measured by records and drawings, the Engineer shall prepare records and drawings as the work proceeds and the Contractor, as and when called upon to do so in writing, shall, within 14 days, attend to examine and agree such records and drawings with the Engineer and shall sign the same when so agreed. If the Contractor does not attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and drawings, the Contractor does not agree the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the Contractor, within 14 days of such examination, lodges with the Engineer notice of the respects in which such records and drawings are claimed by him to be incorrect. On receipt of such notice, the Engineer shall review the records and drawings and either confirm or vary them.

12.3 Method of Measurement

The Works shall be measured net, notwithstanding any general or local custom, except where otherwise provided for in the Contract.

12.4 Breakdown of Lump Sum Items

For the purposes of statements submitted in accordance with Sub-Clause 16.1, the

Contractor shall submit to the Engineer, within 21 days after the receipt of the Letter of Award, a breakdown for each of the lump sum items contained in the Tender. Such breakdowns shall be subject to the approval of the Engineer.

12.5 Omissions

Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:

- (a) The Contractor will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount;
- (b) The omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and
- (c) This cost is not deemed to be included in the evaluation of any substituted work; then the Contractor shall give notice to ENGINEER / EMPLOYER accordingly, with supporting particulars. Upon receiving this notice, ENGINEER / EMPLOYER shall agree or determine this cost, which shall be included in the Contract Price.

13 Variations, adjustments and Additions

13.1 Variation

The Engineer shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he shall have the authority to instruct the Contractor to do and the Contractor shall do any of the following:

- (a) increase or decrease the quantity of any work included in the Contract,
- (b) omit any such work (but not if the omitted work is to be carried out by the Employer or by another contractor),
- (c) change the character or quality or kind of any such work,
- (d) change the levels, lines, position and dimensions of any part of the Works,
- (e) execute additional work of any kind necessary for the completion of the Works, or

- (f) change any specified sequence or timing of construction of any part of the Works.

No such variation shall in any way vitiate or invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with Clause 13.3, 13.4 and 13.5. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor.

13.2 Instructions for Variations

The Contractor shall not make any such variation without an instruction of the Engineer.

13.3 Valuation of Variations

All variations referred to in Clause 13.1 & 13.2 and any additions to the Contract Price which are required to be determined in accordance with Clause 13.3, 13.4 and 13.5 (for the purposes of this Clause referred to as “varied work”), shall be valued at the rates and prices set out in the Contract if, in the opinion of the Engineer, the same shall be applicable. If the Contract contain any rates or prices applicable to the varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable, failing which, after due consultation by the Engineer with the Employer and the Contractor, suitable rates or prices shall be agreed upon between the Engineer and the Contractor. In the event of disagreement, the Engineer shall fix such rates or prices as are, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 15.

13.4 Power of Engineer to Fix Rates

Provided that if the nature or amount of any varied work relative to the nature or amount of the whole of the Works or to any part thereof, is such that, in the opinion of the Engineer, the rate or price contained in the Contract for any item of the Works is, by reason of such varied work, rendered inappropriate or inapplicable, then, after due consultation by the Engineer with the Employer and the Contractor, a suitable rate or price shall be agreed upon between the Engineer and the Contractor. In the event of disagreement, the Engineer shall fix such other rate or price as is, in his opinion,

appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 15.

Provided also that no varied work instructed to be done by the Engineer pursuant to Clause 13.1 & 13.2 shall be valued under Sub-Clause 13.3 or under this Sub-Clause unless, within 14 days of the date of such instruction and, other than in the case of omitted work, before the commencement of the varied work, notice shall have been given either:

- (a) by the Contractor to the Engineer of his intention to claim extra payment or a varied rate or price, or
- (b) by the Engineer to the Contractor of his intention to vary a rate or price/

13.5 Variations Exceeding 20 per cent

The unit rate quoted by the Contractor shall remain unchanged for the quantities varying upto +/-20%. If, on the issue of the Completion Certificate for the whole of the Works, it is found that as a result of,

- (a) all varied work valued under Sub-Clauses 13.3 and 13.4, and
- (b) all adjustments in the estimated quantities set out in the Bill of Quantities, excluding adjustments of price made under Clause 23,

but not from any other cause, there have been additions to or deductions from the Contract Price in excess of 20 per cent at variance with the Contract Price, then and in such event, after due consultation by the Engineer with the Employer and the Contractor, certain amount shall be added or subtracted from the contract price. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer. Such sum shall be based only on the amount by which such additions or deductions shall be at variance in excess of 20 per cent with the Contract Price.

14 Force Majeure

14.1 No Liability for Force Majeure

The Contractor shall be under no liability whatsoever in consequence of any of the special risks referred to in Sub-Clause 14.2, whether by way of indemnity or otherwise, for or in respect of:

- (a) Destruction of or damage to the Works, save to work condemned under the provisions of Clause 7.13 and 7.14 prior to the occurrence of any of the said special risks,
- (b) Destruction of or damage to property, whether of the Employer or third parties, or
- (c) Injury or loss of life.

14.2 Force Majeure

The Force Majeure is:

- (a) the risks defined under paragraphs (a), (c), (d) and (e) of Sub-Clause 2.2, and
- (b) the risks defined under paragraph (b) of Sub-Clause 2.2 insofar as these relate to the country in which the Works are to be executed.

14.3 Damage to Works by Force Majeure

If the Works or any materials or Plant on or near or in transit to the Site, sustain destruction or damage by reason of any of the said special risks, the Contractor shall be entitled to payment in accordance with the Contract for any Permanent Works duly executed and for any materials or Plant so destroyed or damaged and, so far as may be required by the Engineer or as may be necessary for the completion of the Works, to payment for:

- (a) Rectifying any such destruction or damage to the Works, and
- (b) Replacing or rectifying such materials or plant, and the Engineer shall determine an addition to the Contract Price in accordance with Clause 13.3, 13.4 & 13.5 and shall notify the Contractor accordingly, with a copy to the Employer.

14.4 Projectile, Missile

Destruction, damage, injury or loss of life caused by the explosion or impact, whenever and wherever occurring, of any mine, bomb, shell, grenade, or other projectile, missile, munitions, or explosive of war, shall be deemed to be a consequence of the said special risks.

14.5 Increased Costs arising from Force Majeure

Save to the extent that the Contractor is entitled to payment under any other provision of the Contract, the Employer shall pay to the Contractor any costs of the execution of the Works (other than such as may be attributable to the cost of reconstructing work condemned under the provisions of Clause 7.13 & 7.14 prior to the occurrence of any special risk) which are howsoever attributable to or consequent on or the result of or in any way whatsoever connected with the said special risks, subject however to the provisions in this Clause hereinafter contained in regard to outbreak of war, but the Contractor shall, as soon as any such cost comes to his knowledge, forthwith notify the Engineer thereof. The Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor's costs in respect thereof which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Employer.

14.6 Outbreak of War

If, during the currency of the Contract, there is an outbreak of war, whether war is declared or not, in any part of the world which, whether financially or otherwise, materially affects the execution of the Works, the Contractor shall, unless and until the Contract is terminated under the provisions of this Clause, continue to use his best endeavours to complete the execution of the Works. Provided that the Employer shall be entitled, at any time after such outbreak of war, to terminate the Contract by giving notice to the Contractor and, upon such notice being given, the Contract shall, except as to the rights of the parties under this Clause and Clause 17.3, terminate, but without prejudice to the rights of either party in respect of any antecedent breach thereof.

14.7 Removal of Contractor's Equipment on Termination

If the Contract is terminated under the provisions of Sub-Clause 14.6, the Contractor shall, with all reasonable dispatch, remove from the Site all Contractor's Equipment and

shall give similar facilities to his Subcontractors to do so.

14.8 Payment if Contract Terminated

If the Contract is terminated as aforesaid, the Contractor shall be paid by the Employer, insofar as such amounts or items have not already been covered by payments on account made to the Contractor, for all work executed prior to the date of termination at the rates and prices provided in the Contract and in addition:

- (a) The amounts payable in respect of any preliminary items referred to in the Bill of Quantities, so far as the work or service comprised therein has been carried out or performed, and a proper proportion of any such items which have been partially carried out or performed;
- (b) The cost of materials, Plant or goods reasonably ordered for the Works which have been delivered to the Contractor or of which the Contractor is legally liable to accept delivery, such materials, Plant or goods becoming the property of the Employer upon such payments being made by him;
- (c) A sum being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the Works insofar as such expenditure has not been covered by any other payments referred to in this Sub-Clause;
- (d) Any additional sum payable under the provisions of Sub-Clauses 14.3 and 14.5;
- (e) such proportion of the cost as may be reasonable, taking into account payments made or to be made for work executed, of removal of Contractor's Equipment under Sub-Clause 14.7 and, if required by the Contractor, return thereof to the Contractor's main plant yard in his country of registration or to other destination, at no greater cost; and
- (f) The reasonable cost of repatriation of all the Contractor's staff and workmen employed on or in connection with the Works at the time of such termination.

Provided that against any payment due from the Employer under this Sub- Clause, the Employer shall be entitled to be credited with any outstanding balances due from the Contractor for advances in respect of mobilization and any other sums which, at the date of termination, were recoverable by the Employer from the Contractor under the terms

of the Contract. Any sums payable under this Sub-Clause shall, after due consultation with the Employer and the Contractor, be determined by the Engineer who shall notify the Contractor accordingly, with a copy to the Employer.

