



ARTICLE 2 अनुच्छेद-2: COMMERCIAL REQUIREMENT FOR THE NIT निविदा की ब्यवसायिक आवश्यकता:

FEES / DEPOSITS	
Tender Fee निविदा प्रपत्र मुल्य (स्टैक के परिछेद 03 मे उदधृत)	Rs 500/- (Not Applicable for GRSE Registered Vendors)
Earnest Money Deposit (EMD) बयाना राशि जमा	Rs 10,00,000/- (Not Applicable for GRSE Registered Vendors)
Security Deposit (SD) प्रतिभूति	5% of Work Order Value (inclusive of GST)
Liquidated Damages परिनिर्धारित नुकसान	0.5 % per week, Max 5% of unexecuted job
Evaluation of L1 एल1 का मूल्यांकन	L1 bidder will be decided on Totality Basis

*Note: (a) Bidders not registered with GRSE are required to submit Earnest Money Deposit. Bidders registered with GRSE are required to submit Bid Security Declaration against this tender.

(b) MSE/NSIC registered firms having the tendered service listed in their MSE document will be eligible for exemption from submitting EMD/Bid Security Declaration.

(c) Non-submission of EMD/Bid Security Declaration or a valid MSE/NSIC certificate may lead to offer rejection.

(d) If any vendor other than (a) M/s. SHM Shipcare Pvt Ltd (b) M/s. Patel Engg Works (Vizag) (c) M/s. Fidere Marine Services Pvt Ltd (d) M/s. Homa Engineering Works & (e) M/s Yeoman Marine Services Pvt Ltd & (f) M/s. AMEL Marine Tech participates in this tender, then their offer will be **REJECTED** outright.

*** [The submission of EMD & Tender Fee instrument is MANDATORY for joint-venture or consortium of two or more firms and there shall be no exemption applicable against submission of NSIC/MSE certificates by the firms]**

ARTICLE 3 अनुच्छेद-3: ANNEXURES ENCLOSED FORMING PART OF THIS e-TENDER ई-निविदा अंतर्गत संलगित परिछेद:

ANNEXURES	DOCUMENT DESCRIPTION
Annexure 1 संलग्नक-1	Statement of Technical Requirement (SOTR) (attached with NIT)
Annexure 2 संलग्नक-2	GRSE Standard Terms and Conditions (STAC) (please refer www.grse.in → Tender → Enclosures Related to tenders of Sub-Contracting Activities)
Annexure 3 संलग्नक-3	Format for Technical Eligibility Criteria (attached with NIT)
Annexure 4 संलग्नक-4	Format for Self-Certification for not having blacklisted/ not received any tender holiday
Annexure 5 संलग्नक-5	Check List of Statutory Responsibility of Contractor and Principal employer (attached with NIT)
Annexure 6 संलग्नक-6	Check List for Bill submission (attached with NIT)
Annexure 7 संलग्नक-7	Format for Integrity Pact (attached with NIT)
Annexure 8 संलग्नक- 8	Format for Bid Security Declaration (attached with NIT)



Annexure 9 संलग्नक-9	Fire & Safety Guidelines (please refer www.grse.in →Tender→Enclosures Related to tenders of Sub-Contracting Activities)
Annexure 10 संलग्नक-10	Special condition of contract (please refer www.grse.in →Tender→Enclosures Related to tenders of Sub-Contracting Activities)
Annexure 11 संलग्नक-11	Contractors Responsibility (please refer www.grse.in →Tender→Enclosures Related to tenders of Sub-Contracting Activities)
Annexure 12 संलग्नक-12	General Requirement (please refer www.grse.in →Tender→Enclosures Related to tenders of Sub-Contracting Activities)
Annexure 13 संलग्नक-13	PF, ESI declaration form (please refer www.grse.in →Tender→Enclosures Related to tenders of Sub-Contracting Activities)
Annexure 14 संलग्नक-14	Format for - Bank Guarantee Format for EMD (please refer www.grse.in →Tender→Enclosures Related to tenders of Sub-Contracting Activities)
Annexure 15 संलग्नक-15	Format for - Bank Guarantee Format for SD (please refer www.grse.in →Tender→Enclosures Related to tenders of Sub-Contracting Activities)
Annexure 16 संलग्नक-16	Format for - Bank Guarantee Format for PBG (please refer www.grse.in →Tender→Enclosures Related to tenders of Sub-Contracting Activities)

ARTICLE 4 अनुच्छेद-4: DOCUMENTS TO BE UPLOADED अपलोड हेतु दस्तावेज:

Self-Attested documents are to be scanned and uploaded with Part I of GeM-bid ई-बिड के भाग-1 के साथ स्कैन एवं अपलोड हेतु स्वअभिप्रामाणित दस्तावेज		
1	Valid MSE/NSIC certificate	Yes
2	Bid Security Declaration as per format at Annexure 8	Yes
3	Technical Acceptance Format as available with NIT after being downloaded and filled up	Yes
4	Commercial Acceptance Format as available with NIT after being downloaded and filled up	Yes
5	Self-Certification for not having blacklisted /not received any tender holiday as per eligibility criteria to be submitted as per format at Annexure-4	Yes
6	PAN /TAN, GST, Labor License Certificate, Registration Certificate of the Company with ROC, Memorandum and the Article of Association of the firm.	Yes
7	Copies of registration with PF, ESI authorities/ last challans etc.	Yes
8	Partnership Deed / Memorandum and the Article of Association of the firm confirming partners and lead partner	Yes
9	Integrity Pact (refer clause 01 of STAC) as per format at Annexure-7	Yes
10	Government E-Market Place (GeM) registration certificate with Unique GeM Seller ID	Yes
11	Confirmation of TReDS registration number (Entity ID) for invoice discounting system in case of MSME Organization	Yes



- a. In case of non-submission of documents as mentioned above, the bidder may liable to be considered as disqualified.
- b. The Bidders has to submit ink signed hard copy of all above documents within 03 days from opening of Part I bid.
- c. Registered Vendors with GRSE need not upload documents at Sl. 6 above, if valid documents already submitted / available with GRSE Vendor Registration Cell.
- d. Bidders have to indicate Unique GeM Seller ID in COMMERCIAL MATRIX or prior to opening of price bids, failing which price bid of the bidder will not to be opened for further processing.

ARTICLE 5 अनुच्छेद-5: DOCUMENTS IN PHYSICAL FORM TO SUBMIT वास्तविक प्रपत्र जो जमा करने हैं:

PHYSICAL SUBMISSION		
1	Tender Fee Instrument	Within 03 days from opening of Part I bid
2	EMD Instrument	Within 03 days from opening of Part I bid
NOTE:	If instruments submitted through demand draft, the same to be drawn in favour of:	GARDEN REACH SHIPBUILDERS & ENGINEERS LIMITED
	The demand drafts should be payable at	<u>Kolkata</u>
3.	Integrity Pact	Within 03 days from opening of Part I bid

ARTICLE 6 अनुच्छेद-6: JOB EXECUTION SCHEDULE कार्य निष्पादन सूची

(A) Tenure of Contract संविदा कार्यकाल- Initially, the rate contract will be established for a period of **03 (three)** years from the date of commencement of the contract. The contract period may be extended as per requirement of GRSE production schedule at the same rate, terms & conditions. Similarly, the contract period may be reduced as per GRSE discretion.

(B) Mobilisation Period लामबंदी अवधी- 07 days from the date of placement of LOA/Purchase Order will be given for commencement of work.

(C) Job Starting Date कार्य आरम्भ तिथी - The job is to be commenced immediately after mobilisation subject to availability of site clearance & materials.

(D) Job Completion date कार्य समाप्ती तिथी- Job completion schedule will be as per **Annexure-C of SOTR (SOR No: SOR/MW/ASWSWC/Engg/01, Rev: 01 dt. 24.05.2024)** at Annexure 1.

(E) Place of Work - The job is required to be executed at **GRSE(MW/FOJ/RBD/KPDD)**.

ARTICLE 7 अनुच्छेद-7: JOB EXECUTION कार्य निष्पादन -

Job is to be carried out strictly as per **SOTR (SOTR No: SOR/MW/ASWSWC/Engg/01, Rev: 01 dt. 24.05.2024)** at Annexure 1, Drawings, GRSE requirement and in case of doubt, instructions of the Engineer in-charge / PL or their nominated representative are to be followed.

The job is required to be carried out for all ongoing and upcoming projects of GRSE.

ARTICLE 8 अनुच्छेद-8: GUARANTEE& WARRANTY गारंटी एवं वारंटी – Applicable for a period of 12 (twelve) months from the date of final Inspection of the job i.e. handing over of the ship (D448). Any faulty work carried out by the sub-contractor is to be rectified by them within the time stipulated by the GRSE. In case of failure of sub-contractor to meet the ship's construction schedule, outstanding deficiencies shall be rectified by GRSE and all costs of such work shall have to be borne by the sub-contractor. Detail as per GRSE STAC at **Annexure-2**.



ARTICLE 9 अनुच्छेद-9: PRICE मूल्य –

The quoted Price will be firm and fixed till the tenure of the contract of three (03) years. **Price is to be quoted considering all Taxes & duties except GST.** GST is to be indicated separately in the Price Bid and will be paid extra as per ruling rate. No escalation whatsoever will be considered under any circumstances within the valid tenure of contract.

ARTICLE 10 अनुच्छेद - 10: ESCALATION मूल्य वृद्धि: Not Applicable.

ARTICLE 11 अनुच्छेद- 11: UNREASONABLE QUOTES अतर्कसंगत भाव -

i) In case the price of L-1 Bidder is found to quote unreasonably low and/or express desires to withdraw from the tender then such bid will be cancelled and EMD will be forfeited and punitive action will be taken in line with the provision as per GRSE Vendor Policy.

ii) However, in case the L1 Bidder agrees to take-up the job with such unreasonable low quote, lower by 30% or more than estimate and also if the difference in price between L1 & L2 is 30% or more, then the quoted price to be analyzed w.r.t tender requirement and if the L1 bidder fails to justify their quoted rate, the obtained L1 quote will be rejected and punitive action will be taken in line with the provision as per GRSE Vendor Policy.

iii) If the justification is acceptable to GRSE, then the bidder has to submit Bank Guarantee of 10% of the total Contract value (inclusive of GST) in addition to the Security Deposit (SD) and Performance Bank Guarantee (PBG) for execution of the job till satisfactory completion of entire contract. There shall be no exemption / relaxation for the Guarantee against unreasonable quote. In case of breach of contract GRSE shall reserve the right to invoke the BG and may impose tender holiday for a period as per GRSE Vendor policy.

ARTICLE 12 अनुच्छेद -12: OFFER VALIDITY प्रस्ताव की वैधता-

Offer should be valid for **90 days** from the date of opening of Part-I bid i.e. Techno-commercial bid. Under exceptional circumstances GRSE may request for extension of price validity, beyond 90 days against valid reason.

ARTICLE 13 अनुच्छेद-13: CONDITIONAL OFFER सशर्त प्रस्ताव -

Conditional offers w.r.t. SOTR (Annexure 1) will not be accepted.

ARTICLE 14 अनुच्छेद-14: DETERMINATION OF L1 एल-1 का चयन -

L1 bidder will be decided on **Totality** Basis based on the tendered quantity indicated in the **Price Bid**.

ARTICLE 15 अनुच्छेद-15: BOQ बी ओ क्यू -

BOQ as part of SOTR given in the tender is tentative and it may vary according to actual requirement of job during the period of rate contract. The selected Bidder has to execute the required quantity at same rate, terms & conditions up to variation of **(+100%)** in addition to the initial quantity for individual line items. Similarly, the quantity of individual items/tendered quantity may be reduced also as per GRSE project requirement. Purchase Order will be issued Ship wise based on the actual requirement projected by the berth time to time. The contractors will be loaded according to GRSE project requirement. The detailed BOQ will be as per **Annexure-D** of SOTR (SOR No: **SOR/MW/ASWSWC/Engg/01, Rev: 01 dt. 24.05.2024**) at **Annexure 1**.

ARTICLE 16 अनुच्छेद-16: OPENING OF BIDS निविदा खुलना-

Part I (Techno-commercial) bid will be opened on the date declared in NIT. Part II bid will be opened post techno-commercial evaluation by GRSE. Price bid of only those who qualify techno-commercially will be opened. Opening date of Price Bid will be intimated accordingly to all qualified bidders. Disqualified bidders, either during technical assessment or commercial discussion or both techno-commercial evaluation will also be intimated about their non-consideration for further processing.



ARTICLE 17 अनुच्छेद-17: MICRO & SMALL ENTERPRISES सूछ्छम एवं छोटे उद्योग -

- a) The 'Public Procurement Policy for Micro & Small Enterprises (MSEs) Order, 2012' and subsequent amendments / guidelines / press publications / circulars to the Order, as issued by the Ministry of MSME, shall be applicable as on the date of opening of the price bids.
- b) The bidders are advised to check the website of the Ministry of MSME for details of the amendments / circulars issued by the Ministry of MSME.

ARTICLE 18 अनुच्छेद-18: ASSESSMENT OF VENDORS AND DISTRIBUTION OF JOBS TO MULTIPLE BIDDER विक्रेताओं का आंकलन एवं विविध बोली लगाने वालों में कार्य वितरण -

- i. Selection of vendor: A pool of Techno-commercially cleared vendor will be created through negotiation based on the submitted documents against the tender. Price bids of those qualified vendors will be opened.
- ii. Establishment of rate: After opening of price bids and finalization of price with L1 bidder through negotiation (if required), the established rate will be offered to qualified bidders (L2 / L3 / L4 & so on). The vendors who are interested for the job have to accept the L1 rates for execution of the job.
- iii. Distribution of job:
 - a) GRSE Ltd. at its discretion intends to distribute the total job among **02** parallel contractors as per their ranking (L1, L2, L3, & so on) depending on the requirement of GRSE during the tenure of the rate contract.
 - b) The total job for **four (04)** Ships will be distributed **Ship Wise** among **02** vendors. The L1 vendor will be awarded the job for **03 Ships** and subsequently the next **01** bidder (L2/L3/L4..) will be engaged for the remaining 01 ship subjected to acceptance of L1 rate. The distribution is indicative only and may vary as per actual requirement of the yards / ships and work orders shall be issued accordingly.
 - c) In case the L2/ L3/ L4 or subsequent bidder does not accept the L1 rate, the job of remaining **01 Ship** will be loaded on the L1 bidder.
 - d) In case of Resultant Single Vendor Situation, the job of all **04 Ships** will be loaded on the L1 bidder

Note:

- a) Individual Work Order will be issued Ship wise.
- b) The loading of the job will be purely based on GRSE requirement and performance of the vendor. If the performance is not satisfactory, then the job allotted will be withdrawn and will be distributed to other available vendors as per discretion of GRSE. No claim from individual vendors will be accepted.



ARTICLE 19 अनुच्छेद-19: ELIGIBILITY CRITERIA पात्रता के मापदंड –

A. Technical Eligibility Criteria तकनीकी मापदंड - As per SOTR No: **SOR/MW/ASWSWC/Engg/01, Rev: 01 dt. 24.05.2024 (Annexure 1).**

Supporting documents meeting Technical eligibility criteria as detailed in SOTR to be submitted along with the Part-I bid. Satisfactory Work Completion Certificates indicating the work order numbers, issued by the party for whom the work has been done to be submitted for assessment during TNC meeting. GRSE has the right to verify / cross verification of authenticity of the said documents whenever felt necessary.

B. Financial Eligibility Criteria वित्तीय मापदंड - Not Applicable.

C. Self-Certification Criteria: The bidder should give self-certification (as per **Annexure 4**) that they have neither been Blacklisted nor have received any tender holiday from any PSUs/Central & State Govt. Organizations or any other Government / Quasi Government Organizations during last 03 (three) years ending on **31.05.2024**. The bidder has to submit self-certification for the same along with the techno-commercial offer. GRSE reserves the right to independently verify the same. In case violation of declaration is detected at any stage of tender process and during currency of contract, the order will be terminated.

Note:

- a) If any bidder has been black listed by any PSUs/Central & State Govt. Organizations or any other Government / Quasi Government Organizations, then the bidder is not eligible to participate in this tender. If any discrepancy is detected at any stage of the tender, then the offer submitted by the bidder / contract awarded to the bidder will be cancelled and EMD/SD shall be forfeited and appropriate action will be taken in accordance with the vendor policy of GRSE.
- b) If any bidder has been 'Put on Tender Holiday' by any PSUs/Central & State Govt. Organizations or any other Government / Quasi Government Organizations, then this fact must be clearly stated and it may not necessarily be a cause for disqualifying them.
- c) If case of non-submission of the self-certification document as per format at **Annexure 4**, the bidder will be treated as non-responsive and their offer will be rejected.

[Requisite formats attached with NIT as Annexure 3 & 4 of Article 3 to be filled up by the bidders in support of above eligibility criteria and to be submitted the same along with the Techno-Commercial bid.]

ARTICLE 20 अनुच्छेद-20: INSTRUCTION TO THE BIDDERS बिडर हेतु अनुदेश -

1. Before submitting a bid, bidders are expected to examine the Bid Documents carefully, if they desire, may visit the work front, fully inform themselves of existing conditions and limitations including all items described in the Bid Documents. NO consideration will be granted for any alleged misunderstanding regarding
 - (i) The materials (if any) which are to be furnished by vendor for the work.
 - (ii) The work which is to be performed by the vendor.
 - (iii) Actual considerations made by bidder to complete all work.
 - (iv) To comply with conditions specified in the Bid Document.
2. Any qualified deficiency, errors, discrepancies, omissions, ambiguities or conflicts in the Bid Documents, or there be any doubts as to the meaning of a provision or requirement, the same shall immediately brought to notice of GRSE Tendering Dept. in writing, not less than 07 days prior to bid closing date.



