



**GARDEN REACH SHIPBUILDERS & ENGINEERS
LIMITED**

गार्डन रीच शिपबिल्डर्स एण्ड इंजीनियर्स लिमिटेड
(A GOVERNMENT OF INDIA UNDERTAKING – MINISTRY OF DEFENCE)
(भारत सरकार का प्रतिष्ठान)

Registered & Corporate Office Address: GRSE Bhavan, 61, Garden
Reach Road, Kolkata - 700 024

61 Park Unit Address: 61, Garden Reach Road, Kolkata-700 024

Phone दूरभाष: (033) 2469-8100 to 8113, Web site वेब: www.grse.in

CIN सी आई एन: L35111WB1934GOI007891

NOTICE INVITING EXPRESSION OF INTEREST (EOI)

FOR

Expression of Interest for Construction of 18 Nos. Vessels

1. Ref. No.	:	SCC/AKD/61P/Vessels/Construction/25-26/EOI-001
2. Issuing Department	:	Contract Cell
3. Date of Issue of EOI	:	12.04.2025
4. Last date for Submission of EOI	:	19.04.2025 at 1200 hrs.
5. Contact Person	:	Ashim Kumar Dey, Sr. Manager, Contract Email: Dey.AshimKumar@grse.co.in Mob: 75960 23717
6. Validity of EOI	:	180 days from bid opening against the EOI

EOI / Bid formats are to be downloaded from our e-portal <https://www.eprocuregrse.co.in> and Offers / response are to be uploaded using Digital Signature Certificate (DSC). The EOI can also be viewed from www.grse.in.

To participate in the e-Bid submission for GRSE, it is mandatory for the parties to get their firms registered with GRSE E-Procurement portal <https://eprocuregrse.co.in>. It is mandatory for all parties to have class – III Digital Signature Certificate (DSC) in the name of the person who will digitally sign the offer from any of licensed Certifying Agency (CA).

Eoi Offers is to be submitted through our e-portal <https://www.eprocuregrse.co.in> only. No other form of submission is allowed.

This Eoi comprises **EOI CONTENT**.

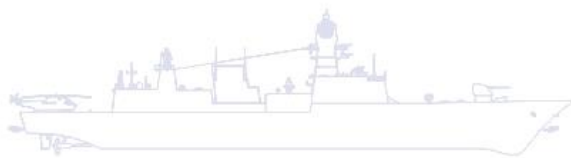
N.B:

- GRSE reserves the right to cancel this EOI at any stage
- Whether GRSE will open the offer against the EOI on closing due date or extend the due date is completely under purview of GRSE.
- No proposal shall be admissible after due date/extended due date and time (as stated above).
- Decision of GRSE shall be final and binding in this regard.

NOTICE INVITING EXPRESSION OF INTEREST (EOI)

1. Expression of Interest is invited for shortlisting technically competent, reputed, resourceful, financially solvent party/ parties having experience in Shipbuilding activities like Construction & Trials of sea going vessels interested for construction of sea-going vessels for GRSE.
2. The aim of seeking this EOI is to shortlist suitable Parties having proven track record of having successfully constructed vessels or hulls of vessels and built to IACS (International Association of Classification Society)/Naval Specifications.
3. Post shortlisting and evaluation of the EOI responses, the qualified firms shall be approached for manufacturing of sea-going vessels as stipulated at Para 1 of EOI Content for GRSE fulfilling the requirement indicated at Para 2 & 3 of the EOI Content.
4. For any clarifications, Email to:

Ashim Kumar Dey, Sr. Manager, Contract
Email: Dey.AshimKumar@grse.co.in Mob: 75960 23717