15 Certificates and Payment

15.1 Monthly Statements

The Contractor shall submit to the Engineer after the end of each month six copies, each signed by the Contractor's representative approved by the Engineer in accordance with Sub-Clause 4.10, of a statement, in such form as the Engineer may from time to time prescribe, showing the amounts expressed in Indian Rupees, to which the Contractor considers himself to be entitled up to the end of the month in respect of:

- (a) The value of the Works executed with reference to the contract
- (b) Any other items in the Bill of Quantities.
- (c) the percentage of the invoice value of listed materials, all as stated in the SCC, and Plant delivered by the Contractor on the Site for incorporation in the Permanent Works but not incorporated in such Works,
- (d) Adjustments under Clause 23, and
- (e) Any other sum to which the Contractor may be entitled under the Contract or otherwise.

15.2 Monthly Payments

The Engineer shall, within 28 days of receiving such statement, deliver to the Employer an Interim Payment Certificate stating the amount of payment to the Contractor which the Engineer considers due and payable in respect of such statement, subject:

- (a) to the deduction, other than pursuant to Clause 8.12 and 8.13, of any sums which may have become due and payable by the Contractor to the Employer.

Provided that the Engineer shall not be bound to certify any payment under this Sub-Clause if the net amount thereof, after all deductions, would be less than the Minimum Amount of Interim Payment Certificates stated in the SCC.

Notwithstanding the terms of this Clause or any other Clause of the Contract no amount will be certified by the Engineer for payment until the performance security, if required under the Contract, has been provided by the Contractor and approved by the Employer.

15.3 Place of Payment

Payments to the Contractor by the Employer shall be made in the currencies in which the Contract Price is payable into a bank account, or accounts nominated by the Contractor in the country of the Employer.

15.4 Correction of Certificates

The Engineer may by any Interim Payment Certificate make any correction or modification in any previous Interim Payment Certificate which shall have been issued by him and shall have authority, if any work is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate.

15.5 Statement at Completion

Not later than 30 days after the issue of the Completion Certificate in respect of the whole of the Works, the Contractor shall submit to the Engineer six copies of Statement at Completion with supporting documents showing in detail, in the form approved by the Engineer:

- (a) the final value of all work done, in Indian Rupees, in accordance with the Contract up to the date stated in such completion Certificate,
- (b) any further sums which the Contractor considers to be due, and
- (c) an estimate of amounts which the Contractor considers will become due to him under the Contract.

The estimated amounts shall be shown separately in such Statement at Completion. The Engineer shall certify payment in accordance with Sub-Clause 15.2.

15.6 Final Statement

Not later than 30 days after the issue of the final completion certificate, the Contractor shall submit to the Engineer for consideration six copies of a draft final statement with supporting documents showing in detail, in the form approved by the Engineer:

- (a) the value of all work done in accordance with the Contract, and
- (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the

Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed (for the purposes of these Conditions referred to as the “Final Statement”).

If, following discussions between the Engineer and the Contractor and any changes to the draft final statement which may be agreed between them, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer an Interim Payment Certificate for those parts of the draft final statement, if any, which are not in dispute. The dispute may then be settled in accordance with Clause 16.3.

15.7 Discharge

Upon submission of the Final Statement, the Contractor shall give to the Employer, with a copy to the Engineer, a written discharge confirming that the total of the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment due under the Final Payment Certificate issued pursuant to Sub-Clause 15.10 has been made and the performance security referred to in Sub- Clause 4.4, if any, has been returned to the Contractor.

15.8 Final Payment Certificate

Within 14 days after receipt of the Final Statement, and the written discharge, the Engineer shall issue to the Employer (with a copy to the Contractor) a Final Payment Certificate stating:

- (a) the amount which, in the opinion of the Engineer, is finally due under the Contract or otherwise, and
- (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled other than under Clause 8.12 and 8.13, the balance, if any, due from the Employer to the Contractor or from the Contractor to the Employer as the case may be.

15.9 Cessation of Employer’s Liability

The Employer shall not be liable to the Contractor for any matter or thing arising out of

or in connection with the Contract or execution of the Works, unless the Contractor shall have included a claim in respect thereof in his Final Statement and (except in respect of matters or things arising after the issue of the Completion certificate in respect of the whole of the Works) in the Statement at Completion referred to in Sub- Clause 15.7.

15.10 Time for Payment

The amount due to the Contractor under any Interim Payment Certificate issued by the Engineer pursuant to this Clause, or to any other term of the Contract, shall, subject to Clause 8.12 and 8.13, be paid by the Employer to the Contractor within 28 days after such Interim Payment Certificate has been delivered to the Employer, or, in the case of the Final Payment Certificate referred to in Sub-Clause 15.8, within 30 days, after such Final Payment Certificate has been delivered to the Employer..

15.11 Mobilization Advance Payment

The Contractor shall be eligible to receive a Mobilization advance payment for an amount not exceeding 10% of the tendered value, if requested by the contractor in writing within 1 month of the order to commence of the work. Such advance shall be in two or more instalments, to be determined by the EIC at his sole discretion. The first instalment of such shall be released by the EIC on a written request made by contractor in this behalf. The second and subsequent instalments shall be released by the EIC only after the contractor furnishes a proof of satisfactory utilization of earlier Installment to the entire satisfaction of the EIC. Before any Installment of advance is released, contractor shall execute Bank Guarantee bond from Scheduled/Nationalised bank for the amount equal to 110% of the amount of advance and valid for the period till the recovery of the advance. This (Bank Guarantee bond from Scheduled/Nationalised bank for the amount equal to 110% of the balance amount of advance) shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery.

The mobilization advance shall bear a simple interest at the rate of 10% per annum and shall be calculated from the date of payment to the date of recovery, both days inclusive on the outstanding amount of advance. Recovery of such sums advanced shall be made by the deduction from Contractor's bills commencing after first 10% of the gross value of the work is execute and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time 80% of gross value of contract is executed and paid, together with interest due on the

entire outstanding amount up to the date of recovery of the Installment.

If the circumstances are considered reasonable by EIC, the period mentioned above for request by Contractor in writing for grant of Mobilization advance maybe extended at the discretion of the EIC.

16 Claims, provisional sum and Settlement of disputes

16.1 Claims

16.1.1 Notice of Claims

Notwithstanding any other provision of the Contract, if the Contractor intends to claim any additional payment pursuant to any Clause of these Conditions or otherwise, he shall give notice of his intention to the Engineer, with a copy to the Employer, within 28 days after the event giving rise to the claim has first arisen.

16.1.2 Contemporary Records

Upon the happening of the event referred to in Sub-Clause 16.1.1, the Contractor shall keep such contemporary records as may reasonably be necessary to support any claim he may subsequently wish to make. Without necessarily admitting the Employer's liability, the Engineer shall, on receipt of a notice under Sub-Clause 16.1.1, inspect such contemporary records and may instruct the Contractor to keep any further contemporary records as are reasonable and may be material to the claim of which notice has been given. The Contractor shall permit the Engineer to inspect all records kept pursuant to this Sub-Clause and shall supply him with copies thereof as and when the Engineer so instructs.

16.1.3 Substantiation of Claims

Within 28 days, or such other reasonable time as may be agreed by the Engineer, of giving notice under Sub-Clause 16.1.1, the Contractor shall send to the Engineer an account giving detailed particulars of the amount claimed and the grounds upon which the claim is based. Where the event giving rise to the claim has a continuing effect, such account shall be considered to be an interim account and the Contractor shall, at such intervals as the Engineer may reasonably require, send further interim accounts giving the accumulated amount of the claim and any further grounds upon which it is based. In cases where interim accounts are sent to the Engineer, the Contractor shall send a final account within 28 days of the end of the effects resulting from the event. The Contractor shall, if required by the Engineer so to do, copy to the Employer all accounts sent to the

Engineer pursuant to this Sub-Clause.

16.1.4 Failure to Comply

If the Contractor fails to comply with any of the provisions of this Clause in respect of any claim which he seeks to make, his entitlement to payment in respect thereof shall not exceed such amount as the Engineer or any arbitrator or arbitrators appointed pursuant to Sub-Clause 16.3.3 assessing the claim considers to be verified by contemporary records (whether or not such records were brought to the Engineer's notice as required under Sub-Clauses 16.1.2 and 16.1.3).

16.1.5 Payment of Claims

The Contractor shall be entitled to have included in any interim payment certified by the Engineer pursuant to Clause 14 such amount in respect of any claim as the Engineer, after due consultation with the Employer and the Contractor, may consider due to the Contractor provided that the Contractor has supplied sufficient particulars to enable the Engineer to determine the amount due. If such particulars are insufficient to substantiate the whole of the claim, the Contractor shall be entitled to payment in respect of such part of the claim as such particulars may substantiate to the satisfaction of the Engineer. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer.

16.2 Provisional Sums

16.2.1 Definition of "Provisional Sum"

"Provisional Sum" means a sum included in the Contract and so designated in the Bill of Quantities for the execution of any part of the Works or for the supply of goods, materials, Plant or services, or for contingencies, which sum may be used, in whole or in part, or not at all, on the instructions of the Engineer. The Contractor shall be entitled to only such amounts in respect of the work, supply or contingencies to which such Provisional Sums relate as the Engineer shall determine in accordance with this Clause. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer.

16.2.2 Use of Provisional Sums

In respect of every Provisional Sum the Engineer shall have authority to issue instructions for the execution of work or for the supply of goods, materials, Plant, Labour or services by:

- (a) the Contractor, in which case the Contractor shall be entitled to an amount equal to the value thereof determined in accordance with Clause 13.3, 13.4 and 13.5, and
- (b) a nominated Subcontractor, as hereinafter defined, in which case the sum to be paid to the Contractor therefor shall be determined and paid in accordance with Sub-Clause 5.4.4.