3. It is understood that in receiving this bid, GRSE assumes no obligation to enter into a contract for the WORK covered by this bid request. GRSE reserves the right to reject any and all unqualified proposals or waive irregularities therein. GRSE reserves the right to evaluate each and every proposal and accept the whole or any part of the tender and the Tenderer shall be bound to perform the same at the rates quoted.
4. GRSE also reserves the right to reject any or, all bids and accept the bid, which in its opinion, appears to be most advantageous to GRSE. Receipt and review of this Bid Request constitutes an agreement of confidentiality between GRSE and each of the contracting Firms preparing its Bid. GRSE reserves the right to change the form of this request to Bids, or make clarifications thereto, within a reasonable time before date of submission of Bids.
5. Generally, Contractor will assume all safety related responsibility for the site and will furnish and maintain its own safety program for itself and its subcontractors. Contractor are bound to comply with all applicable Environmental, Occupational Health & Safety rules, regulations, procedures and guidelines when performing work in the facility or site.
6. Bidders objecting on any grounds to any bid specification or legal requirements imposed by these bidding documents shall provide written notice to GRSE within **07** calendar days from the day bid document was made available to public. Failure of a bidder to object in the manner set forth in this paragraph shall constitute and irrevocable waiver of any such objection.
7. **Independent External Monitors (IEM)** आई. ई. एम. : Either or both of the following Independent External Monitors will have the power to access the entire project document and examine any complaints received by him. In case of any change in IEMs, it will be informed accordingly.

The communication details of the IEMs are as follows:-

(A) Shri Bam Bahadur Singh,
Height-7; Flat No.1802, Uniworld City,
New Town, Rajarhat,
Kolkata-700160
Email: bbsinghbeml@gmail.com

(B) Shri Pidatala Sridhar, IRS (Retd.)
Flat 2C, Kanaka Lakshmi Apartments
3-6-467 & 468
Street Number-6,
Himayatnagar, Hyderabad-500029
Email: sridharpidatala@gmail.com

8. **Integrity Pact** समग्रता अनुबंध: – The Integrity pact essentially envisages the agreement between prospective vendors /Bidders & buyers committing the person/officials of both the parties not to exercise any corrupt influence on any aspects of the contract. Only those vendors/bidders who enter into such an integrity pact with the buyer would be competent to participate in the bid. The format of Integrity Pact is enclosed with tender document (**refer Annexure-7**). The “Integrity pact on Govt. issued Stamp paper of Rs. 100 duly filled as per enclosed format to be submitted in original. Bidders to ensure that every page of IP is ink signed with company seal/stamp in every page. [Please refer guideline for IP in STAC (Sl.No.-1) in GRSE website]



9. Job is to be carried out as per SOTR and instruction of the Engineer in-charge /his nominated representative.
10. Any Drawings or technical information attached / provided with this NIT is the Intellectual Property of the Company and will be governed by the specific Acts applicable thereto.
11. Post submission of Tender, such drawings and technical information are to be physically returned. Also, all soft copies are to be destroyed and a self-certification to be submitted during TNC, failing which the processing of bid will not be taken further.
12. Contractors are responsible to clean up the area of work w.r.t all sort of debris generated on daily basis. If they fail to do so GRSE reserves the right to perform the cleaning activity and charge the contractor with penalty of up to 25%. As a part of National Mission of *Swachh Bharat*, GRSE has adopted *Swachh GRSE* and maintaining cleanliness of work area is an essential pre-requisite.
13. Bidder has to declare, in what capacity he is participating in the tender viz PSU, Limited Co, Pvt. Ltd. Co., Sole Proprietorship Organization, Partnership firm, Joint Venture etc. Supporting documents (scanned copy) confirming such status to be uploaded as attachment to Part I bid.
14. A Bidder is allowed to submit only one Bid under any capacity / status.
15. Difficulty in submitting the bid:
 - a. Any query/difficulty in understanding of SOTR or other technical Terms may be got clarified from **Mr. Arnab Saha, Mgr. (MFOS)/ Main Unit, Mobile No. 76030 56565, e-mail: Saha.Arnab@grse.co.in**
 - b. Any query/difficulty in understanding of Commercial Terms may be got clarified from and **Mr. Ashim Kumar Dey, SM (Contract)/ 61 Park Unit, Mobile No. 75960 23717, e-mail: Dey.Ashimkumar@grse.co.in** prior to submission of offer.
 - c. Any difficulty in submitting / uploading of e-tender or for any system help **Mr. Saraswata Palit, SM (GRSE E-PROCUREMENT), e-mail/ Palit.Saraswata@grse.co.in** / GRSE Service Provider M/s. NIC personnel may be contacted [Land line no: 033 24893902]
16. **E-mail Address for communicationसंचार हेतू ई. मेल पता:** Vendor to provide e-mail address to enable faster communication.

ARTICLE 21 अनुच्छेद- 21: e-BID INSTRUCTION ई बिड के अनुदेश –

- a) To participate in the e–Bid submission for GRSE, it is mandatory for the bidders to get their firms registered with GRSE E–Procurement portal <https://eprocuregrse.co.in>
- b) It is mandatory for all bidders to have class – III Digital Signature Certificate (DSC) in the name of the person who will digitally sign the bid from any of licensed Certifying Agency (CA). Bidders can see the list of licensed CAs from the link <http://www.cca.gov.in>.
- c) Bidders can view / download Part-I (Techno-Commercial) bid documents along with all attachments in E–Procurement portal <https://eprocuregrse.co.in>; Central Public Procurement Portal <https://eprocure.gov.in/cppp/> and GRSE website <https://grse.in/tender-published>. They need to fill up the downloaded documents as per instruction and upload the same during bid submission. Non-acceptance of any techno-commercial criteria is discouraged. However, if there is any, it is to be commented accordingly and also stated in the separate deviation format.



- d) Bidders need to fill up Part II (Price) bid online in Excel Template price bid format by inserting unit price only. No other attachment to the price bid will be reckoned.
- e) In case the bidder does not quote his rate for any item(s), it will be presumed that the bidder has included the cost of that/those item(s) in the rates of other items and the rate for such item(s) shall be considered as **Zero** and the tender will be evaluated by the Employer accordingly and the work executed by the successful bidder accordingly.
- f) Bids can be submitted only during validity of registration of bidder with GRSE e- Procurement portal.
- g) The amendments / clarifications to the bid document, if any, will be posted on E- Procurement portal / GRSE web site only.
- h) It will be the bidder's responsibility to check the status of their Bid on-line regularly after the opening of bid till award of work.
- i) AMENDMENT OF TENDER DOCUMENT
- i. Before the deadline for submission of tenders, the Tender Document may be modified by GRSE Ltd. by issue of addenda/corrigendum. Issue of addenda / corrigenda will however be stopped 7 days prior to the deadline for submission of tenders as finally stipulated.
- ii. Addendum/corrigendum, if any, will be hosted on website / e procurement portal and shall become a part of the tender document. All Tenderers are advised to see the website for addendum/ corrigendum to the tender document which may be uploaded up to 7 days prior to the deadline for submission of Tender as finally stipulated.
- iii. To give prospective Tenderers reasonable time in which to take the addenda/ corrigenda into account in preparing their tenders, extension of the deadline for submission of tenders may be given as considered necessary by GRSE.

ARTICLE 22 अनुच्छेद-22: BID REJECTION CRITERIA बिड अस्वीकृति के मापदंड –

Following bid rejection criteria may render the bids liable for rejection:

1. Bidder's failure to furnish sufficient or complete details for evaluation of the bids within the given period which may range in between two to three weeks depending on the deficiencies noticed in the drawings / technical data which shall not however conflict with validity period.
2. Incomplete / misleading / ambiguous bid in the considered opinion of the Technical Negotiation Committee (TNC)/ Commercial Negotiation Committee (CNC) of GRSE.
3. Bid with technical requirements and/or terms not acceptable to GRSE / Customers / External agency nominated, as applicable.
4. Bid received without qualification documents, where required as per the Tender.
5. Bid not meeting the pre-qualification parameters / criteria stipulated in the Tender Enquiry.
6. Bid with validity expiry date shorter than that specified in the Tender Enquiry.



7. Bidders not submitting Original instrument of EMD within 3 GRSE working days from the tender closing date.
8. EMD validity period is shorter than specified in the tender enquiry.
9. Bidders who have not agreed for the fixed price till the validity of the tender or have quoted the variable price.
10. Bidder not agreeing for furnishing of the required Security Deposit (SD).
11. Bidder submitted false/incorrect documents etc.
12. Bidders who have submitted **PRICE** along with Techno-Commercial Bid.

ARTICLE 23 अनुच्छेद-23: POST AWARD APLICABLE CLAUSES ठेका जारी करनेके पश्चात लागू उपधारा -

A. Security Deposit प्रतिभूति जमा -

Interest free refundable security deposit of 5% of individual work order value (inclusive of GST) is to be deposited in the manner elaborated in GRSE STAC at **Annexure-2** .

B. Work Done Certificate (W.D.C.) कार्य पूर्ति प्रमाण-पत्र (डबल्यू.डी.सी)-

Work done certificate will be issued by DGM (Engg) / Berth Officer MFOS/Berth Officer Plumbing based inspection report as applicable. Details as per Annexure-D of SOTR No: **SOR/MW/ASWSWC/Engg/01, Rev: 01 dt. 24.05.2024 (Annexure 1)**.

W.D.C. is to include whether work has been completed as per delivery schedule or with delay [in days/weeks specified therein]. Any recovery towards usage of GRSE resources is also to be indicated.

C. Bill Submission बिल प्रस्तुति:

Bills are to be submitted considering the Checklist for Bill Submission at **Annexure 6** along with supporting document (Work Done certificate etc.) at the Bill Receiving Counters located at the respective unit of Company. Bill is to be submitted (in 03 copies) in sealed envelope super-scribing on the envelope the Purchase Order No., Vendor code, Bill / Invoice No., Name of person /employee to whom bill is addressed, for processing. The Name of the person to be mentioned on sealed envelope will be the Bill certifying officer.

Note: -Transaction fee of Rs 500.00 for first return & Rs 1000.00 for subsequent return of bill with inappropriate documents will be charged.

D. Payment Terms भुगतान की शर्तें:

a. The certified bill amount (with full GST) against actual work done will be paid within 30 days of receipt of bill (in 03 copies) duly certified by Bill Certifying Authority supported with certified Work Done Certificate (WDC). Recoverable from contractor, if any, is to be adjusted from the payment as per certification of Bill Certifying Authority. Moreover, release of payment is subject to clearance of ESI, P.F. and other labour oriented mandatory liabilities of the Contractor as applicable. In case the employees engaged by the Contractor are out of the purview of ESI, then they should be covered under Employee Compensation Policy (covering benefits under Employees Compensation Act, 1923)

b. The equipment wise payment terms will be as follows:(Details as per Annexure-D of SOTR No: **SOR/MW/ASWSWC/Engg/01, Rev: 01 dt. 24.05.2024 (Annexure 1)**)



1. Diesel Alternator and Associated System:

1.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

1.2 The Stages of Payment for the II STW SDC & Trial:

- i. Payment of 20% will be released after completion of Serv for STW, SDC & II of Diesel Alternator and associated system.
- ii. Payment of 40% will be released after completion of Serv for Load trial, Emergency cooling trial and HATs of Diesel Alternator and associated system (service for APMS/ IPMS trial included)
- iii. Payment of 20% will be released after completion of Serv for AVR & Governor, Paralleling Trail and HATs of Diesel Alternator and associated system (service for APMS/ IPMS trial included)
- iv. Payment of 20% will be released after completion of Serv for SATs Diesel Alternator and associated system

1.3 Post Trial Services:

100% payment will be released on Quarterly basis.

2. HP Air Compressor (MD & DD) including Associated Air Bottles & PRS:

2.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

2.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 20% will be released after completion of Serv for STW, SDC & II of HP Air Compressor (MD & DD) including 06 nos. air bottles, PR sS & manifold (other than OEM)
- ii. Payment of 20% will be released after completion of Serv for HATs Air Compressor (MD & DD) (Endurance trial) with air bottles.
- iii. Payment of 40% will be released after completion of Serv for HATs Air Compressor (MD & DD) (including system trial and air integrity test)
- iv. Payment of 20% will be released after completion of Serv for SATs Air Compressor (MD & DD) (other than OEM)

2.3 Post Trial Services:

100% payment will be released on Quarterly basis.



3.RO PLANT:

3.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

3.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 30% will be released after completion of Serv for STW, SDC & II RO Plant and pre-filter pump
- ii. Payment of 50% will be released after completion of Serv for HATs RO Plant system (other than OEM)
- iii. Payment of 20% will be released after completion of Serv for SATs RO Plant system (other than OEM)

3.3 Post Trial Services:

100% payment will be released on Quarterly basis.

4.Fire Pump:

4.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

4.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 20% will be released after completion of Serv for STW, SDC & II of MD Fire Pump-03 & DD Fire Pump-01
- ii. Payment of 20% will be released after completion of Serv for HATs (Endurance trial) Fire Pump-03 & DD Fire Pump-01
- iii. Payment of 40% will be released after completion of Serv for Fire man system trial (Educator, ballasting de-ballasting, fire hydrant, sprinkling)
- iv. Payment of 20% will be released after completion of Serv for SATs of MD Fire Pump-03 & DD Fire Pump-01 and system trial

4.3 Post Trial Services:

100% payment will be released on Quarterly basis.



5. Salvage Pump:

5.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

5.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 20% will be released after completion of Serv for STW, SDC & II of Salvage Pump
- ii. Payment of 20% will be released after completion of Serv for HATs (Endurance trial) Salvage Pump
- iii. Payment of 30% will be released after completion of Serv for Salvage system trial (Educator, Strum boxes)
- iv. Payment of 10% will be released after completion of Serv for HATs of portable Salvage Pump
- v. Payment of 20% will be released after completion of Serv for SATs for Salvage Pump & system trial

5.3 Post Trial Services:

100% payment will be released on Quarterly basis.

6. Bilge Pump:

6.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

6.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 20% will be released after completion of Serv for STW, SDC & II of Bilge Pump
- ii. Payment of 30% will be released after completion of Serv for HATs (Endurance trial) Bilge Pump
- iii. Payment of 40% will be released after completion of Serv for Bilge system trial (Educator, Strum boxes)
- iv. Payment of 10% will be released after completion of Serv for SATs for Bilge Pump & system trial

6.3 Post Trial Services:

100% payment will be released on Quarterly basis.



7.FO & LO, DLO Transfer Pump:

7.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

7.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 30% will be released after completion of Serv for STW, SDC & II of FO & LO Transfer Pump, DLO Pump
- ii. Payment of 50% will be released after completion of Serv for HATs (Endurance trial) FO & LO Transfer Pump, DLO Pump & system trial
- iii. Payment of 20% will be released after completion of Serv for SATs for FO & LO Transfer Pump, DLO Pump & system trial

7.3 The stages of Payment for the Post Trial Services:

- i. Payment of 100% on Quarterly basis will be released after completion of Running of FO Transfer system beyond trial
- ii. Payment of 100% on Quarterly basis will be released after completion of Running of LO Transfer system beyond trial

8.FO & LO Centrifuge:

8.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

8.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 30% will be released after completion of Serv for STW, SDC & II of FO & LO Centrifuge
- ii. Payment of 50% will be released after completion of Serv for HATs (Endurance trial) FO & LO Centrifuge
- iii. Payment of 20% will be released after completion of Serv for SATs for FO & LO Centrifuge & system trial

8.3 The stages of Payment for the Post Trial Services:

- i. Payment of 100% on Quarterly basis will be released after completion of Running of FO Centrifuge System beyond trial
- ii. Payment of 100% on Quarterly basis will be released after completion of Running of LO Centrifuge System beyond trial



9.FW Pump & Hydrophore Tank:

9.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

9.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 30% will be released after completion of Serv for STW, SDC & II of FW Pump - 03 Nos. & Hydrophore Tank - 02 Nos.
- ii. Payment of 50% will be released after completion of Serv for HATs (Endurance trial) FW Pump & Hydrophore system trial
- iii. Payment of 20% will be released after completion of Serv for SATs for FW system trial

9.3 Post Trial Services:

100% payment will be released on Quarterly basis.

10.OWS with OWS Bilge Pump:

10.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

10.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 10% will be released after completion of Serv for STW, SDC & II of OWS with OWS Bilge Pump
- ii. Payment of 30% will be released after completion of Serv for HATs (Endurance trial) OWS with OWS Bilge Pump
- iii. Payment of 40% will be released after completion of Serv for OWS system trial
- iv. Payment of 20% will be released after completion of Serv for SATs for OWS with OWS Bilge Pump & system trial

10.3 Post Trial Services:

100% payment will be released on Quarterly basis.



11. Emergency Diesel Alternator:

11.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

11.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 30% will be released after completion of Serv for STW, SDC & II of Emergency Diesel Alternator
- ii. Payment of 50% will be released after completion of Serv for Load trial, AVR, Governor and HATs of Emergency Diesel Alternator and associated system
- iii. Payment of 20% will be released after completion of Serv for SATs Emergency Diesel Alternator and associated system

11.3 Post Trial Services:

100% payment will be released on Quarterly basis.

12. Workshop Mc & Laundry:

12.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

12.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 50% will be released after completion of Serv for STW, SDC & II of Workshop M/c. equipments-1 Set (Drill M/c -01, Grinding M/c -01 & Bench Vice -01) & Laundry equipments-1 set (Washing Machine -01 & Tumbler -02)
- ii. Payment of 50% will be released after completion of Serv for HATs & SATs of Workshop M/c. equipments-1 Set (Drill M/c -01, Grinding M/c -01 & Bench Vice -01) & Laundry equipments-1 set (Washing Machine -01 & Tumbler -02)

13. ME GB Raft Unit:

13.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

13.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 20% will be released after completion of Serv for STW, SDC & II of ME GB Raft Unit and associated system
- ii. Payment of 40% will be released after completion of Serv for HATs of ME GB Raft Unit and associated system (Basin Trial)
- iii. Payment of 20% will be released after completion of Serv for SATs of ME GB Raft Unit and associated system (CST)
- iv. Payment of 20% will be released after completion of Serv for SATs of ME GB Raft Unit and associated system (FMT)



13.3 Post Trial Services:

100% payment will be released on Quarterly basis.