EOI CONTENT

Expression of Interest for Construction of 18 Nos. Vessels

1. Garden Reach Shipbuilders & Engineers Ltd (GRSE), is a premier Warship building Company in India, under the administrative control of Ministry of Defence and enjoys Schedule A status. Since 1960, GRSE has built and delivered 110 warships for various roles, starting from state-of-the-art Frigates & Corvettes to Fast Patrol Boats. GRSE, as a premier Defence Public Sector Shipyard, has played a very important role in the defence preparedness of the country and has always spearheaded the national mission of indigenous design and construction of warships. Defence vessels are the primary products for GRSE, but the shipyard also has proven credential of delivering small boats/ ferries to naval and civil establishments. The modernised infrastructure enables the shipyard to undertake construction of large ships using latest modular construction technology. GRSE has a strong design team and vast database generated over years across disciplines like Hull, Engineering, Electrical & Weapon and Outfit. It integrates all these know-hows to realize a customer centric approach to product design. GRSE is seeking to leverage its inherent strengths and enhance the portfolio of defence and commercial vessels to meet the growing demand in both Indian and foreign markets.

2. The aim of seeking this EOI is to shortlist suitable party/ parties in respect of the following: -

(a) Construction and delivery of 18 Nos. vessels for GRSE. Outline specifications are tabulated below:

S No	Element	Parameter	Remarks
1	Number	18	
2	Build Period	First vessel in 30 months & subsequent vessels in 04 months interval	Total build period: 98 months (08 yrs 02 months).
3	Length	66+/-2m	
4	Draught	Min 3.5m	
5	Beam	As per design	
6	Propulsion	CODAE, (02 x Diesel, 02 motors), twin shaft CPP	
7	Max speed	Not less than 25 knots	
8	Cruising Speed	12-14 knots	
9	Loitering Speed	2 to 5 knots	
10	Range	2000NM	
14	Compliment	08 (O) + 42(S)	

(c) After evaluation of EOI responses, detailed Technical Specification will be issued only to the shortlisted parties on submission of Non-disclosure agreement as per format at Annexure 1.

(b) Post Shortlisting of the firms GRSE will float/issue limited tenders to the shortlisted parties and then enter into contract following due procedure.

3. **PRE-QUALIFICATION CRITERIA.**

The party should be a PSU/ Limited Co/ Pvt Ltd. Co incorporated in India [ie. Proprietorship firm, Joint Venture company, partnership firm, LLP are not eligible] and must fulfill the following minimum pre-qualification criteria: -

(A) **Technical Competence.**

(i) Party should be either a PSU engaged in shipbuilding or be a DIPP license holder for shipbuilding.

(ii) Party should have experience of successful completion of similar job during last 07 years ending on 30.04. 2020, and such job should be either of the following: -

(aa) 03 similar Completed Works whose value should be of **Rs. 252 Cr.** each.

(ab) 02 similar Completed Works whose value should be of **Rs. 315 Cr.** each.

(ac) 01 similar Completed Work whose value should be of **Rs. 504 Cr.**

(ad) Similar work completed in last 12 months of **Rs. 189 Cr.**

Similar completed work refers to construction of vessels or hulls/hull blocks of vessels and built to IACS (International Association of Classification Society)/Naval Specifications. or complex engg works having an integration of multiple systems and equipment built for Govt/ Semi govt agencies complying to Independent Classification/ Inspection agencies.

(B) **Financial Health.**

The parties shall have sound financial health satisfying the following criteria: -

(i) Parties average Audited Annual financial turnover during the last 3 years ending on **31 Mar 2024** should be at least **Rs. 189 Cr.**

(ii) Party shall provide Solvency Certificate for a sum of not less than **Rs. 10 Cr** from a Scheduled Bank.

(iii) Party would be disqualified if has been categorized as SMA sub category SMA-1 / 2 (the meaning of SMA-1 / 2 being as per RBI's circular dated 12 Feb 2018 & 07 Jun 2019. The party has to submit certificate in this regard from Statutory Auditor of the party.

(iv) The party should have positive net worth for last three financial years ending on 31 Mar 2024.

(v) The party should be a profit-making organization at least twice during last 03 FYs ending on 31 Mar 2024.

(vi) The credit rating of the party should be minimum BBB or equivalent.