16.2.3 Production of Vouchers

The Contractor shall produce to the Engineer all quotations, invoices, vouchers and accounts or receipts in connection with expenditure in respect of Provisional Sums, except where work is valued in accordance with rates or prices set out in the Tender.

16.3 Settlement of Disputes

16.3.1 Engineer's Decision

If a dispute of any kind whatsoever arises between the Employer and the Contractor in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of the Works or after their completion and whether before or after repudiation or expulsion or other termination of the Contract, including any dispute as to any opinion, instruction, determination, certificate or valuation of the Engineer, the matter in dispute shall, in the first place, be referred in writing to the Engineer, with a copy to the other party. Such reference shall state that it is made pursuant to this Clause. No later than the 30th day after the day on which he received such reference the Engineer shall give notice of his decision to the Employer and the Contractor. Such decision shall state that it is made pursuant to this Clause.

Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the Employer shall give effect forthwith to every such decision of the Engineer unless and until the same shall be revised, as hereinafter provided, in an amicable settlement or an arbitral award.

If either the Employer or the Contractor be dissatisfied with any decision of the Engineer, or if the Engineer fails to give notice of his decision on or before the 30th day after the day on which he received the reference, then either the Employer or the Contractor may, on or before the seventieth day after the day on which he received

notice of such decision, or on or before the seventieth day after the day on which the said period of 30 days expired, as the case may be, give notice to the other party, with a copy for information to the Engineer, of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 16.3.4, no arbitration in respect thereof may be commenced unless such notice is given.

If the Engineer has given notice of his decision as to a matter in dispute to the Employer and the Contractor and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor on or before the day specified here above, the said decision shall become final and binding upon the Employer and the Contractor.

16.3.2 Amicable Settlement

Where notice of intention to commence arbitration as to a dispute has been given in accordance with Sub-Clause 16.3.1, the parties shall attempt to settle such dispute amicably before the commencement of arbitration. Provided that, unless the parties otherwise agree, arbitration may be commenced on or after the 28th day after the day on which notice of intention to commence arbitration of such dispute was given, even if no attempt at amicable settlement thereof has been made.

16.3.3 Arbitration

Any dispute in respect of which:

- (a) the decision, if any, of the Engineer has not become final and binding pursuant to Sub-Clause 16.3.1, and
- (b) amicable settlement has not been reached within the period stated in Sub- Clause 16.3.2, shall be referred for arbitration in the manner provided as under and to the sole arbitrator appointed as follows:
 - (i) Either of the parties may give to the other notice in writing of the existence of such question of dispute or difference with a copy to the Engineer within the time specified in clause 16.3.1.
 - (ii) Within twenty eight (28) days of receipts of such notice from either party

the Engineer in Consultation with the Employer shall send to the contractor a panel of three persons and the contractor within twenty one (21) days of receipt of such panel communicate to the Engineer and Employer the name of one of the persons from such panel and such person shall then be appointed a sole arbitrator by the Employer. However, the arbitrator so appointed shall not be an officer or the employee of the Employer or Engineer.

- (iii) Provided that if the contractor fails to communicate the selection of a name out of the panel so forwarded to him within the specified time, Employer shall without delay select one person from the aforesaid panel and appoint him as the sole arbitrator.
- (iv) The arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, then the Employer shall appoint another person to act as sole arbitrator, such person shall be entitled to proceed with the reference from the stage at which the predecessor left it.
- (v) The award of the arbitrator shall be final and binding. The arbitrator shall
- (vi) decide in what proportion the arbitrator's fees, as well as the cost of Arbitration proceeding shall be borne equally by either party.
- (vii) The arbitrator with the consent of the parties can enlarge the time, from time to time to make and publish his award.
- (viii) A notice of the existence in question dispute or difference in connection with the contract unless served by either party within 30 days after the issue of Final Completion Certificate, failing which all rights and claim under this contract shall be deemed to have been waived and thus forfeited and absolutely barred.
- (ix) The work under this contract shall continue during arbitration proceedings and no valid payments due from or payment by the Employer shall be withheld on account of such proceedings except to the extent, which may be in dispute.
- (x) The Arbitration shall be conducted in accordance with the provisions of the

Arbitration & Conciliation Act, 1996 read with the Arbitration & Conciliation (Amendment) Act, 2015 or any statutory modifications or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.

The Arbitrator shall have the power to enlarge the term to rate the award with the consent of the parties provided always that the commencement or continuation of the arbitration proceeding shall not result in cessation or suspension of any of other rights and obligations of the parties of any payments due to them hereunder.

The venue of the arbitration proceedings shall be at Delhi/NCR. It is further clarified that both the parties to this agreement hereby undertake not to have recourse to civil court to solve any of their dispute whatsoever, arising out of this agreement except through arbitration.

In addition to this clause, in case of contract with another Public Sector Undertaking, following Arbitration Clause shall apply: "Except as otherwise provided, in case of a contract with a public Sector Undertaking if at any time any question dispute or difference whatsoever arises between the parties upon or in relation to, or in connection with this agreement, the same shall be settled in terms of the Ministry of Industry, Department of Public Enterprises O.M No. 3/5/93-PMA dt.30.06.93 or any modifications / amendments thereof. "The arbitrator shall have the power to enlarge the term to publish the award with the consent of the parties provided always that the commencement or continuation of the arbitration proceeding shall not result in cessation or suspension of any of other rights and obligations of the parties of any payments due to them hereunder.

16.3.4 Laws governing the Contract

- i) The laws of India shall govern this contract.
- ii) Irrespective of the place of Works, the place of performance or place of payment under the contract, the contract shall be deemed to have been made at the place from which the Letter of Award has been issued.
- iii) Courts of the place from where the Letter of Award of tender has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of contract. Notwithstanding anything contained in this Agreement,

Parties hereby submit to the exclusive jurisdiction of such court alone.

16.3.5 Failure to Comply with Engineer's Decision

Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 16.3.1 and the related decision has become final and binding, either party may, if the other party fails to comply with such decision, and without prejudice to any other rights it may have, refer the failure to arbitration in accordance with Sub-Clause 16.3.2. The provisions of Sub-Clauses 16.3.1 and 16.3.2 shall not apply to any such reference.

17 Termination by the Employer

17.1 Default of Contractor

If the Contractor is deemed by law unable to pay his debts as they fall due, or enters into voluntary or involuntary bankruptcy, liquidation or dissolution (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or becomes insolvent, or makes an arrangement with, or assignment in favour of, his creditors, or agrees to carry out the Contract under a committee of inspection of his creditors, or if a receiver, administrator, trustee or liquidator is appointed over any substantial part of his assets, or if, under any law or regulation relating to reorganization, arrangement or readjustment of debts, proceedings are commenced against the Contractor or resolutions passed in connection with dissolution or liquidation or if any steps are taken to enforce any security interest over a substantial part of the assets of the Contractor, or if any act is done or event occurs with respect to the Contractor or his assets which, under any applicable law has a substantially similar effect to any of the foregoing acts or events, or if the Contractor has contravened Sub-Clause 5.1, or has an execution levied on his goods, or if the Engineer certifies to the Employer, with a copy to the Contractor, that, in his opinion, the Contractor:

- (a) has repudiated the Contract,
- (b) without reasonable excuse has failed
 - (i) to commence the Works in accordance with Sub-Clause 8.1 or
 - (ii) to proceed with the Works, or any Section thereof, within 28 days after receiving notice pursuant to Sub-Clause 8.11,
- (c) has failed to comply with a notice issued pursuant to Sub-Clause 7.9 or an

instruction issued pursuant to Sub-Clause 7.13 within 28 days after having received it,

- (d) despite previous warning from the Engineer, in writing, is otherwise persistently or flagrantly neglecting to comply with any of his obligations under the Contract, or
- (e) has contravened Sub-Clause 5.2,

then the Employer may, after giving 14 days' notice to the Contractor, enter upon the Site and expel the Contractor there from without thereby violating the Contract, or releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and powers conferred on the Employer or the Engineer by the Contract, and may himself complete the Works or may employ any other contractor to complete the Works. The Employer or such other contractor may use for such completion so much of the Contractor's Equipment, Plant, Temporary Works, and materials, which have been deemed to be reserved exclusively for the execution of the Works, under the provisions of the Contract, as he or they may think proper, and the Employer may, at any time, sell any of the said Contractor's Equipment, Temporary Works, and unused Plant and materials, and apply the proceeds of sale in or toward the satisfaction of any sums due or that may become due to him from the Contractor under the Contract.

17.2 Valuation at Date of Expulsion

The Engineer shall, as soon as may be practicable after any such entry and expulsion by the Employer, fix and determine ex parte, or by or after reference to the parties or after such investigation or enquiries as he may think fit to make or institute, and shall certify:

- (a) what amount (if any) had, at the time of such entry and expulsion, been reasonably earned by or would reasonably accrue to the Contractor in respect of work then actually done by him under the Contract, and
- (b) the value of any of the said unused or partially used materials, any Contractor's Equipment and any Temporary Works.

17.3 Payment after Expulsion

If the Employer shall enter and expel the Contractor under this Clause, the Earnest

Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the IWAI. Further, the Employer shall enter and expel the Contractor under this Clause, he shall not be liable to pay to the Contractor any further amount (including damages) in respect of the Contract until the expiration of the Maintenance Period and thereafter until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any) and all other expenses incurred by the Employer have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum (if any) as the Engineer may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount exceeds the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall, upon demand, pay to the Employer the amount of such excess and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly.