14. Water Jet & Shafting:

14.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

14.2 The stages of Payment for the II STW SDC & Trial:

- i. Payment of 20% will be released after completion of Serv for STW, SDC & II of Water Jet & Shafting components and associated system
- ii. Payment of 40% will be released after completion of Serv for HATs of Water Jet & Shafting components and associated system (Basin Trial)
- iii. Payment of 20% will be released after completion of Serv for SATs of Water Jet & Shafting components and associated system (CST)
- iv. Payment of 20% will be released after completion of Serv for SATs of Water Jet & Shafting components and associated system (FMT)

14.3 Post Trial Services:

100% payment will be released on Quarterly basis.

15. STP with vaccum pump:

15.1 Preservation & de preservation and schedule Routine:

100% payment will be released on Quarterly basis.

15.2 The stages of Payment for the Installation & Trial:

- i. Payment of 20% will be released after completion of Serv for STW, SDC, II STP
- ii. Payment of 40% will be released after completion of Serv for HATs STP (other than OEM)
- iii. Payment of 20% will be released after completion of Serv for SATs STP (other than OEM) (For CST)
- iv. Payment of 20% will be released after completion of Serv for SATs STP (other than OEM) (For FMT)



16.Flushing:

16.1 The stages of Payment for the FO System Flushing:

- i. Payment of 100% will be released after completion of job of Serv for Flushing of FO System pipes for DG Sets
- ii. Payment of 100% will be released after completion of job of Serv for Flushing of FO System pipes for Emergency DG Sets
- iii. Payment of 100% will be released after completion of job of Serv for Flushing of FO System pipes for MEs
- iv. Payment of 100% will be released after completion of job of Serv for Flushing of RUFO tanks & associated pipes and system
- v. Payment of 100% will be released after completion of job of Serv for Flushing of FO storage tanks & associated pipes and system

16.2 The stages of Payment for the LO System Flushing:

- i. Payment of 100% will be released after completion of job of Serv for Flushing of LO System pipes for DG Sets
- ii. Payment of 100% will be released after completion of job of Serv for Flushing of LO System pipes for MEs
- iii. Payment of 100% will be released after completion of job of Serv for Flushing of LO storage tanks & associated pipes and system
- iv. Payment of 100% will be released after completion of job of Serv for Flushing of RUFO tanks & associated pipes and system
- v. Payment of 100% will be released after completion of job of Serv for WJ TBB Lub. oil System pipes & tanks

16.3 Hydraulic System Flushing:

100% payment will be released on completion of job.

16.4 Fresh water System Flushing:

100% payment will be released on completion of job.

17. Pre- wetting system:

17.1 The stages of Payment for the Pre- wetting system:

- i. Payment of 60% will be released after completion of Serv for HATs Pre- wetting system
- ii. Payment of 40% will be released after completion of Serv for SATs Pre- wetting system



18. Scupper & Fixed Foam system:

18.1 The stages of Payment for the Scupper & Fixed Foam system:

- i. Payment of 80% will be released after completion of Serv for HATs Scupper & Fixed foam system
- ii. Payment of 20% will be released after completion of Serv for SATs Scupper & Fixed foam system

19. Other services:

100% payment will be released on completion of job.

- c. 10% of the certified bill amount will be deducted from each bill and will be released after expiry of guarantee period on certification by Bill Certifying Authority or on submission of Performance Bank Guarantee of 10% of the value of Purchase Order valid for a period of 60 days beyond the expiry of Guarantee period. For release of this 10% retention money either after guarantee period or on submission of PBG, the PBG release application to be submitted to Contract Cell duly certified by CGM/GM/AGM of respective Unit/ DGM (Engg.)/ their nominated Officer after expiry of guarantee period. WDC is not required for release of this 10% retention money.

- d. **Bill Certifying Authority:** CGM/GM/AGM of respective Unit/ DGM (Engg.)/ their nominated Officer.

E. Liquidated Damages निर्णित हर्जाना -

The vendor will be liable to pay minimum Liquidated Damages @ ½ % per week or part thereof on the undelivered work subject to a maximum of 5 % of the value of the order for delayed part. The amount of L.D. may be adjusted or set-off against any sum payable to the Contractor under this or any other Contract with GRSE Ltd.

F. Risk Purchase: - जोखिम खरीद -

In case the progress of work is not satisfactory and the contractor fails to maintain the schedule, GRSE reserves the right to get the work done by alternative source at the risk and cost of sub-contractor.

GRSE shall be at liberty to purchase/obtain the service from the alternative source as it deems fit, to make good such default and or in the event of the contract being terminated, the balance of the remaining service to be delivered there under. Any excess over the job price / service rates, paid and incurred by GRSE, as the case may be, over the contract price shall be recoverable from the firm. To make good the recoverable excess amount paid, GRSE shall be at liberty to invoke Bank Guarantee and/or with other available dues of the firm.

- G. **Damage of Materials/ Equipment:** - The Subcontractor will ensure that **NO Damage** is caused to the Materials, Equipment's or any other property of GRSE during execution of the work due to negligence and/ or any reason whatsoever by the subcontractor. The cost of damage will be suitably recovered from Subcontractor's Bill.

H. Fire & Safety Precautions (for working inside GRSE): -

The Vendor/Contractor shall abide by the Safety regulations/rules of the GRSE as detailed in Fire & Safety Guidelines (please refer www.grse.in). The Vendor/Contractor should take all safety precautions and provide adequate supervision & control for their workmen in order to carry out the job safely. In case of any violation of safety precaution and non-usage of safety equipment, Contractor shall be liable for a penalty which is detailed in Fire and Safety Guidelines (please refer www.grse.in).



Penalty amount depends on the type and frequency of violation mentioned in the safety guideline and the same will be deducted from the defaulter's bill.

- I. Mandatory use of ISI marked PPE by Contractor Employees:** - The Contractor shall ensure the use of ISI marked PPE by their engaged Employees. An indicative list of ISI marked Personal Protective Equipment, is appended below for mandatory compliance by the vendors without any deviation:

LIST OF PPES

Sl. No.	Name of PPE	Standard
(a)	Safety Helmet	IS: 2925 / EN 397.
(b)	Safety Footwear	IS 15298 / EN ISO 20345
(c)	Safety Goggles	ANSI Z87.1 / EN166.
(d)	Ear Plug	IS: 9167/ EN 352
(e)	Hand Gloves	(i) IS 4770 for electrical work (ii) EN 420 for general requirement (iii) EN 388 for mechanical hazard (iv) IS:6994 / EN 407 for heat applications (gas cutting / welding).
(f)	Welding Fume Respirator & Dust mask	IS: 9473 / EN: 149
(g)	Double lanyard Safety Belt & harness, automatic fall arrestor	IS: 3521
(h)	Cotton Boiler Suit Cloth	IS: 177 - 1989 (Amended up to date), Variety 3

Note: Apart from the above-mentioned PPE, vendors may consider any other type of standardized PPE as per job requirement, in consultation with GRSE Safety Department.

- J. Contractor's Safety Personnel (संविदाकार के बचाव कर्मचारी) (for working inside GRSE):** - One fully specialist and certified Safety Personnel has to be posted at the site during progress of work. The responsibility of the safety personnel is to supervise and monitor the site safety obligations of all work places and to comply all laid down Fire & Safety Rules of GRSE. He also ensures all workmen working under the sub-contractor at site are made aware of and comply with all the safety norms.

ARTICLE 24 अनुच्छेद 24: SUBMISSION OF BIDबिड की पेशी –

1. Last date of submission of Bid / Date of opening of bid is indicated in Tender Document. Tender is liable to be rejected if all the requisite documents are not enclosed with the Part I, Techno-Commercial offer.
2. Date of opening of Part II offer i.e. Price Bid will be notified to all Techno-Commercially qualified bidders in due course after conclusion of TNC/CNC meetings and acceptance of Techno-Commercial offer. After opening of e-Price bids, the techno-commercially qualified bidders can view the System Generated Price Comparison Sheet from their own portal.
3. GRSE reserves the right to accept / reject any Tender in full or in part without assigning any reason.
4. Acceptance Format Matrix should be filled up and attached with techno-commercial bid as marks of acceptance of NIT/SOTR/STAC. In case of non-receipt of filled in STACs acceptance format matrix, it would be presumed that you have accepted all our terms & conditions as per GRSE tender until & unless deviation is specially mentioned in offer.



ARTICLE 25 अनुच्छेद 25: CONTRACT WORKMAN WAGE PAYMENT: -

- a. Contractor is liable for payment of PF, ESI to their engaged workmen and for other labour oriented mandatory liabilities as applicable for the job.
- b. The Contractor has to comply with the minimum wages & statutory liabilities (as revised time to time) of the engaged manpower applicable for the job.
- c. Payment of wages to the contractor's employee should be made through individual bank account on monthly basis instead of cash payment. PF-UAN activation of all the contractor's employee/workmen is mandatory. Vendors are to comply all statutory provisions for disbursing payment to their workmen/employees.


ARTICLE 26 अनुच्छेद 26: STATUTORY RESPONSIBILITY OF CONTRACTOR DEPLOYING THEIR WORKMEN INSIDE GRSE PREMISES – AS PER ANNEXURE-5.

ARTICLE 27 अनुच्छेद 27: PRE-BID MEETING बोलीपूर्व बैठक -

A pre-bid meeting will be held on **22.06.2024 at 10:00 a.m.** at **GRSE Main Unit, MFOS Dept.** to discuss the brief scope of work of the tender. Interested Bidder should forward their Pre-bid queries (if any) through mail to the following contact persons:

- a. **Mr. Arnab Saha, Mgr. (MFOS)/ Main Unit, Mobile No. 76030 56565, e-mail: Saha.Arnab@grse.co.in**
- b. **Mr. Ashim Kumar Dey, SM (Contract)/ 61 Park Unit, Mobile No. 75960 23717, e-mail: Dey.Ashimkumar@grse.co.in**

Ashim Kumar Dey
SM (Contract)
Garden Reach Shipbuilders & Engineers Limited
GRSE Bhavan, 61, Garden Reach Road, Kolkata – 700 024
Mobile: +91 75960 23717
Mail Id: Dey.Ashimkumar@grse.co.in

 GRSE LTD.	TECHNICAL SPECIFICATION FOR ENGG TURNKEY POST LAUNCHING PACKAGE FOR II, STW, SDC, TRIAL AND COMMISSIONING WORKS OF 04 NOS. ASWSWC SHIP	SOR No.: SOR/MW/ASW SWC/Engg/01, REV: 01
		SHEET- 1 of 33
		PREP. BY: Mgr./MFOS & Mgr./Pipe Shop
		CHECKED BY: DGM/Engg./MW
PROJECT: ASW SWC		
YARD NO: 3033-36		
Group: Engg.		
Date: 24.05.2024		


1. INTENT

It is the intention of GRSE to enter into a comprehensive rate contract for Engg. turnkey post launching package for machinery II, STW, SDC, Endurance Trial, System Trial and commissioning /handing-over works on board ships (ASWSWC project) under construction at GRSE Kolkata. The work is to be performed at GRSE premises including in harbour and at sea.

2. The work encompasses the following for each Naval Warship under ASWSWC project. Propulsion Plant and related Auxiliaries, DAs, Pumps, Centrifuges, Auxiliaries and Other machinery (Detailed List indicated at Appendix A, of this SOTR)
3. Main particulars of the ship:
Length Overall – 77.6 metres (approx.)
Length B.P. – 69.54 metres (approx.)
Breadth (MLD) – 10.5 metres (approx.)
Draught (Loaded) – 2.7 metres (abt.)
4. **No. of ships to be covered under this rate contract: 04 Nos. (Yd-3033-36)**

5. PRE- QUALIFICATION TECHNICAL CRITERIA:

- a) Bidder should have experience of successful completion of similar job during last **07 years ending on 31st May, 2024**. The Similar completed works refers to installation inspection (II), Setting to Work (STW), Testing, Trials & Commissioning of Main Propulsion Plant & related Auxiliaries, DAs, Pumps, Centrifuges, other auxiliary / machinery systems of following categories -
**New Construction Naval / Indian Coast Guard ships or
Naval / Coast Guard ships undergoing medium refit & trial or
New Construction of major sea going commercial vessel or
Sea voyage of major commercial vessel**
- b) Satisfactory Work Completion Certificates indicating the work order numbers, issued by the party for whom the work is done. GRSE has the right to verify / cross verification of authenticity of the said documents whenever felt necessary. (Documents mentioned above to be submitted with Techno-commercial bid)

 GRSE LTD.	TECHNICAL SPECIFICATION FOR ENGG TURNKEY POST LAUNCHING PACKAGE FOR II, STW, SDC, TRIAL AND COMMISSIONING WORKS OF 04 NOS. ASWSWC SHIP	SOR No.: SOR/MW/ASW SWC/Engg/01, REV: 01
		SHEET- 2 of 33
		PREP. BY: Mgr./MFOS & Mgr./Pipe Shop
		CHECKED BY: DGM/Engg./MW
PROJECT: ASW SWC		
YARD NO: 3033-36		
Group: Engg.		
Date: 24.05.2024		

c) Contractor must deploy people with experience (as indicated in **Annexure – A**) of doing installation and commissioning operations of such type of equipment/ systems on regular basis on board new construction / operational Ships.

In support of the above, the credentials of at least 01 senior level executive, 03 working level executives (02 for Machinery activity & 01 for plumbing activity). and 05 direct supervisory staff (03 for Machinery activity & 03 for plumbing activity) proposed to be deployed are to be submitted. These personnel may be called during TNC for assessing their technical suitability by GRSE. Post finalisation of order the same personnel are to be deployed by the firm. In case the firm fails to deploy the said personnel then the new personnel may be allowed for deployment post technical clearance by GRSE.

IMPORTANT NOTE CERTAIN APPENDICES OF THE NIT ARE CLASSIFIED IN NATURE AND WILL BE SHARED WITH PROSPECTIVE CONTRACTORS ONLY AFTER: -


- a. SUBMISSION OF NON-DISCLOSURE AGREEMENT (NDA)
- b. DOCUMENTS IN SUPPORT OF TECHNICAL QUALIFICATION CRITERIA AND CLEARANCE THEREOF BY TECHNICAL SCREENING COMMITTEE AS NOMINATED BY GRSE.

6. **CONTRACTOR'S SCOPE OF WORK**

A. PHASE I

CO-ORDINATION & EXECUTION SERVICES: The contractor need to depute a co-ordination and execution team on site in GRSE consisting with planning, material management, co-ordination with associated departments for successful execution of the work. A mobilization time of not exceeding 01 week may be given. The team shall undertake followings as: -

- a) Examine Technical documents for all equipment and related systems and ship interface areas/ drawings. Towards the same interactions through the nominated personnel of GRSE is to be done with OEMs and Indian Navy/ WOT/ Trials teams /formations.
- b) Inspections and trial to be offered as per GRAQ and inspection to be done as per approved QAP and GRSE QA norms. Contractor to formulate formats for Inspection and Work, Maintenance & Preservation Logs and get the same approved by GRSE QA. The formats and work logs are to be printed by contractor post clearance by GRSE QA.

 GRSE LTD.	TECHNICAL SPECIFICATION FOR ENGG TURNKEY POST LAUNCHING PACKAGE FOR II, STW, SDC, TRIAL AND COMMISIONING WORKS OF 04 NOS. ASWSWC SHIP	SOR No.: SOR/MW/ASW SWC/Engg/01, REV: 01
		SHEET- 3 of 33
		PREP. BY: Mgr./MFOS & Mgr./Pipe Shop
		CHECKED BY: DGM/Engg./MW
PROJECT: ASW SWC		
YARD NO: 3033-36		
Group: Engg.		
Date: 24.05.2024		

- c) Examine all documents from OEMs and evolve technical procedures required to undertake installation inspection, preservation, setting to works, SDCs and trials and handing over of the equipment as indicated in the SOR hereinafter. These are to be ratified/ approved by GRSE MFOS dept./ Plumbing dept. /QA dept. as and if required by the customer reps.
- d) Draft process sheets / QAP / GRAQs / System drawings will be provided during the pre-bid meeting for reference and appreciation of scope to the contractor.
- e) Examine and reconcile complete systems wise material list vis-à-vis items ordered and received. Deficiencies to be projected immediately to GRSE and reflected in monthly progress reports.
- f) Material management team need to be focused for taking-over of materials from previous contractor/other departments/GRSE store and handing-over to the customer reps and need to maintain the log.


B. PHASE II

EQUIPMENT PRESERVATION & RE PRESERVATION, DE-PRESERVATION AND SCHEDULE ROUTINE: In this stage the contractor is required to undertake


- i. Preservation & re-preservation
- ii. Protection of the equipment post lowering / PI
- iii. De-preservation
- iv. Schedule routine

The general description of the tasks given is enumerated below. These are guidelines and not exhaustive.

Note: There may be a situation based on the progress of the ship where the engg. work has already started much before the contractor starts working. This is particularly important and predominant for auxiliary as well as propulsion system work. In that case the contractor will be informed by the yard from what activity they will have to start. To keep a continuity and smooth progress the contractor will have to engage a core expert production team to get associated with GRSE and register their acceptance in the process of work being undertaken by GRSE.

 GRSE LTD.	TECHNICAL SPECIFICATION FOR ENGG TURNKEY POST LAUNCHING PACKAGE FOR II, STW, SDC, TRIAL AND COMMISSIONING WORKS OF 04 NOS. ASWSWC SHIP	SOR No.: SOR/MW/ASW SWC/Engg/01, REV: 01
		SHEET- 4 of 33
		PREP. BY: Mgr./MFOS & Mgr./Pipe Shop
		CHECKED BY: DGM/Engg./MW
PROJECT: ASW SWC		
YARD NO: 3033-36		
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- i. Preservation & re-preservation
- a) Machineries / engg. equipments will be handed over to the engineering contractor after PI of the equipment to be carried out by the previous contractor with proper documentation.
 - b) Post PI the machineries are to be preserved in accordance with the guidelines given by the OEM of each of the respective equipment (where OEM is not directly doing the preservation).
 - c) Jacking up of equipment to prevent mount decay, preservation of mounts as per guidelines of OEMs are to be undertaken and duly recorded.
 - d) For re-preservation routines of major equipment post issuance of item from stores which are necessarily required to be undertaken under the supervision or by the OEM, the contractor will have to provide assisting services for this preservation. Proper record of such re-preservation has to be kept by the contractor signed by OEM and GRSE rep./QA and/or WOT and finally handed over to WOT through GRSE.
 - e) These preservation and re-preservation records are to be signed by the contractors own QA rep and GRSE production/QA, OEM (If applicable).
 - f) Routine greasing, oiling, dust removal from valves, gauges for its smooth functioning.
- ii. Protection of the equipment post lowering / PI
- a) Protection of main equipment to be done by making temporary guards around the equipment by means of scaffolding pipes or welded ty pipe/ flat bars framework. (Wooden flats/ Pipes/ MS flat bars/angles as held with GRSE will be provided free issue). These are to be covered with a non-flammable thick fabric without any particle releasing/itching characteristics (contractor' scope) to ensure that the main equipment is not damaged in any way.
 - b) Fortnightly checks and cleaning of the same are to be done and records thereof maintained. In case removal/ shifting of protection cover of equipment is required for access by other contractors for on board work, same will be co-ordinated and informed to turnkey contractor by GRSE for action.
 - c) Contractor is to maintain preservation log books of all equipment in their scope and get the same signed as required by GRSE rep, QA and WOT (also OEM if so required). These log books are to be handed over (as required) to the commissioning crew of the ship at the time of commissioning.
 - d) Protection of gauges, valves, & other fittings by proper means such as wire lashing, greasing, covering as per requirement of ship.