(C) **Self- Certification Criteria:**

The party should give self-certification (as per **Annexure 2**) 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 **31.03.2025**. The party 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 party has been black listed by any PSUs/Central & State Govt. Organizations or any other Government / Quasi Government Organizations, then the party 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 party / contract awarded to the party will be cancelled and EMD/SD shall be forfeited and appropriate action will be taken in accordance with the party policy of GRSE.

b) If any party 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 2**, the party will be treated as non-responsive and their offer will be rejected.

4. **ELIGIBILITY CRITERIA BASED ON CAPACITY ASSESSMENT**

Capacity assessment of the eligible party will be done based on the following:-

In event the party has Technical Capacity Assessment cleared by MoD organization as per DAP 2020 then the same can be considered as pre-qualified technically. If not then the following have to be assessed and cleared by GRSE Technical Committee.

(A) **Infrastructure.**

(i) Should have lawful earmarked areas with covered shed for fabrication, material /equipment handling, secure warehouses, moisture free air-conditioned storage space for electronic equipment and arrangement for following:

- (i) Plate processing (Cutting & bending)
- (ii) Blasting & painting of plates, sections, blocks.
- (iii) Adequate number of welding machines
- (iv) Pipe spool manufacturing (including bending, flanging and branching)
- (v) Transportation of blocks

(ii) Should have Building berth/dock suitable for construction of the Vessel and facility for launching in to water.

(iii) If the proposed premises is on leased hold land, then property should have minimum 7 years validity of lease period left from the date of submission of bid.

(B) **Process.**

(i) The party shall have a dedicated Quality Assurance Department which shall consist of persons with specialist from Hull Engineering & Electrical discipline and a person who is qualified NDT(RT/UT/LPT/VT) Level II to certify quality of welding. The QA department of party will be responsible for coordinating with Class & WOT and ensuring compliance to all Class requirements.

(ii) The premise/ works' /site wherein the ships are envisaged to be built should be certified for production, installation, and servicing by ISO 9001.

Notes:

- i) The parties shall have the requisite and sufficient capacity as indicated vide Sl. 1 (A) & (B) above available in their company to execute the quantum of job indicated in this document within the stipulated time-frames. Documents showing the capacity of the party and their existing order status to be submitted to GRSE along with the bid. This criterion shall be assessed during the technical evaluation of bids.

- ii) The inputs regarding the party's infrastructure, processes etc required for assessing suitability is to be furnished by the party as per the pro-forma indicated at Annexure – 3.
- iii) GRSE Team may visit the party premises for evaluation of the capacity of the participating party if required.
- iv) Detailed Technical Specification will be issued only to the Techno-Commercially qualified parties on submission of Non-Disclosure Agreement as per format at Annexure 1.

5. **GENERAL TERMS**

- (a) The party shall comply with the terms of the mutual Non-Disclosure Agreement made effective between the party and GRSE.
- (b) Any Intellectual property (IP) rights issues shall be discussed and agreed by the party in the Subcontract Agreement, in the event of contemplated development of foreground IP by the party or by both GRSE and the party.
- (c) The party shall be responsible for the conduct, compliance and liabilities of their employees, including contractual employees. No liability or obligation of whatsoever nature, even vicariously, shall be borne by GRSE.
- (d) Should execution of any MEMORANDUM OF UNDERSTANDING and/or any contract resulting therefrom between the party and GRSE, the same be subject to the laws of India.
- (e) The party will not be entitled to sell, assign or otherwise transfer any of its rights and / or obligations arising from or in relation to subsequent agreement/ MoU to any third party, without the prior written agreement of GRSE.
- (f) Should any contract resulting from the activities of the party be subject to the laws, regulations, licenses and approvals required of India, the party shall be responsible for obtaining such licenses and approvals from the appropriate authority.
- (g) The Parties shall comply with the terms of the mutual non-disclosure agreement (hereinafter the "NDA") which will be signed post evaluation of the competent party.

6. **TECHNICAL DOCUMENTS.** EOI should contain following technical documents to enable GRSE for evaluation of the overall proposal with respect to the below features:-

- (a) A Product Catalogue of experience in construction of Sea-going vessels along with General Arrangement plan, complying with all the requirement of the Type specification and capability of customization, if required.

(b) Technical Knowledge and Experience in supplying of Ongoing Sea vessels etc. as detailed above.