17.4 Assignment of Benefit of Agreement

Unless prohibited by law, the Contractor shall, if so instructed by the Engineer within 14 days of such entry and expulsion referred to in Sub-Clause 17.1, assign to the Employer the benefit of any agreement for the supply of any goods materials or services and/or for the execution of any work for the purposes of the Contract, which the Contractor may have entered into.

17.5 Corrupt or Fraudulent Practices

If in the judgment of the Employer the Contractor has engaged in corrupt or fraudulent practices, in competing for or in executing the Contract, then the Employer may, after having given 14 days' notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of Clause 16 shall apply as if such expulsion had been made under Sub-Clause 17.1.

“Corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official, Employer, Engineer or their representatives in the procurement process or in Contract execution.

“Fraudulent practice” means a misrepresentation of facts in order to influence a

procurement process or the execution of a Contract to the detriment of the Borrower, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.

17.6 Urgent Remedial Work

If, by reason of any accident, or failure, or other event occurring to, in, or in connection with the Works, or any part thereof, either during the execution of the Works, or during the Maintenance Period, any remedial or other work is, in the opinion of the Engineer, urgently necessary for the safety of the Works and the Contractor is unable or unwilling at once to do such work, the Employer shall be entitled to employ and pay other persons to carry out such work as the Engineer may consider necessary. If the work or repair so done by the Employer is work which, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Provided that the Engineer shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the Contractor thereof.

18 Termination by Contractor

18.1 Default of Employer

In the event of the Employer:

- (a) Failing to pay to the Contractor the amount due under any certificate of the Engineer within 28 days after the expiry of the time stated in Sub-Clause 15.12, within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract,
- (b) Interfering with or obstructing or refusing any required approval to the issue of any such certificate,
- (c) becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, or
- (d) giving notice to the Contractor that for unforeseen economic reasons it is impossible for him to continue to meet his contractual obligations, the Contractor shall be entitled to terminate his employment under the Contract by giving notice to the Employer, with a copy to the Engineer. Such termination shall take effect 14 days after the giving of the notice.

18.2 Removal of Contractor's Equipment

Upon the expiry of the 14 days' notice referred to in Sub-Clause 17.1, the Contractor shall, notwithstanding the provisions of Sub-Clause 4.36.1, with all reasonable despatch, remove from the Site all Contractor's Equipment brought by him thereon.

18.3 Payment on Termination

In the event of such termination, the Employer shall be under the same obligations to the Contractor in regard to payment as if the Contract had been terminated under the provisions of Clause 14.

18.4 Contractor's Entitlement to Suspend Work

Without prejudice to the Contractor's entitlement to interest under Sub-Clause 15.12 and to terminate under Sub-Clause 17.1, the Contractor may, if the Employer fails to pay the Contractor the amount due under any certificate of the Engineer within 28 days after the expiry of the time stated in Sub-Clause 15.12 within which payment is to be made,

subject to any deduction that the Employer is entitled to make under the Contract, after giving 28 days' prior notice to the Employer, with a copy to the Engineer, suspend work or reduce the rate of work. If the Contractor suspends work or reduces the rate of work in accordance with the provisions of this Sub-Clause and thereby suffers delay or incurs costs the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) Any extension of time to which the Contractor is entitled under sub clause 8.7, 8.7 and 8.8 of clause 8, and
- (b) The amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.

18.5 Resumption of Work

Where the Contractor suspends work or reduces the rate of work. having given notice in accordance with Sub-Clause 18.4, and the Employer subsequently pays the amount due, including interest pursuant to Sub-Clause 15.12, the Contractor's entitlement under Sub-Clause 18.1 shall, if notice of termination has not been given, lapse and the Contractor shall resume normal working as soon as is reasonably possible.

Whenever the Works is resumed after suspension, the Engineer and the Contractor shall jointly examine the Works and the Plant and Materials affected by the suspension and the Contractor shall prepare a report indicating the physical status and major adverse effects, if any, the Works under suspension has suffered during the period of suspension and furnish same to the Engineer and Employer.

19 Design and drawings

19.1 Custody and Supply of Drawings and Documents

The approved drawings shall remain in the custody of the Engineer, but two copies thereof shall be provided to the Contractor free of charge. The Contractor shall make at his own cost any further copies required by him. Unless it is strictly necessary for the purposes of the Contract, the Drawings, Specification and other documents provided by the Employer or the Engineer shall not, without the consent of the Engineer, be used or communicated to a third party by the Contractor. Upon issue of the Final completion Certificate, the Contractor shall return to the Engineer all Drawings, Specification and other documents provided under the Contract.

19.2 One Copy of Drawings to be kept on Site

One copy of the Drawings, provided to the Contractor as aforesaid, shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and by any other person authorised by the Engineer in writing.

19.3 Disruption of Progress

The Contractor shall give notice to the Engineer, with a copy to the Employer, whenever planning or execution of the Works is likely to be delayed or disrupted unless any further drawing or instruction is issued by the Engineer within a reasonable time. The notice shall include details of the drawing or instruction required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late. This shall not be applicable in the case of permanent works to be designed and engineered by the contractor, except with regard to its approval by the Engineer, if specified.

19.4 Delays and Cost of Delay of Drawings

If, by reason of any failure or inability of the Engineer to issue, within a time reasonable in all the circumstances, any drawing or instruction for which notice has been given by the Contractor in accordance with Sub Clause 19.3, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under sub clause 8.6, 8.7 and 8.8, and

19.5 Supplementary Drawings and Instructions

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

20 Insurance

20.1 Insurance of Works

Contractor is required to take Contractor's All Risk Policy or erection all risk policy (as the case may be) from an approved insurance company in the joint name with the Employer and bear all costs towards the same for the full period of execution of works

including the defect liability period for the full amount of contract against all loss of damage from whatever cause arising other than excepted risks for which he is responsible under the terms of the contract and in such manner that the Employer and the contractor are covered during the period of construction of works and/or also covered during the period of defect liability for loss or damage

- a) The work and the temporary works to the full value of such works.
- b) The materials, construction plant, centering, shuttering and scaffolding materials and other things brought to the site for their full value.

Whenever required by the Employer, the contractor shall produce the policy or the policies of insurance and the receipts for payment of the current premium.

20.2 Insurance under Workmen Compensation Act

Contractor is required to take insurance cover under the Workman Compensation Act, 1923 as amended from time to time from an approved insurance company and pay premium charges thereof. Wherever required by the Employer the contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums.

20.3 Third Party Insurance

Contractor is required to take third party insurance cover for an amount of 5% (five percent) of contract value from an approved insurance company for insurance against any damage, injury or loss which may occur to any person or property including that of the Employer, arising out of the execution of the works or temporary works. Wherever required by the Employer the contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums. In case of failure of the contractor to obtain contractors all risk policy, insurance under workman compensation act and third party insurance as described above within one month from the date of commencement of work, running account payments of the contractor shall be withheld till such time the aforesaid insurance covers are obtained by the contractor. If the Contractor could not effect a comprehensive insurance cover against risks which he may be required to effect under the terms of the contract, then he shall give his attention to get the best insurance cover available and even in case of effecting a wider insurance cover than the one which the subsidiary of the General Insurance Company could offer, such an insurance is ought to be done after the Employers approval, by or through the

subsidiary of the General Insurance Company.

20.4 The Contractor shall at all times indemnify the Employer against all claims, damages or compensation under the provision of Payment of Wages Act-1936, Minimum Wages Act-1948, Employer's liability Act-1938, the Workmen's Compensation Act- 1947, Industrial Disputes Act-1947 and Maternity Benefit Act-1961 or any modifications thereof or any other law in force or as consequence of any accident or injury to any workman or other persons in or about the works, whether in the employment of the contractor or not, against all costs, charges and expenses of any suit, action or proceedings arising out of such incident or injury and against all sum or sums which may with the consent of the contractor be paid to compromise or compound any such claim. Without limiting his obligations and liabilities as above provided, the contractor shall insure against all claims, damages or compensation payable under the Workmen's Compensation Act 1923 or any modification thereof or any other law relating thereto."

20.5 Damage to Persons and Property

The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of:

- (a) death of or injury to any person, or
- (b) loss of or damage to any property (other than the Works), which may arise out of or in consequence of the execution and completion of the Works and the remedying of any defects therein, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, subject to the exceptions defined in Sub-Clause 20.6.

20.6 Exceptions

The "exceptions" referred to in Sub-Clause 20.5 are:

- (a) the permanent use or occupation of land by the Works, or any part thereof,
- (b) the right of the Employer to execute the Works, or any part thereof, on, over, under, in or through any land,
- (c) damage to property which is the unavoidable result of the execution and completion of the Works, or the remedying of any defects therein, in accordance with the Contract, and
- (d) death of or injury to persons or loss of or damage to property resulting

from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor, or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or, where the injury or damage was contributed to by the Contractor, his servants or agents, such part of the said injury or damage as may be just and equitable having regard to the extent of the responsibility of the Employer, his servants or agents or other contractors for the injury or damage.

20.7 Indemnity by Employer

The Employer shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the exceptions defined in Sub-Clause 20.6.

20.8 Cross Liabilities

The insurance policy shall include a cross-liability clause such that the insurance shall apply to the Contractor and to the Employer as separate insured.