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iii. De-preservation of the equipment prior commencement of STW is to be undertaken by the contractor. This activity is to be planned & scheduled by contractor's team duly considering the planned sequence of equipment start and all other interlinked equipment i.a.w. timelines specified in the contract. For certain equipment where the de- preservation is to be undertaken by OEMs as per Main Equipment PO, the back-to-back services of OEM engineers will be provided by GRSE free of cost. The spares and consumables for the same will be provided for by GRSE free of cost.

If the same is required to be provided by the contractor, then separate POs will be issued for the same. This provisioning is to be done only post formal go ahead by GRSE by PS/ AGM level officer.

iv. Schedule routines

- a) After certain running hours as per OEM's / Navy protocol schedule routine of equipment need to be under taken by the contractor. Post issuance of item from stores which are necessarily required to be undertaken under the supervision or by the OEM, the contractor will have to provide assisting services for this routine. Proper record of such routine has to be kept by the contractor signed by OEM and GRSE rep./QA and/or WOT and finally handed over to WOT through GRSE.
- b) For certain equipment where the schedule routine is to be undertaken by OEMs as per Main Equipment PO, the back-to-back services of OEM engineers will be provided by GRSE free of cost. The spares and consumables for the same will be provided for by GRSE free of cost.
- c) Maintenance Routines Based on equipment running Logs, the contractor has to inform well in advance to GRSE Nodal Officer (ideally 04 weeks) the requirement of periodic (time based or running hours based) routines that will be falling due as per OEM maintenance schedules.
- d) These major equipment routines would be undertaken by the OEM themselves / through their authorized agencies. Contractor is to render necessary assistance to OEM work for on board routines.
- e) For all equipment including general purpose machines installed on board contractor has to undertake basic turning and greasing as required, and keep records for the same.

C. PHASE III

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ONBOARD WORKS TOWARDS READINESS, INSTALLATION INSPECTION (II) & SETTING TO WORK (STW)

a) Plumbing system will be handed over to the engineering contractor after II of the system to be carried out by the plumbing contractor. Proper handing over and taking over should take place with all inspection report. Liquidation of observation of all plumbing work to be undertaken by plumbing vender. However, defects arising during endurance trial, system trials, BT, CST & FMT has to be liquidated by the engg. contractor.


Generally, the scope of work of the engineering contractor in the plumbing front are the following:

- i. Checking of the entire pipeline of respective system for its integrity.
- ii. Energise the system with the system pump at working pressure for both suction and discharge side of the system.
- iii. Rectification of the system pipelines arising (if any) at the time of system energising.
- iv. Understanding the pre-requisites of system trial & conducting In-house Trials prior offering to various inspection agencies is mandatory.
- v. During trails plumbing troubleshooting activity such as air purging, strainer cleaning, minor leak arrest, valve throttling for suction, pressure setting in relief/reducing valve etc. may have to be performed.
- vi. Winding up of trial setup by re-establishing system to its original stage.
- vii. Certification of these activity will be done by the yard officer.
- viii. This activity will be considered as part of setting to work (STW) of equipment and system.

b) Complete flushing of pipelines of systems related to DA, Propulsion Main engines, Gear Boxes and water jet hyd. and lub. oil system etc. up to required quality of NAS value, or as specified in GRAQ. Contractor will have to maintain/adjust/rectify the valves, piping loops etc in various systems to complete flushing activity. System equipment running required for flushing will be considered part of flushing activity.

c) Calibration/Adjustment of Instruments, gauges, valves, Pressure switches:

- i. All the instruments related to systems and equipment of the package are to be re-calibrated before II and before handing over of equipment to Ship staff. Also, the calibration to be undertaken based on validity expiry of calibration during the process from II to hand over. Re-calibration of gauges, if required, during trials will be considered as part of services for the trials. Beyond that till handing over

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of the systems to SS, if any, re-calibration if required will be done by the contractor without any financial implication to GRSE.

- ii. All the test & measuring equipment of the contractor should have valid calibration certified by any NABL accredited lab/OEM lab.
 - iii. The calibration and record keeping are to be maintained by the contractor as part of routine up-keeping of the equipment.
 - iv. Adjustment/ setting of reducing/relief valves, pressure switches/transmitters etc. has to done by the contractor.
 - v. However, some additional gauges (digital/analogue) if required to be calibrated on the basis inspection agencies/SS recommendation, same may be done on chargeable basis. Detailed description please see Annexure-C 'Other Services'.
 - vi. The calibration to be done through NABL accredited laboratory/OEM lab. GRSE calibration service facility may be provided to the vendor if required by GRSE on chargeable basis.
- d) Detailed equipment wise job description given in **Annexure-B** for better understanding and execution of the job.

D. PHASE IV

EQUIPMENT COMMISSIONING & TRIALS

- a) Following to be offered by contractor (duly planned & scheduled with inputs & coordination of all concerned): -
 - i. Setting To Work (STW),
 - ii. Interfacing check
 - iii. Safety Device Checks (SDCs)
 - iv. Endurance Trials and System Trials
 - v. Harbour Acceptance Trials (HAT) & Basin Trials (BT)
- b) Above activities are to be undertaken by the contractor and offered to GRSE production (as applicable). Thereafter inspection to be offered by contractor on behalf of GRSE berth to QA/ WOT/MTU/TPI/SS. According to the nature of work, the trials may extend well beyond normal working hours and certain trials may have to be done during off working hours / Sundays Holidays. This has to be duly considered and catered by the contractor without any addl. financial involvement to GRSE.

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- c) The scope of trials is governed by the ship's equipment documentation / NES, GRAQs and the applicable naval standards of IHQ/DME and norms of WOT and MTU. (Copies of the base standards as relevant will be shared to the successful contractor during execution of the contract.)
- d) Liquidation of the observations of the II, SDC, endurance trials, system trials, HATs and SATs are to be undertaken by the contractor, including record keeping of the same by means of the entry in Excel sheets and updating on a daily basis and promulgation to all concerned by means of email. The liquidation of observations/ defects will be categorised into the following heads. The categorization will be done by joint team of GRSE Berth officer, GRSE QA and contractor's execution team head. In event of dispute the decision of PL/DGM (Engg.)/AGM(MW) will be binding on contractor.
- i. **Category I** To be done at no Addl. cost by contractor
 - ii. **Category II** To be done at additional cost, for modifications/ rework
 - a. Type A minor (See Method of Quotation sheet)
 - b. Type B major (---- do-----)

Till trial no rework/ modification will be paid extra.
 - iii. **Category III** Additional cost for spares/supplied parts at actual only and for corresponding service part refer category-II.
- Note: - Operational defects are to be rectified on top priority without hampering normal process. Rest to be done with proper time planning as per concerned yard officer /GRSE.
- d) Running log book is to be maintained and periodic routine maintenance (greasing of bearing points, periodic cleaning of the equipment) is to be done.
- e) Detailed equipment wise job description given in **Annexure-B** for better understanding and execution of the job.

E. PHASE V

CONTRACTOR'S SEA TRIALS(CST), FINAL MACHINERY TRIAL (FMT) & HANDING OVER


- a) Sea Acceptance Trials. Contractor has to completely and comprehensively assist GRSE production in all stages during conduct of Sea Trials. All inspections during CST & FMT have to be offered by contractor on behalf of GRSE berth to QA/

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WOT/MTU/TPI/SS. The sea acceptance trial will be scheduled as per CST/FMT plan of the Ship and accordingly all systems have to be made ready starting from II. It may be noted that in GRSE built ships, the vessel proceeds for Sea trial in a sortie of minimum 5 to 7 days outbound from Kolkata. The personnel deployed therefore have to be deployed accordingly. Contractor and Personnel are required to furnish indemnity bond prior sailing as per standard format. Standard necessary insurance for the same comes under the scope of contractor.

- b) Defect/ Observation Liquidation. Liquidation of the defects/observations during CST & FMT for equipment & Systems are to be undertaken by contractor as per defects category stated as above.
- c) ALL WORKS IN WAY The contractor may be required to undertake other works that are related to the installation / operation or trials of the equipment. These works may include works towards clean ship/house keeping, minor touch up painting & lettering, connectorizations, minor sheet & insulation works, minor plumbing and trunking work etc free of cost.
- d) OPERATION & WATCH-KEEPING The contractor will undertake operation & watch-keeping of the Engg equipment in harbour & Sea and as required for the conduct of the trials of the equipment and running of other equipment falling under this package. For this the contractor will engage the qualified personnel (as per Annexure A). The Professional Assessment Evaluation of these personnel will be done by GRSE. The intimation of requirement of operation and watch keeping of equipment will be given by the DGM Engg/ I/c MFOS / I/c Plumbing of the ship. The contractor is to undertake operation there on only. Log Books are to be maintained and duly signed by contractor supervisor. These activities will be considered part of STW, testing, tuning of equipment. All necessary steps required for safe operations as per GRSE Safety regulations, general safe industrial & marine practices and also OEM guidelines for safe operations are to be adhered to. Equipment will fall under these three categories: -
 - i. Equipment which will be run by contractor under supervision/ after receiving instruction from OEM. GRSE will organise OEM for giving such instruction.
 - ii. General purpose equipment which will required to be operated for conduct of STW etc

Note: Manning/watch keeping of Local, MCR and Bridge propulsion console & APMS console during BT, CST & FMT and any other cold & hot movement of the ship comes under the scope of the contractor.

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- e) DOCUMENTATION & RECORD KEEPING The contractor will undertake the filling up of Log Books, updating of Defect Lists, Test Reports (II/HATs/SATs and all other relevant reports) duly endorsed by GRSE nominated Production Officer.
- f) Detailed equipment wise job description given in Annexure-B for better understanding and execution of the job.


7. DRAWINGS & DOCUMENTS

In addition to drawings & documents referred in Annexures, other drawings, as listed below need to be referred during machinery installation inspection, STW, SDC, endurance & system trial, BT, CST, FMT and subsequent operations.

- a) OEM documents (installation and operation manual).
- b) Installation & System Drawings etc.
- c) Drawings for fitting various outfit items.
- d) GRSE proposed/approved QAP for Engg.
- e) Approved GRAQ

8. GRSE'S SCOPE OF SUPPLY

- a) Main equipment and accessories.
- b) POLs and Lubricants as on demand after necessary verification. Loss of any oil needs justification. Spillage if happens must be cleaned thoroughly and immediately.
- c) OEM services as per main equipment PO
- d) Commissioning spares, during trials. If not held then contractor to provision as mentioned elsewhere in the SOR.
- e) All steel, paints, dock blocks, scaffolding material, pipes, cables etc as required will be provided as held with GRSE on free issue basis.
- f) Primer for touch-up after welding & preservation.
- g) Raw material for fabricating lifting lugs with doublers/jigs etc. However, if any service bolt, nut and washers, if required for the process, contractor to arrange.
- h) Weld consumables for DMR 249 A
- i) Infrastructure for installation including crane
- j) Electricity and water at designated distribution points.
- k) Space for placement of containers within the yard to serve as office space and stores for the contractors

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9. CONTRACTOR'S SCOPE OF SUPPLY

a) Adequate executives and supervisors (as per Annexure A), dedicated QA teams, skilled operatives to meet the schedule with quality. The requisite skill sets required are as follows:

1. Execution Team Adequate experienced executives and supervisors (as per Annexure A) need to be provided by the contractor to take care of installation of machineries, piping and commissioning work of equipment and systems. For this purpose, the following minimum personnel in the officer & supervisory capacity should be provided for execution team


- i. Overall, in-charge of engineering activity in a ship
- ii. 03 executives (02 for Machinery activity & 01 for plumbing activity) minimum Graduate level engg.
- iii. 06 supervisory staff (03 for Machinery activity & 03 for plumbing activity) minimum Diploma level engg.

2. The following category of workmen will be required

SI	Skill	Requirement	Additional requirement
i	Machinery Fitter	ITI/ Min 05 years' experience	Experience in testing, trial and commissioning activity
ii	Pipe fitter	ITI/ Min 05 years' experience	Experience in pipe fabrication, erection.
iii	Store keeper	03 years' work experience	

b) Contractor is to have a dedicated and qualified QA and the QA supervisor is to forward all requests for inspection along with copy of contractors' internal inspection report. The qualification for the QA inspectors is as follows:


QA Engg & control : 02 (01 for machinery & 01 for plumbing)	At least two ex-Navy Sailor/Diploma in Mechanical with minimum three years' experience in the onboard ship or in trial teams/WOT. Knowledge of computer applications / software like MS Office, MS Excel, MS Project etc is essential. Preferable if experienced in testing, trial and commissioning activity
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- c) Duly calibrated and certified pressure simulator, temperature simulator, temperature gun, non-contact type rpm measurement tools / stroboscope, pressure gauges, temperature gauge, ultra-sonic flow meter, Vibration & SPM meter, pumps for pressure testing for measurement of flows during trails, BT, CST & FMT etc. required for the job will be brought in by contractor.
- d) Supply of oil finding paste, water finding paste, sounding tape for calibration of tanks and general requirement comes under contractor's scope.
- e) Paint brushes, cleaning material, portable drill M/c, grinding m/c, digital spirit level, torque spanners, multi meter, general consumable (i.e. general purpose grease, cleaner, cotton waste, emery paper, thread seal, jubilee clamp, service nut , bolts & washer etc) required for the job will be brought in by contractor. Any other machine, equipment, material and consumables not covered above, are also to be arranged by contractor.
- f) Basic tools & tackles such as spanner, hammer, chain pulley, slings, Allen key etc. to conduct trials during HAT, SAT & FMT.
- g) Pump/ Flushing Kit required online and offline flushing, calibrated NAS/contamination monitor, wire mesh/conical filter, hoses, fittings, calibrated pressure gauges to complete loop, filling and extracting POL etc.
- h) Min. 75% of deployed manpower should be of skilled category (Mechanical and plumbing fitters).
- i) Computers with associated peripherals as required for day-to-day electronic emails and data transfer. These computers are to be sanitized as per the requirements of GRSE IT Policy. The required procedure of the same will be shared with contractors.

10. GENERAL POINTS IN SCOPE OF CONTRACTOR

- a) Preparation of check-list in consultation with yard officers, then ensure and maintain activities for starting and wind-up of any equipment / system. Checklist should consist of activities such as Sea chest & line valves, OBDs, gauge cocks, air purging cock, rain cap opening/closing, machine power ON/OFF etc.

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Note: This checklist must be signed by site engineer/supervisor and duly certified by Berth officer after completion of day-to-day activities.

b) Plumbing related general scope:


- i. Minor clamping, fastening work to arrest vibration in capillary/ small dia. pipes.
- ii. Temporary removal and re-fitment of chequer flooring for valve operation during equipment/system running, troubleshooting activity of plumbing systems.
- iii. Air purging cock and strainer cleaning related work of Sea chest, Sea tubes, OBDs & suction lines.
- iv. Adjustment/setting of Pressure reducing/relief valves etc.
- v. Fuel, LO, Fresh water line etc. conical/plane filter fitment/removal work.
- vi. Trouble shooting activity such as air purging, achieving suction from eductor, strum box, hydrant etc. from bilges/bottom & other decks.
- vii. Leak arrest in pipes, flanges, bellows, corrosion protector etc.
- viii. Orifice, spoon, blank fitment and removal activity in pipe line.
- ix. Rain cap fitment and removal activity pre/post equipment running.
- x. Manhole cover opening and box-up work during system troubleshooting.
- xi. Leakage arrest in gauges capillary assembly, Scupper & other dk. Fittings by blanking/opening.
- xii. Fire hydrant coupling & hose fitment and removal for misc. system activity & trials.

- c) **Internal Transport & Services** Transportation of loose material/ equipment within GRSE (including inter unit i.e. MW, FOJ or RDB/etc.) will be the responsibility of the contractor. Transporter (KAMAG/TOMAG) for transportation of major equipment and cranes will be provided by GRSE at no additional cost. However, since GRSE's own infrastructure will also be used for other tasks, the requirement of the same for critical operations are to be planned in advance and coordinated with all stakeholders. Contractor will engage for smooth execution of works as per following support equipment. These are (but not limited to);

Note 1. The contractor has to provide aforesaid services as and when required for execution of the job.


Note 2. Material handling up to 05 Ton will be the responsibility of contractor and GRSE will provide assistance for movement of materials more than 05 Ton weight.

- d) All material rendered surpluses must be returned to GRSE prior to submission of Final Bill. Material Reconciliation Statement (MRS) is to be submitted to

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MFOS/Plumbing/GRSE(as applicable), prior submission of final bill. MRS, duly certified by MFOS/Plumbing in-charge, GRSE to be attached with final WDC/ bill.

