MAZAGON DOCK SHIPBUILDERS LIMITED

(Formerly known as Mazagon Dock Ltd)
CIN: L35100MH1934GOI002079
(A Government of India Undertaking)
Dockyard Road, Mazgaon, Mumbai 400 010. INDIA



EXPRESSION OF INTEREST

DIVISION: SHIP BUILDING
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MDL EOI No.: MDL/EOI/PSV/01

DEPARTMENT: DESIGN-C&M

Fax: +91(022) 2373 8159 Website: www.mazagondock.in

EOI DATE: 12 Jun 2025

CALL FOR EXPRESSION OF INTEREST (EOI) FOR SHORTLISTING SHIPYARD FOR NEW-BUILDING OF PLATFORM SUPPLY VESSELS (PSVs)

1 **INTRODUCTION**:

- 1.1 Mazagon Dock Shipbuilders Limited (MDL) is a premier Shipbuilding Yard in India, located in Mumbai, under the Administrative control of Department of Defence Production, Ministry of Defence, and Government of India.
- 1.2 MDL intends to undertake a project of new-building of Platform Supply Vessels (PSV) for ONGC Ltd.
- 1.3 An EOI is invited from reputed and experienced shipyards meeting the requirements of this EOI, for turnkey construction of the Platform Supply Vessels (PSV).
- 1.4 **Purpose:** The purpose of this EOI is to pre-qualify the shipyards for undertaking the complete design, construction, outfitting, testing, and delivery of the vessel, meeting all applicable regulatory and classification requirements.
- 2 **SCOPE OF WORK (SoW)**: The scope of work for the shipyard includes the following:
- 2.1 The shipyard will be responsible for the design, construction and delivery of Platform Supply Vessels (PSV). A preliminary draft technical specifications is placed at **Enclosure-I**.
- 2.2 Procurement of materials, machinery, and equipment.
- 2.3 All classification, statutory, and regulatory approvals.
- 2.4 Conducting model tests, sea trials, and delivery of the vessel.

- 2.5 Providing all necessary guarantees, documentation, and training.
- 2.6 **Delivery Terms:** Vessels are to be delivered at Ex-Works (Shipyard).
- 3 PRE-QUALIFICATION CRITERIA (PQC): The shipyard must meet the following pre-qualification criteria:

3.1 **Technical PQC:**

- 3.1.1 The bidder shall be a Shipyard located in the Western sea board.
- 3.1.2 The bidder shall have either in-house design capability or willing to collaborate with a Design house/ firm for basic design and detailed design.
- 3.1.3 The shipyard's experience of having carried out similar work in the past should be either of the following:
 - 3.1.3.1 Three contracts/orders of each of not less than Rs 304 crore by the present ownership or past owners of the shipyard.

OR

Two contracts/orders of each of not less than Rs 380 crore by 3.1.3.2 the present ownership or past owners of the shipyard.

OR

One contract/order of similar work of not less than Rs 608 3.1.3.3 crore by the present ownership or past owners of the shipyard.

OR

- 3.1.3.4 Cumulative completion of similar work of not less than Rs 95 crore within continuous span of 12 months by the present ownership or past owners of the shipyard.
- 3.1.4 The shipyard shall provide a statement regarding the shipyard's building experience, including:
 - 3.1.4.1 Name of the ship
 - Type/Size of the vessel 3.1.4.2
 - 3.1.4.3 Year built
 - 3.1.4.4 Owners
 - 3.1.4.5 Classification society
 - Time taken from contract signing to delivery (both contractual 3.1.4.6 and actual)
 - 3.1.4.7 Proof of delivery
- 3.1.5 **Technical Capability:** The shipyard must demonstrate the capability to undertake the project, including:
 - Technical expertise in shipbuilding 3.1.5.1
 - 3.1.5.2 Adequate infrastructure and workforce to construct PSVs.
- 3.1.6 The bidder shall submit particulars of similar work* along with supporting documents of those similar works executed in the past. The

bidder should also submit the details of the company/entity for which similar work has been carried out. MDL reserve the right to verify/ obtain performance report of the bidder and or visit their client place. If the performance of the previous work is not found satisfactory to MDL, then their offer is liable for rejection.

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- 3.1.7 The bidder shall submit the following as a part of technical qualification:
 - 3.1.7.1 Bidder's Company Profile and experience.
 - 3.1.7.2 Overview of the Technical personnel employed by the Company
 - 3.1.7.3 List of personnel with designation, qualification and experience to determine bidder's capabilities.
 - 3.1.7.4 Company Registration Certificate.
 - 3.1.7.5 ISO Standard Certificate.
 - 3.1.7.6 Factory License.
 - 3.1.7.7 Certificate of Incorporation.
 - 3.1.7.8 Registration certificate from local bodies for conducting business.
 - 3.1.7.9 Bidder shall not be under a declaration of ineligibility issued by Govt. of India/ State Govt./ Public Sector Undertakings etc.

<u>Note-1:</u> Sr. 3.1.7.1, 3.1.7.2 and 3.1.7.3 above are not required for permanent registered vendors with MDL. However, such bidders should submit a valid registration certificate duly self-attested and stamped with their company seal.