20.9 Accident or Injury to Workmen

The Employer shall not be liable for in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or any Subcontractor, other than death or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, other than those for which the Employer is liable as aforesaid, and against all claims, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

20.10 Evidence and Terms of Insurances

The Contractor shall provide evidence to the Employer as soon as practicable after the respective insurances have been taken out but in any case prior to the start of work at the Site that the insurances required under the Contract have been effected and shall, within 84 days of the Commencement Date, provide the insurance policies to the Employer. When providing such evidence and such policies to the Employer, the Contractor shall notify the Engineer of so doing. Such insurance policies shall be consistent with the general terms agreed prior to the issue of the Letter of Award. The Contractor shall effect all insurances for which he is responsible with insurers and in terms approved by the

Employer.

20.11 Adequacy of Insurances

The Contractor shall notify the insurers of changes in the nature, extent or programme for the execution of the Works and ensure the adequacy of the insurances at all times in accordance with the terms of the Contract and shall, when required, produce to the Employer the insurance policies in force and the receipts for payment of the current premiums.

20.12 Remedy on Contractor's Failure to Insure

If the Contractor fails to effect and keep in force any of the insurances required under the Contract, or fails to provide the policies to the Employer within the period required by Sub-Clause 20.10, then and in any such case the Employer may effect and keep in force any such insurances and pay any premium as may be necessary for that purpose and from time to time deduct the amount so paid from any monies due or to become due to the Contractor, or recover the same as a debt due from the Contractor.

20.13 Compliance with Policy Conditions

In the event that the Contractor or the Employer fails to comply with conditions imposed by the insurance policies effected pursuant to the Contract, each shall indemnify the other against all losses and claims arising from such failure.

20.14 Source of Insurance

The Contractor shall place all insurance relating to the Contract (including, but not limited to, the insurance referred to in Clauses 20) with insurers from India.

21 Release From Performance

Payment in Event of Release from Performance

If any circumstance outside the control of both parties arises after the issue of the Letter of Award which renders it impossible or unlawful for either or both parties to fulfil his or their contractual obligations, or under the law governing the Contract the parties are released from further performance, then the parties shall be discharged from the Contract, except as to their rights under this Clause and Clause 16.3 and without prejudice to the rights of either party in respect of any antecedent breach of the Contract, and the sum payable by the Employer to the Contractor in respect of the work executed shall be the same as that which would have been payable under Clause 14 if the Contract had been

terminated under the provisions of Clause 14.

22 Notices

22.1 Notice to Contractor

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

22.2 Notice to Employer and Engineer

Any notice to be given to the Employer or to the Engineer under the terms of the Contract shall be sent by post, cable, e-mail or facsimile transmission to or left at the respective addresses nominated for that purpose.

22.3 Change of Address

Either party may change a nominated address to another address in the country where the Works are being executed or in the country of Employer by prior notice to the other party, with a copy to the Engineer, and the Engineer may do so by prior notice to both parties.

23 Changes in Cost and Legislation

23.1 Increase or Decrease of Cost

There shall be no addition or deduction from the Contract Price any sums in respect of rise or fall in the cost of labour and/or materials or any other matters affecting the cost of the execution of the Works as far as the items of Works covered are concerned. However, addition or deduction from the Contract Price any sums in respect of rise or fall in the cost of POL may be determined as defined in SCC.

23.2 Subsequent Legislation

If, after the date 28 days prior to the latest date for submission of tenders for the Contract there occur in the country in which the Works are being or are to be executed changes to any National or State Statute, Ordinance, Decree or other Law or any regulation or bye-law of any local or other duly constituted authority, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or bye-law which causes additional or reduced cost to the Contractor, other than under Sub- Clause 23.1, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer

and the Contractor, be determined by the Engineer and shall be added to or deducted from the Contract Price-and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

24 Sustainability of JV

In case JV/consortium is not sustained due any reasons or discrepancies arising amongst the JV/consortium members, unsustainability of JV/consortium shall be determined by the Engineer in Charge/Employer during the monitoring in the contract period based on the failure of the deliveries/missing of the milestones and other deliverables. The same shall be dealt in the following manner:

- (a) If JV/consortium becomes unsustainable after being selected as L1 EMD of the defaulting JV/consortium shall be forfeited.
- (b) If JV/consortium becomes unsustainable after the award of contract, the employer has complete authority to nominate another contractor to complete the balance work on risk and cost of the defaulting contractor. The Contractor will be notified of the decision to stop the work and get the measurements done to ascertain the value of work completed till date. No payment shall be released immediately, however, after completion of entire work on risk and cost, the differential cost would be recovered from all held up amount (BG, EMD, Security deposit and unpaid amount for the work done) of the defaulting Contractor and if any balance amount is still available, that shall be released to the defaulting Contractor.

25 Independent Relationship

Notwithstanding anything contained in this Agreement, the relationship between the Employer and the Contractor shall always remain on a principal to principal basis and the Contractor shall never declare / claim himself to be an agent of the Employer. The Contractor shall alone be responsible for all its action / omission of the Contractor shall bind the Employer in any manner unless expressly so provided in this Agreement.

26 When the Contract can be determined

26.1 Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by

notice in writing absolutely determine the contract in any of the following cases:

- i. If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii. If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- iii. If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge.
- iv. If the contractor persistently neglects to carry out his obligations under the contract and/ or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
- v. If the contractor shall offer or give or agree to give to any person in IWAI service. or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of contract.
- vi. If the contractor shall obtain a contract with IWAI as a result of wrong tendering or other non-Bonafide methods of competitive tendering or commits breach of integrity pact.
- vii. If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjust insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force, or make any conveyance or assignment of his effects or composition or arrangement for

the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being enforce for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.

- viii. If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- ix. If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- x. If the contractor assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer -in-Charge.

26.2 When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer- in-Charge on behalf of the IWAI with the approval of the competent authority shall have powers:

- ii. To determine the contract as aforesaid (of which termination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the IWAI.
- iii. After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof: as shall be un-executed out of his hand and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work.
- iv. The event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution

- v. of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-- in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value to certified.

PART-II-SPECIAL CONDITIONS OF CONTRACT (SCC)

1. General

- 1.1. Special Conditions shall be read in conjunction with the General Conditions of Contract, specification, ToR, Drawings and any other documents forming part of this contract wherever the context so requires.
- 1.2. Notwithstanding the Sub-division of the documents in to these separate section and volume every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and as a part of the Contract.
- 1.3. Where any portion of the general Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions, the provisions of the Special Conditions shall be deemed to over-ride the provisions of the General Conditions of Contract.
- 1.4. Where it is mentioned in the Specification that the contractor shall perform certain work or provide certain facilities, it is understood that the contractor shall do so at his own cost.
- 1.5. The materials and workmanship shall satisfy the relevant standards as stipulated under the Contract Agreement, the specification conditioned herein and codes referred to. Where the specifications stipulate requirement in addition to those contained in the Standard codes and specifications these additional requirements shall also be satisfied.

2. The Site

2.1 General Site Information

The Contractor shall visit the site and satisfy themselves on the actual site conditions, meteorological and other data, before tendering. Whatever information and, other relevant data given in the tender documents are only intended as a general guidance for the contractor and no warranty is given for the correctness of the same.

2.2 Condition of Site

The Contractor, before carrying out any work, shall inspect the Site in conjunction with the Engineer's Representative to establish its general condition.

3. Order of Works

The order in which the works are to be carried out by the Contractor shall be to the approval of Employer and shall be such as to suit the detailed method of construction, adopted by the Contractor as well as the Work Plan / Overall Schedule approved by the Employer. The works shall be carried out in such a manner so as to enable the other Contractors to work concurrently so that the entire project may be brought into use immediately after the completion of works.

4. General Conditions of Construction and Erection Work

- 4.1 The work shall be permitted on the site round the clock.
- 4.2 The contractor must arrange for the placement of workers in such a way that the delayed completion of the works of any part thereof for any reason whatsoever will not affect their proper employment. The Employer will not entertain any claim for over time /idle time payment etc. whatsoever.
- 4.3 The Contractor shall submit to Employer / Engineer-in-Charge reports at regular intervals regarding the state and progress of work. The details and proforma of the report will mutually be agreed after the award of Contract.

5. Surveys and Levels

- 5.1 Before the works of any part thereof begin, the Contractor shall survey and take levels of the site of the works both above and below water level / Chart Datum level and agree all particulars on which the measurements of the works are to be based. Such particulars shall be recorded and after agreement; the drawings shall be signed by the Employer / Engineer-In-Charge and the Contractor.

6. Setting out the Works

- 6.1 The Employer shall furnish the relevant existing grid points with benchmark with reference to permanent benchmarks. It shall be Contractor's responsibility to the set out the necessary central points on land and to set out alignment. The Contractor shall have in his employees, an efficient survey team for this purpose and the accuracy of such setting out works shall be Contractor's sole responsibility.
- 6.2 Before beginning the work, the Contractor shall work out the control points on ground which, are pre requisite for carrying out hydrographic surveys, accurately, with suitable markers as approved by Employer. All these points and markings shall be checked and approved by Employer's Representative before starting the work.
- 6.3 The Contractor shall also provide necessary equipment, labour and other facilities for proper

checking and inspection of the fabrication, welding, painting and any other such activity forming part of the total scope of the work at no cost to the Employer.

6.4 The Contractor shall give Employer not less than 24 hours' notice in writing of his intention to inspect for any part of the works so that arrangements may be made for checking the work.