(c) The proposal must clearly bring out whether the design of the vessels is based on proven/ existing vessel. In case similar vessel already built to that design, details of builder, owner, along with project report must be submitted with the technical proposal. Preference shall be given to parties with proven designs.

7. EXPERIENCE AND CREDENTIALS DOCUMENT. Along with the technical proposal, following are to be submitted, to establish the experience and credentials of the firm.

- (a) Constitution or legal status of applicants indicating place of registration and principal place(s) of business.
- (b) Experience in similar works carried out under Classification Rules, list of clients and proof of satisfactory completion of work for last 05 Years.
- (c) Details of the jobs completed in ship/sea going vessels construction and supply field which contributes to the experience of the firm for last 05 Years.
- (d) Number of persons including qualification and experience of key personnel employed. Employee Training Certificates on Infusion process to be submitted.
- (e) Details of existing commitment and ongoing projects in hand.
- (f) Credentials from reputed organizations.
- (g) Audited / Certified Balance sheet, Profit / Loss account for past 3 years ending on 31 Mar 2024.
- (h) Others, if any.

8. INSTRUCTION TO THE PARTIES:

a) Before submitting a proposal, parties are expected to examine the Proposal Documents carefully. No consideration will be granted for any alleged misunderstanding on work to be performed and comply with conditions specified in the Proposal Document.

b) Any qualified deficiency, errors, discrepancies, omissions, ambiguities or conflicts in the Proposal Documents, or there be any doubts as to the meaning of a provision or requirement, the same shall immediately be brought to notice of GRSE Tendering Dept. in writing not less than 04 days prior to proposal closing date.

c) It is understood that in receiving proposals by any party, GRSE assumes no obligation to enter into a contract for the WORK covered by this proposal request. GRSE reserves the right to reject any and all proposals or waive irregularities therein. GRSE reserves the right to evaluate each and every party and accept the whole or any part of the proposal.

d) GRSE also reserves the right to reject any and all parties and accept the proposal, which in its opinion, appears to be most advantageous to GRSE. Receipt and review of this Proposal Request constitutes an agreement of confidentiality between GRSE and each of the contracting Firms preparing its Proposal. GRSE

reserves the right to change the form of this request to Proposals, or make clarifications thereto, within a reasonable time before date of submission of Proposals.

e) Parties will assume all safety related responsibilities for the site and will furnish and maintain its own safety program for itself and its sub-parties. Parties are bound to comply with all applicable Environmental, Health & Safety rules, regulations, policies, procedures and guidelines when performing work in the facility or site.

f) Party has to declare, in what capacity he is participating viz. PSU, Limited Co, Private Ltd. Co., Sole Proprietorship Organization, Partnership firm, Joint Venture, etc. Supporting documents (scanned copy) confirming such status to be submitted.

g) A party is allowed to submit only one proposal per Category under any capacity/status.

h) Difficulty in submitting the proposal:

i) Any query/difficulty in understanding the requirement or other technical Terms may be got clarified from (Name of GRSE officer associated with the tender with mobile no. /e-mail) prior to submission of offer.

ii) Any difficulty in submitting / uploading of EOI or for any system help DGM (GRSE E-PROCUREMENT) (E-mail id: Palit.Saraswata@grse.co.in; Dey.AshimKumar@grse.co.in) may be contacted.

j) E-mail Address for communication: Parties to provide e-mail address to enable faster communication.

k) GRSE reserves the right to accept/ reject any or all the proposals in full or in part without assigning any reason thereof. In case of any dispute, GRSE Evaluation Committee decision in the matter shall be final and legally binding on the parties.

l) Last date of submission of Proposal/ Date of opening of proposal is indicated in Eoi Document. The proposal/offer is liable to be rejected if the requisite documents are not enclosed with the technical offer.

m) All pages of this document are to be signed and attached with techno commercial proposal as mark of your acceptance. In case of non-receipt of signed copy, the proposal/offer shall be declared as unresponsive.