- e) Pre-requisite & wind-up activities associated with system trials such as protective covering for delicate items, basic wiping, greasing etc. will taken care by contractor as per guidance of berth Officer.
- f) **Hindrance Register** The contractor is to maintain a Hindrance Register. This Hindrance Register is to record instances of hindrance to work not on account of or attributable to contractor that are hampering the execution of work as per the finalized plan and schedule of Activities. The maintenance of hindrance register is to be done by contractor and the same is to be countersigned by MFOS yard officer/ Plumbing yard officer / PL / DGM (Engg) on regular basis. The hindrances recorded would be admissible for waiver in terms of period of hindrance during the computation of Late Delivery Charges (LD), if any, and as applicable will be admissible for deduction from the final bill.
- g) All general tools, torque wrenches, tackles, lifting appliance are in scope of contractor. As-made jigs and fixtures fabrication (Raw material will be given by GRSE berth and the same are to be made in consultation with berth) will be under contractor's scope. These are to be made in consultation with GRSE/MFOS berth/Plumbing berth. The relevant load test certificates/ calibration certificates etc are to be held in the custody of contractor Safety Executive. A record book is to be maintained by contractor with signature of GRSE officer.
- h) Ship building infrastructure (including crane, power supply, Oxygen, Acetylene, Argo shield gases etc.) other than those explicitly spelt out will be in scope of GRSE. However, since GRSE's own infrastructure will also be used for other tasks the requirement of the same for critical operations are to be planned in advance and coordinated by contractor. It may be noted that non-availability and or non-providing of above or any GRSE infrastructure will not be considered towards an acceptable delay on account of contractor. The contractor having been awarded turnkey responsibility is required to take and make alternate arrangements, as required. The machines required for use onboard e.g. machining, drilling, cutting, grinding etc are in the contractors' scope.
- i) Material

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All loose items are to be mustered with drawing/ documentation during receipt and proper record to be kept.


Instruments/ gauges and items are to be protected during the total process from lowering by means of protection cover or removal. If removal is required, the same to be recorded preserved in safe custody on discussion with GRSE/ OEM as applicable.

j) Co-ordination

Contractor has to actively coordinate with other GRSE subcontractors / OEMs through the nominated production officer of GRSE particularly with respect to interfacing with Systems, Controls, Electricals and IPMS. The time duration for sharing work site for job execution has to be mutually arrived at. In the event of dispute, the decision of PL/DGM (Engg.)/AGM(MW) will be binding on contractor.

k) Workmanship

- Tendered/sub-contracted job should be of good workmanship and meet GRSE laid down standards. Workmanship should be technically correct, good outlook, operational friendly and acceptable to customer.
- All parameter values must match with drawings/GRAQs.
- QAP/QIP as established are to be strictly followed.
- Any additional expenditure incurred by GRSE on account of poor workmanship by the contractor shall be recovered from the contractor towards additional material (consumables POLs etc used due to the same).
- Proper care must be taken during transportation of the equipment.
- QIPs/QCR for inspection to be prepared by contractor in consultation with GRSE (QA) and to be approved by GRSE within 07 days of placement of order/ LOI/ availability of complete binding data / drawings of the specific equipment.
- Contractor is solely responsible for the safety of their workmen. Contractor to ensure safe working condition at their work spot. Special care to be taken and safety of access and ingress & egress is to be ensured wooden planks for working platform and rigid ladders etc. to inspection staff & surveyors.

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- Contractor is required to deploy a qualified and dedicated safety supervisor prior commencement of sub-contracted work. The guidance details of the safety logs that are to be maintained will be handed over to contractor.
 - All personnel deployed are to be medically fit and to wear Personal Protective gears and Equipment. The overall dungarees are to be emblazoned with "Contractor Name".
- l) Ensuring safety for Men and Materials:
- i. All personnel working onboard Ship should be equipped with proper safety gears like Helmet, Boiler Suit, Safety Goggles, Hand Gloves, Safety Shoes etc.
 - ii. For working on height safety belt and other PPE must be used.
 - iii. Laid down Safety rules of GRSE should be adhered during working onboard. Violation of this will lead to heavy penalty including cancellation of order also.
 - iv. All person involved with the job should be covered with PF, ESIC, GRSE (HR) statutory compliances for gate pass (whichever applicable).
 - v. Gate entry formalities of GRSE laid down by CSIF should be followed strictly and GRSE will not intervene in this for any reason whatsoever may be.

11. INSPECTION

- a) Inspection of works including stage inspections will be carried out by GRSE (QA rep) / TPI / WOT / Naval agencies. Overall QAP will be shared during pre-bid meeting.
- b) Based on the above a draft QAP is to be submitted for approval by GRSE QA.
- c) At least 02 days prior notice is required for offering inspection. Rectification, if any, recommended by Inspecting Agency / Agencies, will have to be carried out by contractor without extra cost, within the contractual time period.
- d) For Details refer **Annexure-D**

12. SECURITY

All documents / drawings of GRSE ASWSWC Yard No. 3029 to 3036 are confidential in nature. All drawings / documents issued to the contractor should not be copied and accounted and should be returned to GRSE on completion of work. The contractor and their personnel will be governed by Official Secret Act, 1923 (amended time to time). In case of any violations, provisions of the act will be applicable to the contractor and its personnel.

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13. MISCELLANEOUS


- a) Contractor is to have a dedicated QA department. Before each inspection offer, the same are to be checked by contractor's QA rep.
- b) All materials taken and their completeness for execution of the work is to be checked to ensure that there is no shortfall between supply and document/ drawing. If any the same are to be recorded with GRSE rep and intimated by email/ letter to GRSE concerned officer for taking up.
- c) All loose items, including tallies, pads etc supplied by GRSE must be fitted. A reconciliation report to be submitted prior to final inspection. Any clarification required on drawings/material must be obtained from GRSE within 03 to 05 days of receipt of drawing.
- d) Before delivery, all equipment are to be properly cleaned, dried and preserved and then boxed up. All openings are to be suitably covered with in accordance with extant rules to prevent ingress of foreign material and maintain preservation.
- e) The contractor is responsible for upkeep of the work area. The work area at each work site including onboard ship, shall be kept neat and clean at all times. Touch up painting as required is to be undertaken. (Paint will be supplied as required by GRSE).
- f) Garbage and scrap are to be segregated and deposited at the space earmarked by GRSE.

14. SCHEDULE

Delivery and cardinal date plan of the project is placed at **Annexure-C**. These are to be considered and mobilization plan of resources to be planned.

15. WORK DONE CERTIFICATE

- a) Inspection, WDC and Bill Certification GRSE points are indicated in columns in Method of Quotation **Annexure-D**.
- b) DGM(Engg)/ Berth Officer MFOS/ Berth Officer Plumbing as applicable.
- c) The Inspection notes are to be duly supported by QA inspection notes and WOT/ MTU I-Notes as applicable. The WDC certifying officer is to be taken as the nodal GRSE officer for that task as a general guideline.

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- d) In case of delays, the duration along with number of delayed days shall be specified in respective WDCs to invoke LD clause and effect recoveries from sub contractor's invoice.

16. MODIFICATION/ REWORK


Modification of any work is the sole discretion of GRSE. In case, any modification job is undertaken by the firm then, the cost of 100% of the particular line item shall be applicable. However, this will have to be done under written instruction from GRSE and a mention to this effect is to be made in WDC. Any rework arising out of defective workmanship or lapses on account of the contractor will not be paid for.

17. PLANNING & PROJECT MONITORING

- a) Planning: Contractor has to plan and generate a schedule of activities in detail. The outline plan is to be submitted post award of PO for evaluation.
- b) Given the multiple linkages to various factors (many of which may be beyond the control of GRSE) there is possibility of a requirement to re-schedule the initial planned activities. Accordingly, a Dynamic Review Mechanism (DRM) will be instituted post PO and submission of initial plan.
- c) Contractor must identify a coordinator ear marked for close liaison with GRSE.
- d) **Scheduling & Resources:** Firm as part of the technical bid should submit a document indicating a complete Road Map for Project Execution along with timeline and resources deployment plan indicating major activities as follows:

Sl	Activity	Duration	Resources (Type- Skilled worker / fitter/ operator etc)
i.	Preservation of equipment		
ii.	Onboard de- preservation		
iii.	Installation Inspection (II)		
iv.	STW & SDC		
v.	HATs		
vi.	SATs		

Note: The scrutiny of the above will be a key aspect of discussion in TNC. The contractor will be required to submit detailed proposal for complete work execution along with year-on-year plan, contingency responses and all other factors.

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- e) **Reviews:** GRSE will review the progress of work on a weekly basis with site in charge of contractor to monitor progress vis-a-vis schedule. During this interaction all holdups related to progress of work will be discussed and resolved. Schedule of reviews will be


	GRSE	contractor
Weekly	Berth Officer	Site in charge
Fortnightly	Bert Officer/PL/DGM(Engg)	Site in charge /Project Manager
Monthly	Bert Officer/PL/DGM(Engg)	Site in charge /Project Manager

- f) **Communication Mechanism:** Contractors are free to contact GRSE personnel at all other times also. Contractor is required to communicate to GRSE in unambiguous terms, issues affecting production in order to ensure speedy resolution of the same.
- g) **Communication is to be by email to PL/ DGM (Engg.)/AGM (MW)/ PS, the nodal officer for the contract. The specific contacts and the escalated level of contacts are as follows**

	First level of contact	Escalated level of contact
Production	AM/ DM / Mgr./SM of concerned dept	DGM/ AGM of concerned dept/ PL
Inspection Issues	AM/DM/ Mgr./SM QA,	DQM QA/ AGM QA
Contractual Issues	AM/DM/ Mgr./SM Contract	SM Contract/DGM Contract
Design	AM/ DM/Mgr. Engg Design	SM / AGM Design
HR, Wages, PF, ESI, Passes	AM/DM/Mgr HR / PL	SM HR/ DGM HR/AGM HR
Bills	AM/ DM Finance	Mgr./SM/ DGM Finance SLP
Safety	Safety Officer	CSO/PL

Email ids of specific officers will be intimated at the time of PO placement

- e) **Catch up Mechanism:** To meet the production target, contractor will have to make arrangement for additional manpower/ time. Work in Shift system may also need to be adopted to meet the project dates. This will be intimated in writing in the event of failure of schedule. The shift system is to be implemented within 01 week of intimation.

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f) In the event an activity is delayed solely on account of the contractor, then LD would be levied as per GRSE STACs

18. MOBILISATION PERIOD:

07 days on receipt of LOA/ Contract will be given for commencement of work.

19. PLACE OF WORK:

The job is required to be executed at GRSE (MW/FOJ/RBD/KPDD).

20. GUARANTEE & WARRANTY:

Applicable for a period of 12 (twelve) months from the date of final Inspection of the job i.e. handing over of the ship (D448). Any faulty work carried out by the sub-contractor is to be rectified by them within the time stipulated by the GRSE. In case of failure of sub-contractor to meet the ship's construction schedule, outstanding deficiencies shall be rectified by GRSE and all costs of such work shall have to be borne by the sub-contractor.

21. PRE- BID MEETING:


Pre-bid meeting will be held after **03 days** (Three) of publishing of tender. Technical documents of the engineering equipment/ systems will be shared with the participating bidders, on submission of NDA.

22. SITE VISIT

Before quoting, the Bidder / Tenderer in his own interest shall carry out site visits to know the site conditions / situations and full implications of the assignment. This will also help bidders in proper assessment of the work. Failure to do so will not absolve the contractor of his responsibility to carry out the work as specified in the Tender Documents. The cost of visiting the site shall be borne by the Tenderer and shall be at his own responsibility and risk.

23. METHOD OF QUOTATION AND PAYMENT TERMS

Detailed Method of Quotation & Payment Terms placed at **ANNEXURE-D.**

 GRSE LTD.	TECHNICAL SPECIFICATION FOR ENGG TURNKEY POST LAUNCHING PACKAGE FOR II, STW, SDC, TRIAL AND COMMISIONING WORKS OF 04 NOS. ASWSWC SHIP	SOR No.: SOR/MW/ASW SWC/Engg/01, REV: 01
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APPENDIX-A

TENTATIVE LIST OF MAIN EQUIPMENT VIS-A-VIS COMPARTMENT NAME


SL NO.	EQUIPMENT NAME	COMPARTMENT
1	FW Pump (Port)	Hydrophone Tank Room
2	FW Pump (Stbd)	Hydrophone Tank Room
3	Hydrophore Tank	Hydrophone Tank Room
4	FW Pump	Lobby & Ref Plant
5	Hydrophore Tank	Lobby & Ref Plant
6	MD Compressor	Pump & AC
7	Fire Pump	Pump & AC
8	STP	STP
9	Vacuum Pump(AFT)	STP
10	Vacuum Pump(FWD)	STP
11	Air Bottle(Port)	DA
12	Air Bottle(Stbd)	DA
13	Salvage Pump	DA
14	DG (Port)	DA
15	DG (Center)	DA
16	DG (Stbd)	DA
17	FO Transfer Pump1	DA
18	FO Transfer Pump2	DA
19	Bilge Pump	DA
20	Air Bottle(FWD)	FWD. Engine Room
21	Air Bottle(AFT)	FWD. Engine Room
22	Fire Pump	FWD. Engine Room
23	Salvage Pump	FWD. Engine Room
24	F.O. Centrifuge	FWD. Engine Room
25	Bilge Pump	FWD. Engine Room
26	L.O. Pump(Upper)	FWD. Engine Room
27	Dirty Lube Oil (DLO) Pump	FWD. Engine Room
28	OWS Bilge Pump	FWD. Engine Room
29	ME GB Raft Unit (Port)	FWD. Engine Room
30	ME GB Raft Unit (Stbd)	FWD. Engine Room
31	DG	FWD. Engine Room

**GRSE LTD.****PROJECT:** ASW SWC**YARD NO:** 3033-36**Group:** Engg.**Date:** 24.05.2024

**TECHNICAL SPECIFICATION FOR
ENGG TURNKEY POST
LAUNCHING PACKAGE FOR II,
STW, SDC, TRIAL AND
COMMISIONING WORKS OF 04
NOS. ASWSWC SHIP**


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Mgr./Pipe Shop**CHECKED BY:** DGM/Engg./MW

32	L.O. Pump (Lower)	FWD. Engine Room
33	Air Bottle	AFT. Engine Room
34	DD Compressor	AFT. Engine Room
35	MD Compressor	AFT. Engine Room
36	OWS	AFT. Engine Room
37	Fire Pump	AFT. Engine Room
38	Salvage Pump	AFT. Engine Room
39	LO Centrifuge	AFT. Engine Room
40	FO Centrifuge	AFT. Engine Room
41	ME GB Raft Unit (Center)	AFT. Engine Room
42	Plumber Bearing Unit (Port)	AFT. Engine Room
43	Plumber Bearing Unit (Stbd)	AFT. Engine Room
44	HPP (Port)	Waterjet
45	HPP (Center)	Waterjet
46	HPP (Stbd)	Waterjet
47	Lube Oil Hose Unit (P)	Waterjet
48	Lube Oil Hose Unit (C)	Waterjet
49	Lube Oil Hose Unit (S)	Waterjet
50	LO Pump (Port)	Waterjet
51	LO Pump (Center)	Waterjet
52	LO Pump (Stbd)	Waterjet
53	Hydraulic Oil Tank	Waterjet
54	Waterjet Assembly[P]	Waterjet
55	Waterjet Assembly[C]	Waterjet
56	Waterjet Assembly[S]	Waterjet
57	Thrust Bearing Unit (Port)	Waterjet
58	Thrust Bearing Unit (Cent.)	Waterjet
59	Thrust Bearing Unit (Stbd)	Waterjet
60	Washing Machine	Laundry
61	Tumbler(FWD)	Laundry
62	Tumbler(AFT)	Laundry
63	EDA	EDA
64	DD Fire Pump	Main Deck FR No. 44-46
65	Workshop Equipment	Workshop compartment

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ANNEXURE A

	Designation	Domain	Minimum strength req.
<u>EXECUTION TEAMS</u>	Project Manager /Project Head per ship	Experienced Executives with 10+ years with experience in testing, trial & Commissioning	In-charge Engg. - 01
	Site Engineer per ship	Engineering Graduate (Mechanical/Production/Marine) with 05 Years + experience in testing, trial & Commissioning	Machinery-02 Plumbing-01
	Site Supervisor per ship	Engineering / Diploma (Mechanical/Production/Marine) with 03 Years + experience in testing, trial & Commissioning	Machinery-03 Plumbing-03
	List /Number of Specialist / fitters per ship	Detailed list to be submitted during TNC	
<u>QA TEAMS</u>	QA supervisor per ship	Diploma with 03 Years + experience in testing, trial & Commissioning	Machinery-01 Plumbing-01
<u>SAFETY TEAMS</u>	Safety supervisor per ship	Diploma with 03 Years + experience in Industrial safety	Safety-01

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ANNEXURE B


➤ DETAILED EQUIPMENT WISE JOB DESCRIPTION UNDER THE SCOPE OF CONTRACTOR

1. Diesel Alternators: The ship is fitted with four (04) numbers of Diesel Alternators (400KW each) manufactured by Cummins-Elmot. The DAs have a two-stage mounting arrangement, with the Diesel engine and Alternator resiliently mounted on a common skid/raft and the skid/raft itself resiliently mounted on ship's foundation.

- a) Service for O/B preservation & de preservation, Schedule Routine of Diesel Alternator
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of Diesel Alternator and associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals.
 - ii. System drawings of fuel & Lub. oil, compressed air, intake, exhaust, Sea Water cooling & fire main system for plumbing operations.
 - iii. Testing and load trial of DAs, Emergency cooling, AVR, Governor and paralleling trial.
 - iv. Vibration & bearing condition test during load trials.
 - v. Assistance for exhaust IRSS trials as per GRAQ.
 - vi. Operation and manning of DA sets during CST & FMT is come under "Service for SATs" and no addl. running hours will be paid for the same.
- c) Post-trial services
Services for Running of DA and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

2. HP Air compressor (HPAC): The ship is fitted with three (03) numbers of compressors manufactured by Burckhardt Compression, 06 nos. Air bottles of Everest Kanto, PRS & manifold by Flash forge.

- a) Service for O/B preservation & de preservation, Schedule Routine of HPAC
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of HPAC and associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals
 - ii. System drawings of compressed air, exhaust (for DD only), Sea Water cooling & fire main system for plumbing operations.
 - iii. Endurance trial, bottle filling and cut-in & cut-out trial.
 - iv. Vibration & bearing condition test during trial.
 - v. Air bottle/PRS/Manifold blow through, filling and discharge operations as per standard practice.