6.5 The Contractor shall at his own expense provide all assistance which Employer or his representative may require for checking and inspection.

7. Conditions for work

7.1 The decision of EIC to accept the work done with or without the Liquidated damages shall be final and binding.

7.2 No idle time charges will be paid to the contractor on any account.

7.3 The Employer / Engineer-in-charge or his representative will inspect, co-ordinate, measure and certify the work. He has the right to inspect at any time during the contract period for which contractor's authorized agent shall be available at site during such inspection.

7.4 The Contractor may execute the work round the clock and on all days including Sundays and Public Holidays except National Holidays subject to such restriction as may be imposed by State Govt. / local body or Engineer in Charge.

7.5 If the Contractor's personnel or any outside labour employed to work during execution of Contract, breaks or damages/destroys any vessel, craft, net, fishing stakes etc. building, road, kerb, water pipe, fence, bund, wires, trees, crop, fruit or cultivated ground during the period of agreement, the same shall be made good by the Contractor at his own expenses or in default the IWAI may cause the same to be made good by other sources and deduct the expenses from any sums that may be then or at any time thereafter may become due to the contractor.

7.6 The rate quoted shall include all taxes, duties and any other levies. No additional payment on any such account shall be payable by IWAI. However, GST which will be quoted separately by the Bidder will be reimbursed to the Bidder on producing proof of payment

7.7 The right to award/split up work or to reject the offer without assigning any reason is reserved with the Authority.

7.8 If the work is stopped continuously for more than 3 days due to law and order, the Contractor has to report to EIC the same and take actions mutually in accordance with prevailing local laws for removal of such problem and proceeding further with the work to mutual benefit.

7.9 Any charge incurred for adopting environmental safeguards, minimizing detrimental impacts, enhancing the beneficial aspects of the project and for effective management of the environmental resources affected by the project shall be met by the Contractor. No additional charges on any account shall be payable by IWAI.

8. Standard and Standard Products

8.1 Standards

Save in so far otherwise specified in the Contract the relevant provisions of the appropriate Bureau of Indian Standards shall apply for all materials and workmanship. Where relevant BIS standards do not exist, the latest version of the relevant standards in vogue shall be applied. Where both above Standards may not be available, the following Standards shall also be referred to and adopted.

- BS : British Standard Specification
- CP : British Standard Code of Practice
- ASTM : Standard of American Society for Testing Materials.

8.2 Standard Products

If mention is made in the Contract of named products of individual manufacturers, this is an indication of the standard type and workmanship of goods, which are satisfactory to the Engineer. The Contractor may substitute similar products of at least equal quality and suitability, subject to the approval of the Engineer.

Proposals by the Contractor for the supply of manufactured products shall be accompanied by certification that the manufacturer's products are approved by the relevant standards authority.

9. Security and Safety

- 9.1.** The Contractor shall comply with all regulations imposed by the Central / State / Local Authorities and Employer in respect of the passage of Plant, Vehicles, materials and personnel through waterways.
- 9.2.** The Contractor shall take all possible precautions to prevent out breaks of fire on the site and in all offices, stores, camps and other places and things connected therewith and especially with respect to the safe storage of petroleum products, explosives and all other dangerous of hazardous goods. The Contractor shall comply with all rules, regulations and orders of any Statutory Authority and of Employer at no extra cost to the Employer.
- 9.3.** The Contractor shall obtain from the Employer details of any restricted areas in or around the site and shall have prominently and clearly displayed for the information of his staff and work people notices defining any such restricted areas. Such notices shall be provided at his own expenses.

9.4. If required, the Contractor shall take entry passes to the restricted areas for all personnel labourers and vehicle. No claim whatsoever on this account will be entertained.

10. **Health Safety and Environment, Risk & Hazard**

10.1. The Contractor shall prepare and submit to the Employer / Employer-In-Charge the Health Safety and Environment (HSE) Plan in line with Employers HSE policy and Contractors company policy within 28 days of commencing of works for the approval of the Employer. The policy shall be followed during the life cycle of the project. The policy may be updated as and when required.

10.2. The Contractor shall prepare and submit the Risk and Hazard identification and mitigation plan within 28 days of commencing of works for approval of the Employer. The plan may be updated as and when required.

11. **Arbitration**

In addition to Clause 15.3.3, in case of contract with another Public Sector Undertaking, following Arbitration Clause shall apply: "Except as otherwise provided, in case of a contract with a public Sector Undertaking if at any time any question dispute or difference whatsoever arises between the parties upon or in relation to, or in connection with this agreement, the same shall be settled in terms of the Ministry of Industry, Department of Public Enterprises O.M No. 3/5/93-PMA dt.30.06.93 or any modifications / amendments thereof. "The arbitrator shall have the power to enlarge the term to publish the award with the consent of the parties provided always that the commencement or continuation of the arbitration proceeding shall not result in cessation or suspension of any of other rights and obligations of the parties of any payments due to them hereunder.

12. **Taxes, duties and levies etc.**

The prices shall include all the taxes, levies, cess, octroi, royalty, terminal tax, excise, GST or any other local, State or Central taxes as applicable/ charged by Centre or State Government or Local authorities on all materials that the contractor has to purchase for the performance of the contract and services, shall be payable by the contractor and the Authority will not entertain any claim for compensation whatsoever in this regard.

13. **Additional Conditions**

i. **PERFORMANCE OF THE WORK:**

The work shall be performed at the place or places named in the tender or at such other places or places as may be approved by the Owner.

ii. SPECIFICATION:

In particular and without prejudice to the foregoing condition, when tenders are called for in accordance with the particulars, the contractor's tender to supply the Survey Vessel in accordance with such particulars shall be deemed to be an admission on his part that he has acquainted himself with the details thereof and no claim shall lie against the owner on the ground that the contractor did not examine or acquainted himself with such particulars.

iii. GUARANTEE FOR THE MAIN ENGINES AND EQUIPMENTS SUPPLIED

The contractor will be required to obtain and furnish a guarantee for the main engines and auxiliaries, machineries fitted on the Survey Vessel to the effect that General spares suppliers will be in a position to supply the spare parts of the engines and gear boxes and other machineries and the spares will continue to be available from the stock for a period of at least seven years from the date of the receipt of the machineries and equipment.

iv. MISTAKE IN DRAWINGS:

The contractor will be responsible for and shall pay for any alterations of the work due to any discrepancies, errors or omissions in the drawings or other particulars supplied by him whether such drawings or particulars have been approved by the Owner or not, provided that such discrepancies, error or omission be not due to inaccurate information or particulars furnished to the Contractor on behalf of the Owner. If any dimensions figured upon a drawing or plan differ from those obtained by scaling the drawing or plan, the dimensions as figured upon the drawing or plan shall be taken as correct.

v. VARIATIONS (i.e. MODIFICATIONS) IN DESIGN AND DIMENSION:

Should any alterations in or additions to the works as specified in the said specifications not involving extra cost to the Contractor be considered necessary or expedient by the Contractor by the owner or the Inspecting Owner or Officer and be mutually agreed on in the writing the Contractor shall execute the same without any charge beyond the Contract Price. But if the owner shall desire any alteration or additions involving extra cost to the contractor before executing the same shall tender to the owner a written offer stating the nature and cost of such alterations or additions and the extension of time if any required for making them and if the owner shall accept the said offer and allow such extension of time in writing the Contractor shall be bound to execute the work. No extra work shall be executed by the Contractor or if

executed shall be paid for to the Contractor except such as may be embraced in such offer and acceptance. The Contractor shall allow the owner the value as shall be mutually agreed in writing, or any materials and value as shall be mutually agreed in writing or any material and workmanship dispensed with by any such alterations or additions.

Provided that no such variations shall except with the instructions from the Inspector as to carry out the work which either then or later will in the opinion of the contractor, involve a claim for additional payment, the Contractor shall, as soon as reasonably possible after receipt of instructions aforesaid advise the Inspector to that effect.

vi. APPROVAL OF DRAWINGS WITH CONSENT OF OWNER

In case the survey vessel is constructed based on the standard & proven design no further approval to the detail drawings for construction shall be required. However, the G. A. plan may require the approval of statutory body for registration. In case the survey vessel shall be constructed with new design, the detailed drawings so prepared from the general arrangements drawing should be approved from owner or his authorized officer. Approved statutory body/Society if engaged will give approval of all construction drawings. However, other drawings such as General Arrangement, Machinery layout, system control drawings and particular of all equipment to be installed shall be forwarded to owner or his authorized Officer for his approval. Copies of all drawings to be sent to the owner, IWAI will be the Owner of such design and drawings of the Survey Vessel.

vii. CONTRACTOR TO CONSTRUCT, EQUIP, TEST AND DELIVER THE SURVEY VESSEL.