n) GRSE reserves the right to forthwith cancel, reject any proposal submitted by party in response to the EOI if it is ascertained by GRSE that contents/ experience/ criteria/ information furnished with the proposal are false, misleading, forged, and incorrect. GRSE in such cases, also reserves its right to initiate appropriate action against such party, for furnishing such false, misleading, incorrect and forged information.

p) In case of any discrepancy/ issues regarding the EOI is raised by the party, the decision of GRSE shall be final and binding.

q) Issuance of this EOI or submission of proposal in response to such EOI does not guarantee any business/ execution of MoU Agreement and or does not render GRSE liable to enter into any commercial relationship with the party.

r) The detailed terms and conditions as may be contained in subsequent Agreements with GRSE shall prevail over the any previous understandings etc. in case of any inconsistency of the former with the latter.

.....XXXXXXXXXXXXXXXXXXXXXXXXXXXX.....



NON – DISCLOSURE AGREEMENT

This Non-Disclosure Agreement executed thisDay of2025.

Between

GARDEN REACH SHIPBUILDERS & ENGINEERS LIMITED, a company incorporated under the provisions of the Companies Act, 1956, having its Registered Office at 43/46, Garden Reach Road, Kolkata – 700024, hereinafter referred to as “**GRSE**” (which expression shall unless excluded by or repugnant to the subject or context be deemed to mean and include its successors-in-interest, administrators and assigns) of the **FIRST PART**.

AND

M/s _____ (with full address)., (which expression shall unless excluded by or repugnant to the subject or context be deemed to mean and include its successors-in –interest, administrators and assigns) of the **SECOND PART**.

WHEREAS

For purpose of this Agreement, GRSE that discloses confidential information is herein after referred to as the “Disclosing Party” and M/s _____, that receives and or accesses confidential information here under is herein after referred to as ‘Recipient’

WHEREAS _____ - being considered inter alia for the purpose of and as such some of the drawings/documents in connection with the said work are required to be disclosed which shall be treated as confidential and the said _____, shall not disclose or part with such drawings/documents to any other third party, without prior written consent from GRSE.

AND WHEREAS the said M/s _____, is obliged to execute an undertaking in the form of “Non-Disclosure Agreement” on handing over of GRSE and/or Designated Buyer owned data drawings/ documents and also confidential/proprietary drawings or technical information of any other party, as the case may be, to them by GRSE, duly promising and/or undertaking to keep and treat such data, drawings/documents as strictly ‘confidential’.

NOW THEREFORE both GRSE and M/s _____, do hereby agree as follows in the premises aforesaid: -

1. In the Premises aforesaid it is agreed as follows:

a) During all discussion and subsequent agreement if any between the parties herein, if any, for execution of the job and also for a period of 10 years from the date of Expiry and/or foreclosure and/or termination of the said agreement, M/s _____, the recipient, undertakes that the data, drawings/ documents so received in any form whatsoever shall be:

i) Protected and kept as strictly confidential by them.

ii) Disclosed to and used only by the persons within the organization of M/s _____, who have a need to know solely for the purpose as described above and for execution of the work if awarded by GRSE subsequently subject to their taking due care and protection of the system and data.

iii) Used in whole or in part solely for the purpose intended and for execution of the work if awarded by GRSE subsequently in the manner as ordered by GRSE or to be ordered from time to time exclusively and shall not be exploited for any other purpose or customers.

iv) Neither disclosed nor cause to be disclosed directly or indirectly to any third party.

v) Neither be copied nor otherwise be reproduced, in whole or in part without prior express consent from GRSE.

vi) Returned to GRSE forthwith on demand at any point of time and upon immediate foreclosure /expiry of the contract if subsequently entered.

2. Nothing in this agreement or the disclosure of the information or data or systems, to be intended to be granted or shall be construed as granting to M/s _____, any rights, title, interest or license other than the right to use such data, drawings/documents etc. for the purpose intended and for the execution of the contract/job if subsequently awarded by GRSE and shall not be exploited for any other purpose or customers and the property in all the information/data/ drawings or documents disclosed by GRSE to M/s _____. In this regard for the purpose of post-bid meeting/discussions or for execution of job if any, to be subsequently awarded by GRSE shall, subject to the rights of the owner, rest with GRSE.