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- vi. Testing & trial of air integrity test.
- vii. Trial & testing of compressed air supply/discharge to various delivery points.
- viii. Operation and manning of HPAC sets during CST & FMT is come under "Service for SATs" and no addl. running hours will be paid for the same.

c) Post-trial services

Services for Running of HPAC and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

3. RO Plant: The ship is fitted with two (02) numbers of RO plant manufactured by Rochem.

a) Service for O/B preservation & de preservation, Schedule Routine

- i. Refer Phase II

b) Service for STW, SDC, II & Trial

- i. Refer Phase III, IV & V.
- ii. GRAQs/OEM manuals.
- iii. System drawings of fresh water, Sea Water cooling & fire main system for plumbing operations.
- iv. Endurance trial and vibration & bearing condition test.
- v. Operation and manning of RO plant during CST & FMT is come under "Service for SATs" and no addl. running hours will be paid for the same.

c) Post-trial services

Services for Running of RO Plant and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.


4. Fire Pump: The ship is fitted with three (03) numbers of Fire Pump manufactured by Desmi.

a) Service for O/B preservation & de preservation, Schedule Routine

- i. Refer Phase II

b) Service for STW, SDC, II & Trial of associated system

- i. Refer Phase III, IV & V
- ii. GRAQs/OEM manuals
- iii. System drawings of fire main, salvage, bilge, ballast system for plumbing operations.
- iv. Endurance trial and vibration & bearing condition test.
- v. Testing & trial of Eductors, hydrants, sprinklers & various suction points.
- vi. Trial & testing of Ballasting/De-ballasting of tanks.
- vii. Trial & testing of Fire main supply/discharge to various service points & auxiliaries.

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- viii. Box-up & opening of tank manholes during the whole activity.
- ix. Operation and manning of Fire pumps during CST & FMT is come under “Service for SATs” and no addl. running hours will be paid for the same.

c) Post-trial services

Services for Running of Fire Pump and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

5. Salvage Pump: The ship is fitted with three (03) numbers of Salvage Pump manufactured by Desmi.

a) Service for O/B preservation & de preservation, Schedule Routine

- i. Refer Phase II

b) Service for STW, SDC, II & Trial of associated system

- i. Refer Phase III, IV & V, GRAQs/OEM manuals.
- ii. System drawings of fire main, salvage, bilge for plumbing operations.
- iii. Endurance trial and vibration & bearing condition test.
- iv. Testing and trial of portable salvage pumps (05 nos.)
- v. Testing & trial of eductors, strum boxes & various suction/discharge points.
- vi. Box-up & opening of tank manholes during the whole activity.
- vii. Operation and manning of salvage pumps during CST & FMT is come under “Service for SATs” and no addl. running hours will be paid for the same.

c) Post-trial services

Services for Running of Salvage Pump and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

6. Bilge Pump: The ship is fitted with two (02) numbers of Bilge Pump manufactured by SPX.


a) Service for O/B preservation & de preservation, Schedule Routine

- i. Refer Phase II

b) Service for STW, SDC, II & Trial of associated system

- i. Refer Phase III, IV & V, GRAQs/OEM manuals.
- ii. System drawings of fire main, salvage, bilge for plumbing operations.
- iii. Endurance trial and vibration & bearing condition test.
- iv. Testing & trial of eductors, strum boxes & various suction/discharge points.
- v. Operation and manning of bilge pumps during CST & FMT are come under “Service for SATs” and no addl. running hours will be paid for the same.

c) Post-trial services

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Services for Running of bilge pump and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

7. FO & LO Transfer Pump: The ship is fitted with two (02) numbers of FO transfer Pump & two (02) nos. LO transfer Pumps manufactured by Desmi & 01 no. DLO pump.

- a) Service for O/B preservation & de preservation, Schedule Routine
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals
 - ii. System drawings of FO & LO filling & transfer, FO & LO centrifuge for plumbing operations.
 - iii. Endurance trial and vibration & bearing condition test.
 - iv. Testing & trial of FO/LO/DLO pumps by taking suction, discharge, transfer through various fuel & Lub. oil tanks as per system pipe line.
 - v. Proving RAS system for fuel & LO line.
 - vi. Box-up & opening of tank manholes during the whole activity.
 - vii. Operation and manning of FO, LO, DLO pumps during CST & FMT will come under "Service for SATs" and no addl. running hours will be paid for the same.


c) Post-trial services

Services for Running of FO & LO, DLO pumps and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

8. FO & LO Centrifuges: The ship is fitted with two (02) numbers of FO centrifuges & one (01 no.) LO centrifuges manufactured by GEA.

- a) Service for O/B preservation & de preservation, Schedule Routine
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals
 - ii. System drawings of FO & LO filling & transfer, FO & LO centrifuge for plumbing operations.
 - iii. Endurance trial and vibration & bearing condition test.
 - iv. Testing & trial of FO/LO centrifuges by taking suction, discharge, transfer through various fuel & Lub. oil tanks as per system pipe line.
 - v. Box-up & opening of tank manholes during the whole activity.
 - vi. Operation and manning of FO & LO centrifuges during CST & FMT are come under "Service for SATs" and no addl. running hours will be paid for the same.

c) Post-trial services

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Services for Running of FO & LO centrifuges and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

9. FW Pump & Hydrophore System: The ship is fitted with two (03) numbers of FW pump & two (02 no.) Hydrophore tank manufactured by SPX.

- a) Service for O/B preservation & de preservation, Schedule Routine
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals
 - ii. Refer System drawings of FW & HW filling & transfer, compressed air for plumbing operations.
 - iii. Endurance trial, vibration & bearing condition test.
 - iv. Trial testing, cut-in cut out of hydrophore tank.
 - v. Trial & testing of Fresh water, Hot water supply/discharge to various service points & auxiliaries.
 - vi. Testing & trial of FW pump by taking suction, discharge, transfer through various FW tanks as per system pipe line.
 - vii. Box-up & opening of tank manholes during the whole activity.
 - viii. Operation and manning of FO & LO centrifuges during CST & FMT are come under "Service for SATs" and no addl. running hours will be paid for the same.
- c) Post-trial services
Services for Running of FW pumps and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

10. OWS & OWS bilge System: The ship is fitted with 01 (One) number of OWS & OWS bilge pump manufactured by EPE.

- a) Service for O/B preservation & de preservation, Schedule Routine
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals
 - ii. Refer System drawings of bilge system, OWS system and compressed air for plumbing operations.
 - iii. Endurance trial, vibration & bearing condition test.
 - iv. Testing & trial of OWS by taking suction & discharge as per system pipe line.
 - v. Operation and manning of FO & LO centrifuges during CST & FMT are come under "Service for SATs" and no addl. running hours will be paid for the same.
- c) Post-trial services

 GRSE LTD.	TECHNICAL SPECIFICATION FOR ENGG TURNKEY POST LAUNCHING PACKAGE FOR II, STW, SDC, TRIAL AND COMMISIONING WORKS OF 04 NOS. ASWSWC SHIP	SOR No.: SOR/MW/ASW SWC/Engg/01, REV: 01
		SHEET- 29 of 33
		PREP. BY: Mgr./MFOS & Mgr./Pipe Shop
		CHECKED BY: DGM/Engg./MW
PROJECT: ASW SWC		
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Group: Engg.		
Date: 24.05.2024		

Services for Running of OWS and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

11. Emergency DA: The ship is fitted with one (01) no. EDA manufactured by Kirloskar.

- a) Service for O/B preservation & de preservation, Schedule Routine
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals.
 - ii. System drawings of fuel & Lub. oil, exhaust, & fire main system for plumbing operations.
 - iii. Testing and load trial of DAs, AVR, Governor trial.
 - iv. Vibration & bearing condition test during load trials.
 - v. Operation and manning of EDA sets during CST & FMT is come under "Service for SATs" and no addl. running hours will be paid for the same.

c) Post-trial services


Services for Running of EDA and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

12. Workshop Machinery and Laundry:

- a) Service for O/B preservation & de preservation, Schedule Routine
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals.
 - ii. Testing and trial.

13. ME GB Raft Unit: The ship is fitted with Three (03) numbers of Raft unit manufactured by MTU and Reintjes. The Raft have a two-stage mounting arrangement, with the Diesel engine and Gear Box resiliently mounted on a common skid/ raft and the skid/ raft itself resiliently mounted on ship's foundation.


- a) Service for O/B preservation & de preservation, Schedule Routine
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of ME GB Raft and associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals.
 - ii. System drawings of fuel & Lub. oil, compressed air, intake, exhaust, Sea Water cooling, FW & fire main system for plumbing operations.
 - iii. Testing and trial of MEs, Emergency cooling, BT, CST & FMT.
 - iv. Vibration & bearing condition test & trial during HAT, BT, CST & FMT.

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- v. Fuel flow and water flow measurement through ultra-sonic flow meter during trials, BT, CST & FMT.
- vi. Assistance for exhaust IRSS trials as per GRAQ.
- vii. Fabrication and erection of Shaft to GB coupling guard i.e., Guard for Geislinger Coupling is under the contractor's scope and comes under STW.
- viii. There are 03 nos. Plenum chambers in ASWSWC class of ships for air intake of 03 nos main engines. The Plenum chambers are located in Dk-1. Vendor has to install 01 no. 2 stage separator, 02 nos drain trap assembly, 04 nos intake filters and all the accessories for each plenum chamber as per OEM approved Drawings. and as per recommendation of OEM/MFOS officer and it is under the contractor's scope and comes under STW
- ix. Operation and manning of ME & GB sets during CST & FMT is come under "Service for SATs" and no addl. running hours will be paid for the same.
- c) Post-trial services
Services for Running of ME & GB and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

14. Waterjet and shafting: The ship is fitted with Three (03) numbers of waterjet system manufactured by Wartsila.

- a) Service for O/B preservation & de preservation, Schedule Routine
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of waterjet, shafting and associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals.
 - ii. System drawings of Hyd. & Lub. oil, Sea Water cooling & fire main system for plumbing operations.
 - iii. Testing and trial of water jet reversing and steering during HAT, BT, CST & FMT.
 - iv. Hyd flow and water flow measurement through ultra-sonic flow meter during trials, BT, CST & FMT.
 - v. Vibration & bearing condition test & trial during HAT, BT, CST & FMT.
 - vi. After CST/FMT waterjet & shafting related dry-dock checks comes under contractor scope.
 - vii. Operation and manning of ME & GB sets during CST & FMT is come under "Service for SATs" and no addl. running hours will be paid for the same.
- c) Post-trial services
Services for Running of waterjet & shafting and associated system beyond trial. Separate log book to be maintained for running hours. Payment will be made on the quarterly basis based on berth Officer certified log register.

 GRSE LTD.	TECHNICAL SPECIFICATION FOR ENGG TURNKEY POST LAUNCHING PACKAGE FOR II, STW, SDC, TRIAL AND COMMISIONING WORKS OF 04 NOS. ASWSWC SHIP	SOR No.: SOR/MW/ASW SWC/Engg/01, REV: 01
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		PREP. BY: Mgr./MFOS & Mgr./Pipe Shop
		CHECKED BY: DGM/Engg./MW
PROJECT: ASW SWC		
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Date: 24.05.2024		


15. STP Plant : The ship is fitted with one (01) number of STP plant manufactured by Vacman.

- a) Service for O/B preservation & de preservation, Schedule Routine
 - i. Refer Phase II
- b) Service for STW, SDC, II & Trial of waterjet, shafting and associated system
 - i. Refer Phase III, IV & V, GRAQs/OEM manuals.
 - ii. System drawings of scupper, sea water cooling, fire main, compressed system for plumbing operations.
 - iii. Testing and trial of STP & vacuum toilet system during HAT, CST & FMT.
 - iv. Operation and manning of STP sets during CST & FMT is come under "Service for SATs" and no addl. running hours will be paid for the same.

16. Flushing: Scope of work and supply for FO, LO, Hydraulic & Fresh water System Flushing:

References: GRAQs and System drawing FO, LO, FW, Hyd. & Lub. Oil hydraulic system.

- i. Establishing flushing circuit/loop with motor driven pump, hose, pipe line tank and filter element at suitable place. Vendor has to arrange flushing unit with filter element.
- ii. Flushing of system may be required to be undertaken in multiple circuits.
- iii. Vendor should arrange suitable arrangement & calibrated machine for measuring NAS Grade online. (as mentioned in respective GRAQs)
- iv. Ports which are not in service to be suitably blanked to prevent ingress of foreign particles prior and post flushing. Suitable fitting for Blanking are to be arranged by Vendor.
- v. Changing & cleaning of filters regularly, if required to achieve desired result.
- vi. If leakages observed during flushing, to be rectified by the vendor.
- vii. Flushing to be offered and shown to the inspection agencies.
- viii. After completion of flushing, vendor has to re-establish the original system and defects, if any, to be liquidated during trial of the system.
- ix. All type of Machine, tool & tackles such as Motor driven pump, flushing kit, filters, hoses etc. to carry out on-board job.
- x. All necessary pipe fittings for looping, running the flushing activity.
- xi. Experienced and skilled manpower to carry out the flushing.
- xii. Service nut-bolts as and when required for erection of the indented job.
- xiii. Any other facilities not listed above but considered necessary by the Contractor for carrying out the entire work satisfactorily.

 GRSE LTD.	TECHNICAL SPECIFICATION FOR ENGG TURNKEY POST LAUNCHING PACKAGE FOR II, STW, SDC, TRIAL AND COMMISIONING WORKS OF 04 NOS. ASWSWC SHIP	SOR No.: SOR/MW/ASW SWC/Engg/01, REV: 01
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		PREP. BY: Mgr./MFOS & Mgr./Pipe Shop
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17. Pre-wetting system:

Service for HATs, SATs of pre-wetting associated system

- i. Refer Phase III, IV & V, GRAQs/OEM manuals.
- ii. System drawing of pre-wetting & fire main system for plumbing operations.
- iii. Testing and trial of pre-wetting system at Harbour & CST/FMT.
- iv. Operation and manning of Fire Pumps sets during pre-wetting will come under "Service for HATs & SATs" and no addl. running hours will be paid for the same.


18. Scupper & Fixed foam system:

Service for HATs, SATs of Scupper & fixed foam associated system

- i. Refer Phase III, IV & V, GRAQs/OEM manuals.
- ii. System drawing of scupper, fixed foam system for plumbing operations.
- iii. Testing and trial of scupper supply, drain & service points in all compartments.
- iv. Maintenance & trouble shooting of scupper lines during CST, FMT.
- v. Testing and trial activity of fixed foam supply/drain as per GRAQs.

19. Other Services:

- i. TCG fitment, tank readiness & tank calibration with IPMS for Ready used tanks (FO & LO): Tank content gauge fitment, tank cleanliness inspection, tank box-up and tank calibration with IPMS.
- ii. TCG fitment, tank readiness & tank calibration with IPMS for Bottom Tanks: Tank content gauge fitment, tank cleanliness inspection, tank box-up and tank calibration with IPMS.
- iii. Testing of Lub oil, Fuel oil, Coolant, Hyd oil, Water from NABL accredited lab: onboard sample collection, transportation & testing after trails from lab.
- iv. Service Calibration of gauges/switches Analogue (Other than Equipment's mounted, OEM supplied & System) : Opening, plugging, transportation, calibration & re-fitment of gauges/switches etc.
- v. Service Calibration of gauges /switches Digital (Other than Equipment's mounted, OEM supplied & System): Opening, plugging, transportation, calibration & re-fitment of gauges/switches etc.
- vi. Liquidation of STW, II, SDC, HATs & SATs observations Type A minor:
Refer Phase IV
- vii. Liquidation of STW, II, SDC, HATs & SATs observations Type B major:
Refer Phase IV
- viii. Assistance for Bunkering and De-bunkering of Fuel oil, Lub. Oil & Fresh Water:
 - a. Assistance in fuelling & de-fuelling through oil barge, portable tanks of jetty.
 - b. Assistance in Fresh water bunkering and de-bunkering to/from outside source.

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PROJECT: ASW SWC		
YARD NO: 3033-36		
Group: Engg.		
Date: 24.05.2024		

ANNEXURE C

➤ **PROJECT EXECUTION TIME LINE**

Yard No.	Tentative Start	Tentative completion	Tentative job Execution schedule	BT	CST	FMT / Handing-over
3035	July 2024	Dec 2024	06 Months	Early Sep 24	Oct 24	Dec 24
3033	July 2024	Dec 2025	18 Months	Mar 25	May 25	Sep 25
3036	July 2024	Dec 2025	18 Months	Jun 25	Aug 25	Dec 25
3034	April 2025	Sep 2026	18 Months	Mar 26	May 26	Sep 26

➤ **JOB EXECUTION SCHEDULE**

Tenure of Contract - Initially, the contract will be established for a period of **03 (three)** years from the date of commencement of the contract. The contract period may be extended as per requirement of GRSE production schedule at the same rate, terms & conditions. Similarly, the contract period may be reduced as per GRSE discretion.