Subject to and in accordance with the provisions of the Contract, the Contractor shall in the best and most workman like manner and with material, thing and workmanship respectively of the best kinds build, equip and test to the satisfaction of the Owner and deliver to the representative in the condition provided by this Contract, the Survey Vessel of the description dimensions containing the accommodation and supplied with all apparatus, permanent and temporary fittings, outfit and gear and the spare gear mentioned and described in or to be informed from the modifications hereto attached and from the specifications furnished by the Contractor and accepted by (Owner) for the purposes of this Contract, both of which herein after called the said specifications here to attached and from the plan or plans which have for purposes of identification been signed on behalf of the Owner and by the Contractor and shall

supply and deliver as herein after mentioned the spare parts as specified in all respects with this contract, the said specifications and the said plans, supplementary drawing, instructions and explanations as shall from time to time herein after be furnished and given by the contractor to and be approved by the Owner the contractor shall also in manner aforesaid when requested by the Owner supply further drawings and execute supply and complete to the satisfaction of the Owner all other works, materials and thing mentioned and described in or to be inferred from the said specifications and the said drawings furnished and given to and approved by the Owner shall provide to the satisfaction of the Owner, labour, superintendence, power, materials and things which shall be requisite for the due performance, execution and completion of all and every work, matters and thing hereby contracted to be executed and done.

viii. CONTRACTOR TO INCLUDE EXECUTION AND SUPPLY OF ALL WORK MATTERS AND THINGS REQUIRED BY OWNER FOR DUE PERFORMANCE OF CONTRACT:

This contract shall be deemed to comprise the design of **Survey Vessel**, construction, testing, installation of the equipment/machineries and delivery complete in working order in all respects of the Survey Vessel together with the equipment and all other things to be supplied in connection there with and the due performance, execution and completion of all works, matters and thing necessary or proper for such construction, installation of equipment/machineries and delivery at the price herein after mentioned and accordingly the Contractor shall execute all works and find and supply all things which the Owner or the inspecting Owner or officer shall consider necessary proper according to the direction of the Owner or inspecting authority or officer and to their satisfaction according to the true intent and meaning of this Contract and notwithstanding that any such work or things respectively may not be expressly mentioned or referred to in the said specification and the said plans and the Contractor shall not be entitled to any payment or allowance whatsoever in respect thereof unless such payment or allowance is, in the opinion of the Owner, occasioned on account of such modifications of the said Contract, as have been agreed to in writing by the Owner.

ix. INSPECTION

(a) Obligation to carryout Inspector's instructions

The Contractor shall satisfy the Inspector that adequate provision has been made, (i) to carry out his instructions fully and with promptitude (ii) to ensure that parts required to be inspected

before use are not used before inspection; and (iii) to prevent rejected parts being used in errors. Where parts rejected by the inspector have been rectified or altered, such parts shall be segregated for separate inspection and approved before being used in the work.

(b) Inspection and testing during progress of work :

The Contractor shall offer the Owner or the Inspecting authority or Officer all proper and reasonable facilities for examining, inspecting and testing the materials, machinery and workmanship used or intended to be used or employed during the progress of the construction and installation of equipment of the Survey Vessel and on completion thereof shall also supply free of charge such apparatus, materials, tools or labour as may be required from time to time for the purpose of such examinations, inspections and testing. The Owner, the Inspecting authority or officer shall have access to the place or places where any part of the machinery or equipment is being constructed or is stored at all reasonable times during the execution of this Contract and in case any part of the work shall have been covered or closed without previous inspection the Contractor shall if required open such part or parts wherever necessary to enable the Owner or Inspecting authority or Officer to inspect the part so opened up at the expense of the Contractor.

(c) Intimation for Inspection & Cost involved

The Contractor shall inform the Inspector in writing when any portion of the work is ready for inspection, giving him sufficient notice to enable him to inspect the same without retarding the further progress of the work. No portion of the work shall be considered completed in accordance with the terms of the contract until the inspector shall have certified in writing that it has been inspected and approved by him. The expense incurred in the inspection and / or tests at the place agreed upon the contract will be defrayed by the owner, provided that the results are the event of inspection and or tests providing unsatisfactory and resulting in the non-acceptance of the plan/structure or any portion thereof, the cost of such re-inspection and / or tests shall be borne by the contractor.

x. REPLACEMENT OF DEFECTIVE WORK, MATERIAL AND FITTINGS

All materials, machinery and workmanship used and employed in carrying out this Contract shall be to the entire satisfaction of the Owner or the Inspecting Owner or Officer. Any portion or portions of the material, machinery or any of the works done under this Contract which may be considered by the Owner or the Inspecting Owner or officers to be defective or unsatisfactory or not in accordance with the said specifications and plans and the requirements

of the Survey Vessel shall be replaced in a manner satisfactory to the Owner or the Inspecting Owner or Officer at the sole expense of the Contractor.

If the Inspector shall find any work to be not in accordance with the contract, he shall be entitled to give the Contractor notice thereof, and the Contractor shall forth with make the defective work good or alter the same to make it comply with the requirements of the contract. Should he fail to do so within a reasonable time (as to which the Inspector shall be the judge), the owner may reject and replace at the cost of the contractor the whole or any portion of the work as the case may be, which is defective or fails to fulfil the requirement of the contract. Such replacement shall be carried out by the owner within a reasonable time to the same specifications and under competitive conditions.

The Contractor's full and extreme liability under this clause shall be satisfied by the payment to the owner, of the extra cost, if any, of such replacement delivered and / or constructed as provided for in the original contract, such extra cost being the ascertained difference between the price paid by the Owner, under the provisions above mentioned, for such replacement and the contract price for the work so replaced, and there payment of any sum paid by the owner to the Contractor in respect of such defective work. Should the Owner not so replace the rejected work within reasonable time, the Contractor's full and extra liability under this clause shall be satisfied by the repaying of all money paid by the Owner to him in respect of such work.

xi. TRIALS

Forth with after the completion of the Survey Vessel in strict conformity with the Technical specifications under this contract the Survey Vessel shall undergo, in the presence of the Owner and the Inspecting Authority or Officer or their representative trials near the yards of construction or any other places as mutually agreed upon in accordance with the provisions of the specifications and as directed by the Owner or the Inspecting Authority or Officer.

The said trials shall be at the sole expenses and risk of the Contractor who shall pay and discharge all costs and bear all liabilities whatever arising out of the same. The contractor shall supply all crew and officers, fuel, gear and equipment required for the trials, all at his own expenses and shall also be responsible for all risks to the Survey Vessel and other craft or to any person or property during the continuance of such trials and make good any damage

which may arise in consequence thereof and in dignify the owner and his Officers / and servants there from and from all claims, action, suits and proceedings and all costs, charges and expenses in respect there of or in any way arising there out or incidental thereto. Provided that all claims in respect of the owner shall meet the employee's representatives of the Owner.

xii. DELIVERY

(a) Preparing for voyage and delivery

Immediately after completion of satisfactory trials the Contractor shall proceed to make the Survey Vessel ready for the delivery at specified destination and shall there upon deliver the Survey Vessel or cause the same to be delivered in a proper and seaman like manner at their own risk at the said specified destination and deliver the same in the charge of the representative in such suitable place and position as may be indicated by him complete with all necessary certificates and licences and in a good, complete and satisfactory condition of repair, fair wear and tear, consequent on the voyage accepted and with all stores and equipment's in the specification mentioned or herein provided for on board, any damages incurred (other than fair wear and tear) or defects discovered during such navigation being made good by the Contractor at his own expenses prior to such last mentioned delivery. A sufficient crew and all engines and other necessary and usual stores and equipment are to be provided for the delivery by the Contractor and all costs and charges of every description in connection with the delivery are to be borne by the Contractor and all dock, canal and harbour dues and charges are to be paid by him.

The contractor shall comply with all Department of Shipping Rules, if any, and must also satisfy the requirements of the insurance broker, under writers and surveyors and not do anything or leave anything undone where by the cost of insurance premium is increased. Should the cost of insurance be in any way increased by the failure of the contractor to meet such requirements, any such increased cost shall be borne by the contractor.

(b) SPARE PARTS

The spare parts for 5000 hrs operation of vessel are required to be supplied along with the Survey Vessel at the cost of the contractor.

Should it be necessary for the Contractor to send any of the spare parts by the separate means, the contractor shall be responsible for the cost of delivery and also for the proper packing, storage and protection whilst on the board and for their subsequent reception and delivery to the representative.

(c) PROVISION AS TO TRIALS

As soon as the Survey Vessel shall have been re-equipped and made ready for work to the satisfaction of the representative it shall then undergo such trial as their representative may require to demonstrate that neither the hull, machinery nor any other parts of the Survey Vessel have been damaged during the delivery and that all are in good working order and that the Survey Vessel is upto the standard required when working under local conditions. Any defect noticed during such trials shall be rectified by the Contractor to the satisfaction of the Owner/Inspector or the representative at the cost of the contractor.

**(d) SURVEY VESSEL TO BE AT CONTRACTOR'S RISK UNTIL
THE ISSUE OF CERTIFICATE OF DELIVERY**

The said delivery and re-equipment of the Survey Vessel at the specified destination shall bear the expense and risk of the contractor who shall pay and discharge all costs and liabilities thereof and connected therewith and shall continue to be responsible for the safety of the Survey Vessel until the Owner or his representative shall have accepted delivery thereof as herein after mentioned. If any loss (whether total or otherwise) shall be sustained or incurred by the Survey Vessel by any means or from any cause either during the delivery or before acceptance by the Owner, then and in any such case the Contractor shall at his own expenses forthwith make good such loss subject in the case of total or constructive total loss to the provision of this contract.

(e) AS TO ACCEPTANCE OF DELIVERY

When and as soon as the Survey Vessel shall have been duly re-equipped and made ready for work in accordance with the specifications and shall be in a complete and satisfactory condition with their certificates, licences and outfits and spare gears enumerated in the specifications on board then the Survey Vessel shall be delivered to the representative of Owner who shall there upon give to the Contractor or to such other persons who may be appointed by the contractor to receive the certificates of such delivery and of the date thereof and the granting of such delivery and of the date thereof and the granting of such certificates shall along be evidence of the acceptance by the owner of the delivery and of the date thereof.