3. Neither party shall resort to any publicity or advertising in respect of this agreement or the subject matter thereof and the subject matter of PO and/ or any Agreement, if any, to be entered into subsequently.

4. M/s _____. shall not make any copies or duplicate in anyway in whole or part any information without the prior written consent of GRSE and where such copies or reproductions are permitted in accordance with this clause, M/s _____. shall treat them strictly confidential in accordance with the provisions of this agreement and comply with the instructions of GRSE with regard to the protection and disposal of them.

5. Expiry, foreclosure or termination of PO or any or all of the subsequent agreements entered into by GRSE and the said M/s _____, if any, in pursuance of the agreed scope, shall not relieve M/s _____ of their obligations under these presents which shall be effective and remain effective and in full force, for a period of 10 years from the date of such expiry/foreclosure/termination.

6. In the event of expiry, foreclosure or termination, M/s _____. shall forthwith return to GRSE, all data and drawings/documents as received by them during tenure of the PO and/or subsequent agreements.

7. Neither party shall assign any PO and / or any Agreement, if any, to be subsequently entered into, without the written consent of the other and should there be any re-organization, merger, take over or the like, its successor-in-interest shall be bound by the conditions of this Agreement.

8. Failure to enforce any provision of this agreement and/or failure to initiate timely action, will not construe to be waiver and GRSE shall be freely entitled to enforce the provisions of this agreement at any appropriate time thereafter.

9. M/s _____. shall indemnify and hold harmless GRSE from and against any action, claim or proceeding and any loss, damage, costs, expenses or liabilities arising out of such action, claim or proceedings, brought by any third party pursuant to any unauthorized disclosure or use of any data/document/drawings/ information by M/s _____, or by any person for whom M/s _____ is responsible under this agreement, or pursuant to any breach of any undertaking, warranty or representation contained in this Agreement.

10. This agreement shall be governed under the Indian Laws and the Courts in the city of Kolkata shall have exclusive jurisdiction to try determine and adjudicate any disputes arising between the parties in relation to this agreement.

11. GRSE' standard arbitration clause as contained in Annexure – I shall apply to this agreement for resolution of disputes between the parties.

IN WITNESS WHEREOF the parties have hereunto set and subscribed their respective hands and seals on the day, month and year first above written.

FOR GARDEN REACH SHIPBUILDERS & ENGINEERS LTD FOR M/s _____,

Signature:

Name:

Address:

Signature:

Name:

Address:

WITNESS 1

WITNESS 2

Signature:

Name:

Address:

Signature:

Name:

Address:

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 **31.03.2025** 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.

FORMAT FOR CAPACITY/CAPABILITY ASSESSMENT

Parameters	Inputs
Year Established	
Type of Organization size/ classification of yard	Public Limited Company / Government PSU small scale / medium size / large Contractor
Organization Chart	Chart may be enclosed
Product Profile (construction of major/ medium/ small vessels)	<ul style="list-style-type: none"> • Enclose list of vessels built in the last five years • List out other activities if any in which yard has participated
Details of collaboration if any (Indian / Foreign)	
Annual Turnover in the last three years (tonnage built)	
Details of future business development planned	
Expansion plans, if any	
Details of customer' appreciation/ complaint if any received in the last 5 years and action taken	Transparency & Customer relation
Whether the Contractor has license for production of warships	