---END---

ANNEXURE D											
PAGE 1											
DIESEL ALTERNATOR AND ASSOCIATED SYSTEM											
Sl	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightages
A	Preservation & de preservation and Schedule Routine										
1	Serv for O/B preserv.& de preservation, Schedule Routine of Diesel Alternator (Unit Months = Per Machine per Months)	Months	(18 Months X 04 Nos./ Ship) = 72 Months	3	(72 Months X 3 Ship) = 216 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B	II STW SDC & Trial										
1	Serv for STW, SDC & II of Diesel Alternator and associated system	Set	4	3	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 4. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	20%
2	Serv for Load trial, Emergency cooling trial and HATs of Diesel Alternator and associated system (service for APMS/IPMS trial included)	Set	4	3	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		40%
3	Serv for AVR & Governor, Paralleling Trail and HATs of Diesel Alternator and associated system (service for APMS/IPMS trial included)	Set	4	4	16	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%
4	Serv for SATs Diesel Alternator and associated system	Set	4	4	16	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C	Post trial services										
1	Services for Running of DA & associated system beyond trial	HRS	2000	4	8000	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis.	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 2									
HP AIR COMPRESSOR (MD & DD) INCLUDING ASSOCIATED AIR BOTTLES & PRS											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A	Preservation & de preservation and Schedule Routine										
1	Serv for O/B preserv. & de preservation, Schedule Routine of MD & DD Air Compressor including 06 nos. air bottles, PRS & manifold (Unit Months = Per Machine per Months)	Months	(18 Months X 03 Nos./ Ship) = 54 Months	3	(54 Months X 3 Ship) = 162 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B	II STW SDC & Trial										
1	Serv for STW, SDC, II of HP Air Compressor (MD & DD) including 06 nos. air bottles, PRS & manifold (other than OEM)	Set	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 4. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	20%
2	Serv for HATs HP Air Compressor (MD & DD) (Endurance trial) with air bottles	Set	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%
3	Serv for HATs HP Air Compressor (MD & DD) (including system trial and air integrity test)	Set	3	4	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		40%
4	Serv for SATs HP Air Compressor (MD & DD) (other than OEM)	Set	3	4	12	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C	Post trial services										
1	Services for Running of HPAC (MD & DD) & associated system beyond trial	HRS	1200	4	4800	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 3									
RO PLANT											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A Preservation & de preservation and Schedule Routine											
1	Serv for O/B preserv. & de preservation, Schedule Routine of RO plant including pre-filter pump (Unit Months = Per Machine per Months)	Months	(18 Months X 02 Nos./ Ship) = 36 Months	3	(36 Months X 3 Ship) = 108 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B II STW SDC & Trial											
1	Serv for STW, SDC, II RO Plant and pre-filter pump (other than OEM)	Set	2	4	8	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 3. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	30%
2	Serv for HATs RO Plant System (other than OEM)	Set	2	4	8	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		50%
3	Serv for SATs RO Plant System (other than OEM)	Set	2	4	8	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C Post trial services											
1	Services for Running of RO Plant & associated system beyond trial	HRS	50	4	200	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 4									
FIRE PUMP											
Sl	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A Preservation & de preservation and Schedule Routine											
1	Serv for O/B preserv. & de preservation, Schedule Routine of MD Fire Pump-03 & DD Fire Pump- 01 (Unit Months = Per Machine per Months)	Months	(18 Months X 03 Nos./ Ship) = 54 Months	3	(54 Months X 3 Ship) = 162 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B II STW SDC & Trial											
1	Serv for STW, SDC, II of MD Fire Pump-03 & DD Fire Pump- 01	Set	4	3	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 4. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	20%
2	Serv for HATs (Endurance trial) MD Fire Pump-03 & DD Fire Pump- 01	Set	4	3	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%
3	Serv for Fire man system trial (Eductor, ballasting de-ballasting, fire hydrant, sprinkling)	Set	4	4	16	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		40%
4	Serv for SATs of MD Fire Pump-03 & DD Fire Pump- 01 and system trial	Set	4	4	16	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C Post trial services											
1	Services for Running of D Fire Pump-03 & DD Fire Pump- 01 & associated system beyond trial	HRS	1000	4	4000	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 5									
SALVAGE PUMP											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A	Preservation & de preservation and Schedule Routine										
1	Serv for O/B preserv. & de preservation, Schedule Routine of Salvage Pump (Unit Months = Per Machine per Months)	Months	(18 Months X 03 Nos./ Ship) = 54 Months	3	(54 Months X 3 Ship) = 162 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B	II STW SDC & Trial										
1	Serv for STW, SDC, II of Salvage Pump	Set	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 5. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	20%
2	Serv for HATs (Endurance trial) Salvage Pump	Set	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%
3	Serv for Salvage system trial (Eductor, Strum boxes)	Set	3	4	12	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		30%
4	Serv for HATs of portable Salvage Pump	Set	5	4	20	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		10%
5	Serv for SATs for Salvage pump & system trial	Set	3	4	12	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C	Post trial services										
1	Services for Running of Salvage Pump & associated system beyond trial	HRS	500	4	2000	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 6									
BILGE PUMP											
Sl	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A Preservation & de preservation and Schedule Routine											
1	Serv for O/B preserv. & de preservatio, Schedule Routine of Bilge Pump (Unit Months = Per Machine per Months)	Months	(18 Months X 02 Nos./ Ship) = 36 Months	3	(36 Months X 3 Ship) = 108 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B II STW SDC & Trial											
1	Serv for STW, SDC, II of Bilge Pump	Set	2	3	6	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 4. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	20%
2	Serv for HATs (Endurance trial) Bilge Pump	Set	2	3	6	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		30%
3	Serv for Bilge system trial (Eductor, Strum boxes)	Set	2	4	8	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		40%
4	Serv for SATs for Bilge pump & system trial	Set	2	4	8	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		10%
C Post trial services											
1	Services for Running of Bilge Pump & associated system beyond trial	HRS	400	4	1600	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 7									
FO & LO, DLO TRANSFER PUMP											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A	Preservation & de preservation and Schedule Routine										
1	Serv for O/B preserv. & de preservation, Schedule Routine of FO Transfer Pump-02 Nos., LO Transfer Pump-02 Nos. & DLO-01 No. (Unit Months = Per Machine per Months)	Months	(18 Months X 03 Nos./ Ship) = 54 Months	3	(54 Months X 3 Ship) = 162 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B	II STW SDC & Trial										
1	Serv for STW, SDC, II of FO & LO Transfer Pump, DLO Pump	Set	5	3	15	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 3. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	30%
2	Serv for HATs (Endurance trial)FO & LO Transfer pump, DLO Pump & system trial	Set	5	4	20	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		50%
3	Serv for SATs for FO & LO Transfer pump, DLO Pump & system trial	Set	5	4	20	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C	Post trial services										
1	Services for Running of FO Transfer system beyond trial	HRS	800	4	3200	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%
2	Services for Running of LO Transfer system beyond trial	HRS	200	4	800	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 8									
FO & LO Centrifuge											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A Preservation & de preservation and Schedule Routine											
1	Serv for O/B preserv. & de preservation, Schedule Routine of FO Centrifuge-02 Nos. & LO Centrifuge-01 No. (Unit Months = Per Machine per Months)	Months	(18 Months X 03 Nos./ Ship) = 54 Months	3	(54 Months X 3 Ship) = 162 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B II STW SDC & Trial											
1	Serv for STW, SDC, II of FO & LO Centrifuge	Set	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 3. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	30%
2	Serv for HATs (Endurance trial) FO & LO Centrifuge	Set	3	4	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		50%
3	Serv for SATs for FO & LO Centrifuge & system trial	Set	3	4	12	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C Post trial services											
1	Services for Running of FO Centrifuge System beyond trial	HRS	1000	4	4000	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%
2	Services for Running of LO Centrifuge System beyond trial	HRS	100	4	400	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 9									
FW Pump & Hydrophore Tank											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A	Preservation & de preservation and Schedule Routine										
1	Serv for O/B preserv. & de preservation, Schedule Routine of FW Pump - 03 Nos. & Hydrophore Tank- 02 Nos. (Unit Months = Per Machine per Months)	Months	(18 Months X 03 Nos./ Ship) = 54 Months	3	(54 Months X 3 Ship) = 162 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B	II STW SDC & Trial										
1	Serv for STW, SDC, II of FW Pump - 03 Nos. & Hydrophore Tank- 02 Nos.	Set	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 3. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	30%
2	Serv for HATs (Endurance trial) FW Pump & Hydrophore system trial	Set	3	4	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		50%
3	Serv for SATs for FW system trial	Set	3	4	12	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C	Post trial services										
1	Services for Running of FW System beyond trial	HRS	500	4	2000	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 10									
OWS with OWS Bilge Pump											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A Preservation & de preservation and Schedule Routine											
1	Serv for O/B preserv. & de preservation, Schedule Routine of OWS with OWS Bilge Pump (Unit Months = Per Machine per Months)	Months	(18 Months X 01 Nos./ Ship) = 18 Months	3	(18 Months X 3 Ship) = 54 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B II STW SDC & Trial											
1	Serv for STW, SDC, II of OWS with OWS Bilge Pump	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 4. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	10%
2	Serv for HATs (Endurance trial) OWS with OWS Bilge Pump	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		30%
3	Serv for OWS system trial	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		40%
4	Serv for SATs for OWS with OWS Bilge Pump & system trial	Set	1	4	4	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C Post trial services											
1	Services for Running of OWS with OWS Bilge Pump & associated system beyond trial	HRS	50	4	200	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 11									
EMERGENCY DIESEL ALTERNATOR											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightages
A Preservation & de preservation and Schedule Routine											
1	Serv for O/B preserv. & de preservation, Schedule Routine of Emergency Diesel Alternator (Unit Months = Per Machine per Months)	Months	(18 Months X 01 Nos./ Ship) = 18 Months	3	(18 Months X 3 Ship) = 54 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B II STW SDC & Trial											
1	Serv for STW, SDC & II of Emergency Diesel Alternator	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 3. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	30%
2	Serv for Load trial, AVR, Governor and HATS of Emergency Diesel Alternator and associated system	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		50%
3	Serv for SATs Emergency Diesel Alternator and associated system	Set	1	4	4	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	SAT part will be cleared against successful completion of CST & FMT		20%
C Post trial services											
1	Services for Running of Emergency DG & associated system beyond trial	HRS	50	4	200	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 12									
Workshop Mc & Laundry											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightages
A	Preservation & de preservation and Schedule Routine										
1	Serv for O/B preserv.& de preservation of Workshop M/c. equipments - 1 Set (Drill M/c-01, Grinding M/c-01 & Bench Vice-01) & Laundry equipments -1 set (Washing Machine - 01 & Tumbler- 02) (Unit Months = Per Machine per Months)	Months	(18 Months X 02 Nos./ Ship) = 36 Months	3	(36 Months X 3 Ship) = 108 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B	II STW SDC & Trial										
1	Serv for STW, SDC & II of Workshop M/c. equipments - 1 Set (Drill M/c- 01, Grinding M/c-01 & Bench Vice-01) & Laundry equipments -1 set (Washing Machine - 01 & Tumbler- 02)	Set	2	4	8	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 2. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	50%
2	Serv for HATS & SATs of Workshop M/c. equipments - 1 Set (Drill M/c- 01, Grinding M/c-01 & Bench Vice-01) & Laundry equipments -1 set (Washing Machine - 01 & Tumbler- 02)	Set	2	4	8	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		50%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 13									
ME GB Raft Unit											
Sl	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightages
A Preservation & de preservation and Schedule Routine											
1	Serv for O/B preserv. & de preservation, Schedule Routine of ME GB Raft Unit (Unit Months = Per Machine per Months)	Months	(18 Months X 03 Nos./ Ship) = 54 Months	3	(54 Months X 3 Ship) = 162 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B II STW SDC & Trial											
1	Serv for STW, SDC & II of ME GB Raft Unit and associated system	Set	3	4	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 4. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	20%
2	Serv for HATs of ME GB Raft unit and associated system (Basin Trial)	Set	3	4	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		40%
3	Serv for SATs of ME GB Raft unit and associated system (CST)	Set	3	4	12	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%
4	Serv for SATs of ME GB Raft unit and associated system (FMT)	Set	3	4	12	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%
C Post trial services											
1	Services for Running of ME GB Raft unit and associated system beyond trial	HRS	1500	4	6000	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 14									
Water Jet & Shafting											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightages
A	Preservation & de preservation and Schedule Routine										
1	Serv for O/B preserv.& de preservation, Schedule Routine of Water Jet & Shafting (Unit Months = Per Machine per Months)	Months	(18 Months X 03 Nos./ Ship) = 54 Months	3	(54 Months X 3 Ship) = 162 Months	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B	II STW SDC & Trial										
1	Serv for STW, SDC & II of Water Jet & Shafting components and associated system	Set	3	4	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 4. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	20%
2	Serv for HATs of Water Jet & Shafting components and associated system (Basin Trial)	Set	3	4	12	QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		40%
3	Serv for SATs of Water Jet & Shafting components and associated system (CST)	Set	3	4	12	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%
4	Serv for SATs of Water Jet & Shafting components and associated system (FMT)	Set	3	4	12	MFOS/QA/WOT AS PER QAP	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%
C	Post trial services										
1	Services for Running of Water Jet & Shafting components and associated system beyond trial	HRS	1500	4	6000	MFOS	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	At actual running hours	Payment will be made on at actual basis based on berth Officer certified log register and the billing cycle will be quarterly basis	100%

Note : Inspection agency is naval trial agency wherever applicable.

STP with vaccum pump											
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage%
A	Preservation & de preservation and Schedule Routine										
1	Serv for O/B preserv. & de preservation, Schedule Routine of STP (Unit Months = Per Machine per Months)	Set	1	3	3	MFOS/QA/WOT	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	Service Started after handing over of eqpt./PI and finished till commissioning	Payment will be made on at actual basis based on certification of the applicable inspection agency and the billing cycle will be quarterly basis.	100%
B	Installation & trial										
1	Serv for STW, SDC, II STP	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	II, STW, SDC & Trial of individual equipment consists of sub-categories indicated in B 1 to 4. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	20%
2	Serv for HATs STP (other than OEM)	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		40%
3	Serv for SATs STP (other than OEM) (For CST)	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%
4	Serv for SATs STP (other than OEM) (For FMT)	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%

Note : Inspection agency is naval trial agency wherever applicable.

	ANNEXURE D	PAGE 16									
	Flushing										
SI	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A	FO System Flushing										
1	Serv for Flushing of FO System pipes for DG Sets	Each	4	3	12	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
2	Serv for Flushing of FO System pipes for Emergency DG Sets	Each	1	3	3	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
3	Serv for Flushing of FO System pipes for MEs	Each	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
4	Serv for Flushing of RUFO tanks & associated Pipes and system	Each	7	3	21	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
5	Serv for Flushing of FO storage tanks & associated Pipes and system	Each	6	3	18	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
B	LO System Flushing										
1	Serv for Flushing of LO System pipes for DG Sets	Each	4	3	12	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
2	Serv for Flushing of LO System pipes for MEs	Each	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
3	Serv for Flushing of LO storage tanks & associated Pipes and system	Each	1	3	3	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
4	Serv for Flushing of RUFO tanks & associated Pipes and system	Each	7	3	21	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
5	Serv for Flushing of WJ TBB Lub. oil System pipes & tanks	Each	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
C	Hydraulic System Flushing										
1	Serv for Flushing of WJ Hydraulic System pipes & tanks	Each	3	3	9	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%
D	Fresh water system Flushing										
1	Serv for Flushing of Fresh water System, Bottom tanks & associated pipes	Each	5	4	20	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual equipment	100%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 17									
Pre-wetting system											
Sl	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A	Pre-wetting system										
1	Serv for HATs Pre-wetting system	Set	1	4	4	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	Pre-wetting system consists of sub-categories indicated in A 1 to 2. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	60%
2	Serv for SATs Pre-wetting system	Set	1	4	4	Plumbing/QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		40%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 18										
Scupper & Fixed Foam system												
Sl	Activity	Unit	Qty./ Ship	Nos. of Ship	Total Qty.	Nos	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
A	Scupper & Fixed Foam system											
1	Serv for HATs Scupper & Fixed foam system	Set	1	4	4	1	QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	Scupper & Fixed Foam system consists of sub-categories indicated in A 1 to 2. Bidder should quote in totality of the job. The total obtained price will be distributed in the ratio as indicated in weightage column. Payment will be made on completion of the job.	80%
2	Serv for SATs Scupper & fixed foam system	Set	1	4	4	1	Plumbing/QA/WOT AS PER QAP	DGM ENGG/In-charge Plumbing	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project		20%

Note : Inspection agency is naval trial agency wherever applicable.

ANNEXURE D		PAGE 19									
OTHER SERVICES											
Sl No	Activity	Unit	Est. Qty/Ship (Payment on actuals)	Nos. of Ship	Total Qty.	INSPECTION NOTE BY	WDC	BILL CERTIFICATION	Period/Remarks	Payment Terms	weightage %
1	TCG fitment, tank readiness & tank calibration with IPMS for Ready used tanks (FO & LO)	Each	8	4	32	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual job	100%
2	TCG fitment, tank readiness & tank calibration with IPMS for Bottom Tanks	Each	20	4	80	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual job	100%
3	Testing of Lub oil, Fuel oil, Coolent, Hyd oil, Water from NABL accraediated lab	Each	50	4	200	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual job	100%
4	Serv_ Calibration of gauges/switches Analogue (Other than Equipments mounted, OEM supplied & System)	Each	100	4	400	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual job	100%
5	Serv_ Calibration of gauges /switches Digital (Other than Equipments mounted, OEM supplied & System)	Each	100	4	400	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual job	100%
6	Liquidation of STW, II, SDC, HATS & SATs observations Type A minor	Each	2000	4	8000	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual job	100%
7	Liquidation of STW, II, SDC, HATS & SATs observations Type B major	Each	1000	4	4000	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual job	100%
8	Assistance for Bunkering and De-bunkering of Fuel oil, Lub Oil & Fresh Water	KL	300	4	1200	MFOS/QA/WOT	DGM ENGG/In-charge MFOS	GM(MW)/AGM (MW)/DGM (ENGG)	As per time schedule of respective project	At actual after completion of individual job	100%

Note : Inspection agency is naval trial agency wherever applicable.



FORMAT FOR TECHNICAL ELIGIBILITY

1. **Name of the Bidder:**

2. **Job Description:**

3. **Tender Reference:**

(A) **Details of Executed relevant jobs:**

Sl. No.	Description of Executed relevant jobs	Order No., Date & Value (in INR) <i>(Supporting soft or, hard copy to be submitted)</i>	Start & Completion date as per Order	Actual start date	Actual Completion Date	Order placed by	Scope of work for executed contract (To quantify)	Details of Resources/ Machinery Deployed	Work completion certificate Ref. No. & date <i>(Supporting soft or, hard copy to be submitted)</i>

(Signature of Authorized Representative with official seal)

Date:

Name:

Designation:

Note: Please add additional pages if required.



FORMAT OF SELF-CERTIFICATION FOR DECLARATION REGARDING BLACKLISTING/ TENDER HOLIDAY

(To be submitted in Company's Letterhead)

I / We, Proprietor/ Partner(s)/ Director(s) of M/s. ----- hereby declare that our firm/company namely M/s.-----have neither been blacklisted nor have received any tender holiday by any PSUs/Central & State Govt. Organizations or any other Government / Quasi Government Organizations during last 03 (three) years ending on **31.05.2024** from taking part in Government tenders.