(f) POWER FOR REPRESENTATIVE TO DISMANTLE AND RE-EQUIP THE SURVEY VESSEL IN DEFAULT OF CONTRACTOR

If after the arrival of the Survey Vessel at the specified destination the contractor shall fail to dismantle any equipment/machineries of the Survey Vessel and re-equip and make it ready in all respects for work to the satisfaction of the representative or shall in the opinion of the representative be carrying on such dismantling, re-equipment and making ready for work negligently, improperly or so slowly as to cause or be delayed then in any such case the representative on behalf of the Owner may without vitiating this Contract take the Survey Vessel out of the possession of the Contractor and employ any persons or workmen upon such terms as he may think fit to dismantle and re-equip the Survey Vessel and make it ready for work in accordance with the specifications under this Contract and to perform any of the other obligations of the contractor under this contract which shall remain to be performed and the contractor shall pay to owner such a sum as shall be certified in writing by the representative to represent to costs and expenses incurred by the owner or the representative by reason or in course of the exercise of any of the powers conferred on the representative under this clause or the owner may at his option deduct such sum from the contract price.

xiii. NUMBER OF WORKMEN AND RATE OF PROGRESS TO BE INCREASED ON REQUISITION OF THE OWNER.

The contractor shall at all times during the progress of the construction and installation of equipment and machineries of the Survey Vessel and subject to the limits of his control in the matter of labour employment and sufficient number of skilled workmen and labour employment and sufficient number of skilled workmen and labourers with necessary over looks and proceed with the works here by agreed to be executed (herein after referred to as the “workers with such dispatch as in the opinion of the Owner or Inspecting Authority or Officer shall be necessary in order to secure the due completion of the Survey Vessel within the time limit for that purpose by the contract and shall also at times during the progress of the works upon being required to do so by the Owner or the Inspecting Authority or officers hasten the rate of progress of the Survey Vessel and of the work in accordance with any such requisition and to the satisfaction of the Owner or the Inspecting Authority Officer PROVIDED ALWAYS that nothing here in contained nor anything done or omitted to be done by the Owner or the inspecting Authority or officer on behalf of owner in pursuance hereof shall be deemed to release the Contractor from or diminish or affect obligation to complete the vessel within the limit by this Contract or their liability in respect thereof.

xiv. DEFECT LIABILITY PERIOD (DLP)

In the event of any defect being discovered in any part of the Survey Vessel, the machineries or equipment or fittings (which is not attributable to fair wear and tear of the Survey Vessel nor to improper management on the part of the official staff of the Survey Vessel during a period of 12 calendar months from the date of the delivery certificate, the Contractor shall supply to Owner or their representative at the specified destination new parts to replace any that may be proved to have been so defective or shall pay to Authority such sum as it would cost the Contractor to supply such parts for replacement from the Contractors works.’ The cost of receiving any such defective parts and or fitting such parts in replacement thereof shall be borne by the Contractor or be adjusted as liquidated damages from the security deposits/payment of last instalment of the contract price to such amount as it would in the opinion of the Owner have cost the contractor if the removing and replacing had been done at their works. The contractor shall also be entitled to have any workmanship or material claimed to be defective inspected by a representative to be appointed by them for that purpose or should the Contractor so require, Owner shall be bound to consign to the Contractor at his works in and at the Contractors expenses the parts claimed by the Owner to be defective so that the contractor may have an opportunity of satisfying himself as to the defect complained of and also be in position to operate his relief if any against any sub-contractor in respect of such defective parts.

xv. REGISTRATION OF SURVEY VESSEL

Registration cost to be borne by contractor. The Contractor shall complete registration formalities of vessel prior to delivery by submission of builders and other certificates/documents and do such other acts and things as may be necessary or proper on his part for the registration of the Survey Vessel in the name of the Owner. Failing this the Contractor must arrange for the Survey Vessel to proceed to the specified delivery destination under a "Single Voyage Permission" from the appropriate authorities and all fines payment or penalties which may become payable shall be borne by contractor. All other costs by reason of any defect in such registration or during the delivery of the Survey Vessel to the specified destination shall be paid by the Contractor or may be deducted from the money payable to him under this contract and he shall indemnify the Owner, the representative from all claims, actions, suits and proceeding and all costs, charges and expenses in respect thereof.

xvi. INSURANCE

The Contractor shall at his own cost fully insure and keep insured in the joint names of the Owner and the Contractor the Survey Vessel and the machineries, materials and thing used or intended for use in the construction and outfit thereof. Hull insurance and machinery insurance may be done by the Builder but the insurance cover should cover the effected payment as well as the extent of work completed. The contractor is also to keep insured the value of any modifications, additions and spare parts as may be agreed upon from time to time during the construction of the Survey Vessel.

The Policy/Policies shall be effected with reputable Insurance Company approved by the Govt. and shall comprise insurance against fire, launching and all other risks, accidents and damages excluding War Risk which for the time being can be covered by insurance during and after the construction of the Survey Vessel and whiles here mains in the harbour or the yard of construction or when engaged on or in connection with any trials made under this Contract as well as the perils of the river and all other risk of every kind including War Risk so far as they are insurable, or whilst lying therein or on a slipway or in a dry dock or being tried near there to previous to being accepted by Owner and the Contractor shall from time to time (if from any cause the Survey Vessel shall not be delivered to and accepted by the Owner during the term of such policies) renew and said insurance and pay and continue to pay all premium which shall be come payable in respect of such insurance and within seven days from the date when such renewed insurance is effected or premium paid shall deliver to the Owner the policy or policies there of and the receipts for such premium PROVIDED ALWAYS that in case of default by the Contractor to keep up the said insurance or to effect any such renewal insurance as aforesaid then the Owner if they shall think fit shall be at liberty to do so and there upon the Contractor shall repay the owner the amount of the premium paid by them or the Owner shall be at liberty at his option to deduct the amount thereof from any sums payable to the Contractor under this contract PROVIDED ALSO that nothing wherein contained nor anything done or omitted to be done by the Owner in pursuance hereof shall be deemed to release the Contractor from diminish or affect his obligation to keep the dredging machineries, materials and thing insured to the full amount of the value therefore from time to time in accordance here with until her acceptance at the place of delivery mentioned in the Contract nor shall diminish or affect the liability of the Contractor in respect thereof. If any event shall happen giving rise to a claim under the insurance policy to be effected under this clause or if the SURVEY VESSEL shall become a total or constructive total loss on the delivery to specified destination or after the arrival there and before the acceptance by

the representative owing to perils of the river of other risks insurance so far as they are insurable to be effected for the delivery at the specified destination the Owner without prejudice to the rights to have this contract performed within such extended time and at such price as may be mutually agreed and failing agreement determined by the Owner shall give the money which shall become payable under whichever of the said policies the claim shall arise and retain the same paying the contractor the difference between the aggregate of such sums as they may have previously paid the contractor under this contract and such total amount as the Owner may certify would have been payable to the contractor if this contract had been terminated. Provided that if the Survey Vessel is covered against War Risks the premium on the account shall be payable by Owner.

xvii. QUOTATION OF RATES BY CONTRACTOR

The price quoted by contractor shall be firm with no provision for any deviation as per in the cost schedule. The price shall include taxes and duties (if applicable), the cost of the material, equipment, machineries, dry docking, test & trial and delivery at Badarpur/Karimganj.

The contractor has to arrange inspections of underwater component of Survey Vessels as per methodology recommended by Class and approved by EIC duly considering site conditions.

Accordingly, provision is to be made and rate to be quoted.

14. Additional Conditions other than above

In addition to the above-mentioned SCC the following table shall also form part of SCC which are to be read in conjunction with relevant GCC Clause:

| GCC Clause | Heading | Definitions |
|-------------------|---|--|
| 1.3 | Language for Communication | English |
| 2.3 | Right of access to site | - |
| 3.1.2.4 (ii) | Percentage of variation under Engineer's duty and Authority | 20 % (twenty percent). |
| 4.4 | Performance security and security deposit | Shall be released only after the completion of defects liability period. |
| 4.7 (b) | Unforeseeable Physical Obstructions or Conditions | No cost on any account due to unforeseeable physical obstructions or conditions shall be added to the Contract price |
| 4.9.1 | Program to be Submitted | 14 days |

| GCC Clause | Heading | Definitions |
|-------------------|--|--|
| 4.9.3 | Cash Flow Estimate | 14 days and subsequently submit the revised cash flow estimate at mutually agreed interval |
| 5.4.4 & 5.4.5 | Payments to Nominated Subcontractors | The GCC clause 5.4.4 & 5.4.5 shall now be read as: Contractor shall be entirely responsible for all the payments to be made to the nominated sub-contractor. Contractor shall hold employer indemnified against all claims arising from sub-contracting of works. The contractor shall produce No claim Certificate from the sub-contractors at the demand of EIC, before final bill payment. Contractor shall not be absolved of his responsibilities and duties of the contract by nominating sub-contractors. |
| 8.5 | Time for completion | 08 months from the signing of agreement |
| 8.12 | Limit of Liquidated Damages | 10 percent of the Contract Price. |
| 10.2 & 10.3 | Taking over of sections or parts | There shall be no taking over of sections or parts. Only interim completion certificate and final completion certificate shall be given as per the conditions of contract. |
| 11.0 | Defects Liability Period | 12 months |
| 15.2 (b) | Minimum Amount of Interim Payment (stage wise) | Interim Payment Certificates |
| 15.13 | Mobilization Advance Payment | Applicable |