Part A: Infrastructure

Production Facility & Process Control

(a)	Contractor facilities	<ul style="list-style-type: none"> • Steel /Aluminium Stocking • Blasting & Priming shop • Equipment stores • Bonded stores • Hull production & Assembly shop • Pipe Production shop • Paint Stores & Paint Shop • Pre-Outfitting shop • Electrical shop • Carpentry shop & mock-up manufacturing • Building berth, Slip way & synchrolift • Dry dock / building berth capacity 		
(b)	Floor areas	<p>Steel Stockyard</p> <p>Aluminium Stockyard</p> <p>Blasting & Priming</p> <p>Equipment stores</p> <p>Hull production shop</p> <p>Pipe production shop</p> <p>Galvanizing Bay</p> <p>Machine shop</p> <p>Pre-outfitting shop</p> <p>Paint shop & Paint store</p> <p>Electrical shop</p>	COVERED AREA	UNCOVERED AREA
(c)	Cold & Hot Forming & Cutting	<ul style="list-style-type: none"> • Capacity of plate forming machine • Maximum thickness for cutting & forming machine 		
(d)	Lifting capacity of Cranes & Horizontal Transporters	<ul style="list-style-type: none"> • Inside shops for Sub-Assemblies • In the open area for blocks, at dry docks & berths and at the fitting-out jetty. • Mobile cranes & gantries 		
(e)	Largest block that can be handled	<ul style="list-style-type: none"> • Facilities for storage & transfer of blocks 		
(f)	Launching / berthing Facilities available with the yard to enable launching of ship in maximum fitted out condition	<ul style="list-style-type: none"> • Largest vessel launched • Type of launching • Depth of water & tide variation for launching • Tug availability after launching • Launching calculations, 		

		verifications & inspection
(g)	Power supply	<ul style="list-style-type: none"> • Approved : KW/KVA • Captive power plant : KW/KVA
(h)	Details of production process & how the process is controlled	<ul style="list-style-type: none"> • Please provide details of various codes being followed
(i)	Welding & Bonding	<ul style="list-style-type: none"> • Weld procedure • Qualification • Welder qualification • Welding manual / instructions • Currency of machines & calibration • Procedures for NDT & approval of plans • Correction methods for defects • Advanced techniques <ul style="list-style-type: none"> ○ SMAW ○ GSAW ○ TIG & MIG ○ Laser welding ○ Explosion bonding
(j)	Technologies	<ul style="list-style-type: none"> • Automatic/ Semi-automatic welding facilities • Laser cutting & welding • Automatic bending machines • Parts making and automatic tracking • Online quality control • Telemetry for verification of manufactured products
(k)	Details of manufacturing / process control, inspection and testing records verified during the visit to works	Details to be given
(l)	Control techniques to minimize deformation	<ul style="list-style-type: none"> • For thermal stress • For realizing locked up stresses during building sequence
(m)	Machinery & Electrical Installations	<ul style="list-style-type: none"> • Alignment & accuracy control-telescopic sighting • Methods for vibration / noise control • Cleanliness procedures during fitment & installation • Qualification, experience & training of fitters • Installation experience with advanced systems

		<ul style="list-style-type: none"> o Azimuth/voith /other propulsion o Flexible coupling o Multi-engine / multi-gear installation o Electric propulsion system etc. • Installation of steering gears & bow thrusters • Accessibility for maintenance • Control on hull penetrations • Marking and cutting of openings
(n)	Piping & Ducting System	<ul style="list-style-type: none"> • Pipe fabrication & joining including bending, flanging & branching – automated process • Approval of welder qualifications • Stress compensation for openings made • Stainless steel / CuNi / grp piping • Design & material control for bulkhead transitions
(o)	Electrical & Electronic Systems	<ul style="list-style-type: none"> • Installation facilities & manpower for Propulsion, auxiliary machinery and accommodation systems, cable tray, pneumatic system, routing & routing approval • Foundation and mounting of Main Machinery and flexible connections. • Integration of motors, lighting, heaters, ovens with switchboards
(p)	Management of Coating Facilities	<ul style="list-style-type: none"> • Paint storage facility - Shop temperature & humidity control • Paint mixing facility - Equipment & trained manpower • Coat specification - Adherence to Manufacturers' method • Coating control - Blast cleaning & Humidity / temp control; application Facilities & manpower • Surface Condition & Dew Point Monitoring • QC after paint drying • Expiry life control / batch control / non-usage of tin based paints

Part B1: Quality Assurance/ Quality Control

(a)	QMS (Quality Management Services) implementation & certification	Example : ISO 9001
(b)	Amenability of yard to adopt new procedures / technology and specifications like on-line inspection monitoring system.	
(c)	Control of sub-contracted work	Detailed procedure of QC measures being followed by sub-contractors be furnished.
(d)	How quality of raw materials & supplies ensured.	Approved vendors used: yes/no Vendor's performance analysis: yes/no Evaluated QC. check for yard personnel to check item before fitment on board
(e)	How quality is ensured during process of manufacture? Details of quality control/ quality assurance measures deployed	Details of in-process inspection. Details of final inspection.