Or

I / We Proprietor/ Partner(s)/ Director(s) of M/s. ----- hereby declare that our firm/company namely M/s.-----has received tender holiday from M/s----- (name of PSUs/Central & State Govt. Organizations or any other Government / Quasi Government Organizations) from taking part in Government tenders for a period of ----- months w.e.f.-----to ----- (date). The period is over on ----- (date) and now our firm/company is entitled to take part in Government tenders. (relevant withdrawal/revocation document is attached).

In case the above information are found inappropriate, I/We are fully aware that the offer submitted by our firm / contract awarded to our firm/company namely M/s -----will be rejected/cancelled by M/s GRSE, and EMD/SD shall be forfeited and appropriate action will be taken in accordance with the vendor policy of GRSE.

Signature -----

Name -----

Designation: -----

Name & address of the firm: -----

Date:

Signature of Bidder with Seal.



ANNEXURE-5 "A"

CHECK LIST OF STATUTORY RESPONSIBILITY OF CONTRACTOR THE CONTRACT LABOUR (R & A), ACT, 1970 AND CENTRAL RULES, 1971

SL. NO.	NATURE OF STATUTORY REQUIREMENTS	FORM NO.	RESPONSIBILITY	REMARKS
01	Labour License	Form –II	Contractor	Contractors engaging 20 or more contract labours would apply for obtaining labour license (in triplicate) to the ALC (C), Kolkata. A copy of the license should be submitted to concerned Unit HR Department. <i>Note: The Contractor cannot deploy more than the number of workmen mentioned in the license on any day.</i>
02	Renewal of labour license	Form –II	Contractor	The contractor shall apply to the ALC(C), Kolkata for renewal of license at least 30 days prior to its expiry. A copy of the acknowledgement / renewed license should be submitted to concerned Unit HR Department.
03	Notice for commencement / completion of work	Form-VII	Contractor / Principal Employer	The contractor shall submit Form – VII to the Inspector / Labour Enforcement Officer (C), Kolkata within 15 days intimating the actual date of commencement / completion of the work. The receipted copy of Form – VII should be submitted to concerned Unit HR Department.
MAINTENANCE OF REGISTERS				
04	Employee Register	FORM – A	Contractor	Comprising of personal details like name, father's name, DOB, Address etc. of the workmen engaged by the contractor.
05	Wages Payment Register	FORM – B	Contractor	Comprising of current rate of minimum wages, employees PF & ESI contribution and other allowances, if any.
06	Register of Loan / Recoveries / Fines etc.	FORM – C	Contractor	To maintain record of loans, fines and advances given, if any and monthly record of recoveries.
07	Attendance Registers	FORM – D	Contractor	Data of daily attendance of each workmen engaged by the contractor indicating their in and out time.



SL. NO.	NATURE OF STATUTORY REQUIREMENTS	FORM NO.	RESPONSIBILITY	REMARKS
08	Employment Card	Form – XII	Contractor	Every contractor shall issue employment card / appointment letter to their contract workers within 03 days from their date of employment.
09	Service Certificate	Form – VIII	Contractor	To be issued by the contractor upon termination of employment / completion of work etc.
10	Wage-slip	Form – XIX	Contractor	Contractors shall issue wage-slip to their workmen at least 01 day prior to disbursement of wages.
11	Annual Return	Online Submission	Contractor	Every Contractors shall prepare Annual Return for the previous year which is submitted online by the Contractors' in <i>Shram Suvidha</i> Portal to the Registering Officer within 31st Jan of the following year.



**CHECK LIST OF STATUTORY RESPONSIBILITY OF CONTRACTOR
COMPLIANCE OF OTHER STATUES FOR ENGAGEMENT OF CONTRACTORS' WORKMEN**

Sl. No.	Relevant Statues	Responsibility	Compliances to be ensured as per the Statute
01	The Factories Act, 1948 & West Bengal Factories Rules, 1958	Contractor	<p>1. <u>Leave with Wages</u>: Every worker who has worked for a period of 240 days or more is entitled to get leave with wages to be calculated one day for every 20 days of work performed by him.</p> <p>2. <u>Payment of Overtime</u>: Where a worker has worked for more than 09 hours in any day or for more than 48 hours in a week, he shall, in respect of overtime work, be entitled to wages twice the hourly rate.</p> <p>3. <u>Hours of Work</u>: The total nos. of hours of work in a week, including overtime, shall not exceed sixty.</p> <p>4. <u>Hours of Overtime</u>: The total hours of overtime shall not exceed fifty in any quarter i.e. during three consecutive months for any worker.</p>
02	Payment of Wages Act, 1936	Contractor	Contractors (employer) engaging less than 1,000 persons have to pay wages before expiry of the 7th day after the last day of wage period.
03	The Minimum Wages Act, 1948	Contractor	Contractors (employer) shall pay minimum wages to every worker as per the Central rates circulated by the Management from time to time.
04	The EPF & MP Act, 1952	Contractor	<p>1. Every contractor shall obtain the following before commencement of work:</p> <p>(a) PF Code No. of the firm.</p> <p>(b) PF UAN i.r.o of the workmen engaged by him.</p> <p>(c) Ensure submission of nominee and dependent details while applying for UAN of workmen.</p>
		Contractor	<p>2. Every contractor shall contribute towards PF @ 12% of the monthly wages of each workman as employer's share and recover 12% of monthly wages from each employee, as employees share and thereafter remit the entire amount to EPFO i.r.o every workman engaged by him. The contribution for the preceding month should be remitted prior to expiry of the 15th day of the following month. Contractors (Employers) are also required to bear the administrative charges as applicable.</p>



Sl. No.	Relevant Statues	Responsibility	Compliances to be ensured as per the Statute
05	The ESI Act, 1948	Contractor	1. Every contractor shall obtain the following: a) ESI Code No. of the firm b) ESI code no. i.r.o of the workmen engaged by him c) Ensure submission of nominee and dependent details while applying for ESI TIC (E-Pehchan Card).
		Contractor	2. Every contractor shall remit ESI contribution (employers' share @ 3.25% and employees' share @ 0.75%) i.r.o every workman engaged by him for the preceding month prior to expiry of the 15th day of the following month.
06	The Payment of Bonus Act 1965 & Rules	Contractor	1. Contractors shall pay annual bonus to their workmen (Contract Labour) drawing wages below and upto Rs. 21,000/- per month. Bonus will be payable minimum @ 8.33% and maximum @ 20% of annual wages.
		Contractor	2. Register in Form - C format {Rule 4(b)} of 'The Payment of Bonus Act, 1965' is to be maintained by the contractor for submission of Annual Return as per the Act.



**RESPONSIBILITIES OF CONTRACTORS OVER AND
ABOVE THE STATUTORY REQUIREMENTS**

- (i) Contractors shall take all necessary steps for disbursement of wages through bank-transfer and issue a payment notice at least 02 days prior to such bank-transfer for information of respective unit HR Dept. as well his workers. (should be incorporated in the contract document in the Payment Terms).
- (ii) All contractors should obtain labour-licenses prior to commencement of work. Principal Employer shall not allow any contractor without license.
- (iii) All outsourced jobs are required to be supervised by a Supervisor duly appointed by the Contractor. The contractor should declare the name and contact number of the supervisor(s) against each P.O before commencement of work and submit the details of the supervisor(s) to the respective unit HR Department. He should keep adequate nos. of supervisors to supervise and co-ordinate the execution of job by contract labours. (The principal employer must check that the name and number of the supervisor which has been provided by the contractor, whether the same person is coming as the said supervisor).
- (iv) The supervisor's name should not be mentioned in the employee register as he is not a contract labour.
- (v) Supervisor of concerned contractor should be present in the work-site where the contract labours of the concerned contractor are supposed to work. To ensure the presence of the supervisor, their attendance may be recorded by the user department on daily basis.
- (vi) Contractor should mention the name of his Supervisor / agent / manager in Form-II which is to be submitted to ALC (C) for obtaining labour license.
- (vii) The supervisor should maintain the attendance register of their contract labours (Form-D) which may be randomly checked by the Officers of the user department. This attendance register will be submitted by the contractors on monthly basis along with the wages-payment registers to the respective unit HR Depts. for obtaining certification of payment of wages to each contractor labour based on their daily / monthly attendances.
- (viii) Contractors must submit details of their firms in the Appendix B1 format prior to commencement of work. They must also submit details of their contract labours in B2 formats for making new gate-passes for the purpose of entry / exit prior to the engagement of such contract labour.



CHECK LIST FOR BILL SUBMISSION - for Service Contracts					
A.	GENERAL PARTICULARS: (to be checked and submitted by Contractor/Vendor)				
A.1	BTN (as per BTS System): -				
A.2	Invoice No and date / E-Invoice No. & Date (if applicable for the vendor) (Original & in triplicate)				
A.3	PO Number				
A.4	Name of Vendor				
A.5	Location of work:		MW / RBD/ FOJ/ TU / 61Park/Vendor's premises		
I. For RA Bill (Running/Progressive bill) (Put ✓ Mark)			YES	NO	NA
A.6	PO Number and date verified with Invoice:				
A.7	Vendor Name & Address in Invoice verified with Purchase Order:				
A.8	Vendor Code as in PO verified with Invoice:				
A.9	Original certified WDC enclosed:				
A.10	Whether WDC is Certified by the Authorized Person as per PO / SOTR with Rubber Stamp				
A.12	HSN/SAC code is as per PO				
A.13	GSTIN No. is as per PO				
A.14	GST % is as per PO				
A.15	Security Deposit (SD) submitted as per PO				
A.16	PBG of equivalent amount submitted, as per PO				
A.17	Compliance of Statutory Liabilities of labour as per PO				
II. Applicable for Final/Balance Bill (Put ✓ Mark)					
A.20	Certified Job Completion Certificate (JCC) enclosed				
A.21	MRS as per PO terms enclosed (If applicable)				
A.22	Guarantee Period (GP) expired as per PO term				
A.23	PBG of equivalent amount submitted, if GP is not over (If Yes, copy to enclose with the bill)				

Signature of Vendor's representative
with Seal/Stamp



For GRSE Use Only				
B.	To be checked and verified by Bill certifying authority (Put ✓ Mark)	YES	NO	NA
B.1	Whether Bill has been forwarded through BTS			
B.2	Whether WDC is Certified by the Authorized Person as per PO / SOTR with Rubber Stamp			
B.3	Job starting & Completion Date (Schedule & Actual) indicated in WDC			
B.4	Certification of Penalty/ Recovery from bill indicated in WDC, if applicable			
B.5	Whether Bill is Certified by the Authorized Person as per PO / SOTR with Rubber Stamp			
B.6	Certification of Penalty/ Recovery from bill as per WDC, if applicable			
B.7	Service Entry Sheet (SES)/GR in line with WDC, PO & Invoice			
	For Final/Balance Bill (Put ✓ Mark)			
B.8	Certified MRS copy as per PO terms enclosed (If applicable)			
B.9	Guarantee Period (GP) expired as per PO term and JCC			
B.10	PBG copy of equivalent amount till GP validity enclosed (if GP is not over)			

Signature of GRSE Bill Certifying Authority
with Designation



INTEGRITY PACT

This Integrity Pact Agreement is executed thisDay of2024.

Between

M/s Garden Reach Shipbuilders & Engineers Limited (GRSE) hereinafter referred to as "The Principal"

and

M/s..... having registered office address _____ hereinafter referred to as "the Bidder/Principal Contractor"

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for _____(Job) The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness /transparency in its relations with its Bidder(s)/ or Principal Contractors (s) in consideration of the Contract awarded to GRSE by Indian Navy, Government of India.

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the Principal mentioned above.

Section 1- Commitments of the Principal

[1] The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -

- a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b. The Principal will, during the tender process treat all bidder(s) with equity and reason. The Principal 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 contact execution.
- c. The Principal will exclude from the process, all known prejudiced persons.

[2] If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this



regard, the principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2- Commitments of the Bidder(s)/Principal Contractor(s)

[1] The Bidder(s)/Principal 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)/ Principal Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person, any material or 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)/Principal Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The Bidder(s)/Principal Contractor(s) will not commit any offence under the relevant IPC/PC Act, further the Bidder(s)/Principal Contractor(s) will not use improperly, for purpose of competition or personal gain, or pass on to others, any information or document provided by the principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Principal Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the Bidder(s) / Principal Contractor(s) of Indian Nationality shall furnish the name and address of the foreign particulars, if any. Further details as mentioned in the "Guidelines on Indian agents of Foreign suppliers" shall be disclosed by the Bidder(s)/Principal Contractor(s). Further as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only, copy of the "Guidelines on Indian agent of foreign supplier" is annexed and marked as annex.
- e. The Bidder(s)/Principal Contractor(S) will, when presenting his/its bid, disclose any and all payments he/it has made, is committed to or intends to make to agents, brokers or any other intermediaries or any other person in connection with the award of the contract.



[2] The Bidders(s)/ Principal Contractor(s) will not instigate third persons to commit offences, outlined above or be an accessory to such offence.

Section 3- Disqualification from tender process and exclusion from future contracts.

If the Bidder(s)/Principal Contractor(s) before award or during execution has/have committed a transgression through a violation of Section 2 above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidders(s)/ Principal Contractor(s) from the tender process or take action as per the extant procedure of the Principal.

Section 4- Compensation for Damages.

- 1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to section 3, the Principal is entitled to demand and recover the damages equivalent to earnest Money deposit/Bid security.
- 2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Principal Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

Section 5- Previous Transgression

- 1) The Bidder declares that no previous transgressions has occurred for them in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise 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 as per the procedure mentioned in "Guidelines on Banning of business dealing"

Section 6- Equal treatment of all Bidders/Principal Contractors/Sub-Principal Contractors.

- 1) The Bidder(s)/Principal Contractor(s) undertake(s) to demand from all sub-Principal Contractors a commitment in conformity with this integrity pact, and to submit it to the Principal before contract signing.
- 2) The Principal will enter into agreements with identical conditions as this one with all Bidders, Principal Contractors and Sub-Principal Contractors.
- 3) The Principal will disqualify from the tender process all bidders who do not sign this pact or violates its provisions.



Section -7- Criminal charges against violating Bidder(s) Contractor(s)/Sub-Contractor(s)

If the Contractor obtains knowledge of conduct of a Bidder, Contractor or Sub-Principal Contractor, or of an employee or a representative or an associate of a Bidder, Contractor or Sub Contractor which constitutes corruption, or if the principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8- Independent External Monitor/Monitors

- 1) The Principal appoints competent and credible Independent External Monitor (Monitor) for this pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2) The Monitor is not subject to instructions by the representative of the parties and perform its functions neutrally and independently. The Monitors report to the Chairman, GRSE.
- 3) The Bidder(s)/Contractor (s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Principal Contractor. The Principal Contractor will also grant the Monitor, upon its request and demonstration of a valid interest, unrestricted and unconditional access to the project documentation. The same is applicable to Sub Principal Contractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Principal Contractor(s) /Sub Principal Contractor(s) with confidentiality.
- 4) The Principal will provide to the Monitor sufficient information about all meeting among the parties related to the project provided such meetings could have an impact on the contractual relations between the Principal and the Principal Contractor, The parties offer to the Monitor the option to participate in such meetings.
- 5) As soon as the Monitor notices, or believes to notice, a violation of this pact, it will so inform the management of the Principal and request the management to discontinue or take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 6) The Monitor will submit a written report to the Chairman, GRSE within 8 to 10 weeks from the date of reference or intimation to it by the Principal and should the occasion arise, submit proposals for correcting problematic situations.
- 7) The Monitor shall be entitled to compensation on the same terms as being extended to/provided to Independent Directors on the GRSE Board.



8) If the Monitor has reported to the Chairman GRSE, a substantiated suspicion of an offence under relevant IPC/PC act, and the Chairman GRSE has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

9) The word `Monitor' would include both Singular and plural.

Section 9- Pact Duration:

This pact begins, when both parties have legally signed it. It expires for the Principal Contractor 18 months after the last payment under the contract, and for all other bidders 6 months after the contract has been awarded.

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

Section 10- Other provisions:

1) This agreement is subject to Indian Law; place of performance and jurisdiction is the Registered Office of the Principal i.e. Kolkata.

2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

3) If any provisions of this agreement is held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions hereof shall not be affected and shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & On behalf of the Principal)

(For & On behalf of the Bidder/Principal Contractor)
(Name, designation, official seal)

Place.....

Place.....

Date

Date.....

Witness 1
(Signature, Name & Address)

Witness 2
(Signature, Name & Address)



Form for Bid Security Declaration

Date: DD/MM/YYYY

Bidder's Ref: _____

GeM Tender Ref: _____

To

M/s. Garden Reach Shipbuilders & Engineers Ltd.

43/46, Garden Reach Road,

Kolkata – 700 024

Kind Attn: (*Name & Designation of tender issuing officer*)

Dear Sir / Madam,

We the undersigned declare that:

We understand that, according to tender conditions, bids must be supported by a bid Security Declaration along with valid MSE/NSIC document.

We accept that we will automatically be suspended from being eligible for bidding in any contract with M/s. GRSE Ltd. for the period of 03 Years starting from date of opening of price bid, if we are in breach of our obligation(s) under the bid conditions, because we:

- (a) Have withdrawn our bid after opening of price bid and within the bid validity specified in the tender; or
- (b) Having been notified of the acceptance of our bid by M/s. GRSE Ltd. during the period of bid validity, (i) fail or refuse to execute the contract, if required, or (ii) fail or refuse to furnish the security deposit, in accordance with Article 23 (A) of tender.

We understand this bid security declaration shall expire if we are not the successful bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful bidder; or (ii) twenty-eight days after the expiration of our bid.

[*Insert signature of authorized representative*]

[*Insert legal capacity of the person signing the declaration*]

[*Insert complete name of person signing the declaration*]

Duly authorized to sign the bid for and on behalf of [*insert complete name of bidder*]

Date: DD/MM/YYYY

[*Put corporate seal as appropriate*]