Part B2: Assessment of QA/QC Capability**A) List of Potential QA/ QC Manpower**

Sl No	Name	Grade/ Designation	Discipline	Experience

Note:

i) Inspection coverage by QA/ QC Team of the shipyard for all disciplines (Hull, Engg, Electrical, Weapons and Sensors, Mechanical Testing, NDT, Timber, Paint & Rubber Testing, Instrument Calibration) to be indicated.

ii) Qualification Level of NDT Personnel by ASNT/ ISNT (Level I, Level II, Level III)

B) In-house Testing Facilities

Whether QA/QC Department of the Partner Shipyard is equipped with following Testing facilities for in-house Testing:

1. Mechanical Testing Laboratory

- i) Tensile Test
- ii) Bend Test
- iii) Flattening Test
- iv) Compression Test
- v) Hardness Test
- vi) Micro structural Analysis

2. **Non Destructive Testing Laboratory**

- i) X – Ray Radiography Test
- ii) Ultrasonic Test
- iii) Dye Penetrant Test

3. **Paint Testing Laboratory**

- i) Viscosity Measurement
- ii) Solid Content Measurement
- iii) Determination of Drying Time, Pot Life, Mass / Lit,

4. **Testing Welding Electrodes**

- i) Diffusible Hydrogen Content and Moisture content test of Low Hydrogen welding electrodes as per ASME Sec II.
- ii) All Weld Test of welding electrode as per ASME Sec II to ascertain its mechanical properties.

5. **Timber Testing**- Specific Gravity and crushing strength

6. **Metrological Laboratory** - Calibration of all Linear Measuring Instrument

Note: The details of testing machines/ equipment are to be mentioned.

C) Tie-ups with External Laboratories

D) Special Equipment

Instruments like Digital Theodolite/ Total Station/ Laser Tracker/ Digital Inclinator etc to be specifically mentioned:-

SI No	Description	Model	Make	Range	Accuracy

E) Facility for conducting training and certification of the welders and establishing WPS/ PQR:

- 1. SOP for training and certification
- 2. Availability of training centre
- 3. Details of competent manpower those who impart training

Part C: Planning & Co-ordination		
(a)	Planning in-charge : Name Designation	
(b)	Integration of Hull & Out fitting	Steel cutting to accommodate fitting out

		of equipment % of work in ship-areas Integration of shipboard systems with structures IHOP - Integrated Hull construction Outfitting and Painting system.
(c)	Production Planning	Division of ship into zones Identification of hull assembly sections Decision on assembly sequence Decision on installation sequence Definition of production activities (palletizations) Established ship-building quality standard Computer aided Planning & Process Monitoring
(d)	Client coordination	Establishment of hold-points for client inspection Establishment of hold-points for third-party inspection

Part D: Purchase & Stores		
(a)	Procedure for issuance of POs	Technical requirements Price negotiations & cost control Scheduling of negotiations & time factor Inspection scheduling Information to inspection agency
(b)	Inspection	At the Contractor on receipt At sub-contractor's works
(c)	Maintenance of procured items	Stores are not prone to flooding preservation & control of fixed shelf life items Storage & maintenance routines established & followed Fire Fighting facilities installed
(d)	Maintenance of certificate	
(e)	Open stock yards and handling methods/ identification of partly used plates	

Part E: Human Resource

(a)	Available permanent work force	Managers/ Engineers: Skilled, Semi- skilled and Unskilled manpower	List be enclosed
(b)	Temporary work-force	% of Skilled & Unskilled workers % of local & Migrant workers	
(c)	Training facilities	Training schedule for class room & on- job training Certification process & maintenance	
(d)	Quality awareness among workers	Training imparted	