*Note-2: "Similar work" means that the bidders should have experience in fabrication of hull units/ blocks or construction of Commercial Vessels/ Naval Ships/ Submarines/ Offshore Structures/FDD and should be conversant with Ship Building/ Ship Construction procedures.

<u>Note-3:</u> Delivery/ Builders certificate/work done certificate of the similar work by the Shipyard should be submitted.

3.2 Commercial PQC:

- 3.2.1 The average annual financial turnover of 'The bidder' during the last three years, ending 31st March of the previous financial year excluding the calendar year of tendering should be at Rs. 57 crore as per the annual report (audited balance sheet and profit and loss account) of the relevant period, duly authenticated by a Chartered Accountant/Cost Accountant in India.
- 3.2.2 Bidders Shop and establishment registration certificate or registration certificate from registrar of firms or certificate of incorporation from Registrar of Companies (Not required for permanent registered vendors with MDL).
- 3.3 MDL reserves the full right to change/ amend the above PQCs.

Offer Submission: The schedule of activities during the EOI Process shall be as follows:

Sr. No.	Description	Date
1.	Issue of EoI document	12 Jun 25
2.	Last date of Submission of EoI response	23 Jun 25 (1100 hrs)

- Signatory: The documents should be signed only by a duly authorized 4.1 representative of the Shipbuilder, whose name and designation shall appear in Capital letters below the signature.
- 4.2 The bidders shall submit their offers by e-mail, on or before the last date and time for receipt of offers as mentioned above. The offer should be super scribed with the enquiry number, enquiry subject, last date for receipt of EOI and shall be addressed to:

Ms. Sapna Dipu AGM (D-C&M)

Email: sdipu@mazdock.com

nkmaddheshiva@mazdock.com

5 **Method of Selection:**

5.1 **Evaluation Bids/offer:**

- 5.1.1 Offer received against the EOI will be opened and evaluated as soon as possible from the date of receipt and shall be subjective to approval by competent authority in MDL.
- 5.1.2 The bidders will be shortlisted based on the parameters and criteria laid down at article 3 above.
- 5.1.3 Pre-Bid Enquiry/ Limited tender will be sent to those shortlisted shipyards.
- 5.1.4 Based on the criteria outlined in the Pre-Bid Enquiry/ Limited tender, a firm will be selected for the partnership.
- 5.1.5 Definite agreement/ Consortium Agreement / placement of order will be done with the selected firm based on mutual agreed terms and conditions.
- 5.1.6 Any information contained in the Offer shall not, in any way, be construed as binding on the MDL, its agents, successors, or assigns, but shall be binding on the bidders.

5.2 **Clarifications:**

- 5.2.1 To facilitate evaluation of Offers, MDL may, at its sole discretion, seek clarifications from any prospective Applicant(s) regarding its Offer. Such clarification(s) shall be provided within the time specified by the MDL for this purpose. Any request for clarification(s) and all clarification(s) in response thereto shall be in writing.
- 5.2.2 If the firm does not provide clarifications sought under within the specified time, its Offer shall be liable to be rejected. In case the Offer is not rejected, the MDL may proceed to evaluate the Offer.
- 5.2.3 Collection of EOI queries & missing document via the email, the evaluation may be done on the basis of soft copy (signed stamped and

scanned document send via email) submitted by the applicant(s) and they may be asked to submit the document in physical form on or before the signing of the agreement.

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6 CONDITIONS UNDER WHICH THIS EOI IS ISSUED:

- 6.1 MDL, its employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the EOI document.
- 6.2 MDL may, in its absolute discretion, but without being under any obligation to do so, modify, amend or supplement the information in this EOI document.
- 6.3 The issue of this EOI does not imply that MDL is bound to select and shortlist any or all the participating firm. Even after selection of suitable participating firm, MDL is not bound to proceed ahead with the participating firm and in no case be responsible or liable for any commercial and consequential liabilities in any manner whatsoever.
- 6.4 The participating firm shall bear all costs associated with the preparation, technical discussion/presentation and submission of EOI. MDL shall in no case be responsible or liable for these costs regardless of the conduct or outcome of the EOI process.
- 7 We look forward to your participation in the EOI within due date and time.

Yours faithfully, For MAZAGON DOCK SHIPBUILDERSLIMITED,

Sapna Dipu AGM (Design-FDG/C&M)

ENCLOSURES:

Enclosure-I	Preliminary Technical Specification
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Enclosure - I

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PRELIMINARY BASE SPECIFICATION OF PLATFORM SUPPLY VESSEL (~3000DWT)

Operating Area : Indian Offshore Sector

Fuel : HFHSD With Battery (Hybrid Vessel)

Endurance : 45 days

General Particulars

Vessel Type : Platform Supply Vessel (PSV)

Flag : India

Class Society : IRS

Classification notation : Swastika, SUL, MULTIPURPOSE OFFSHORE SUPPORT VESSEL

(SUPPLY, OCC, STS, SSR, AGNI 1), IP, SPS, CMF(Cy-c-l), IY, IBS, SYJ,

DP2, EP, Cys-E, BATTERY PROP, INWATER SURVEY

Length Overall (LOA) : 80 – 90 meters

Beam (Moulded) : 18 – 20 meters

Depth (Moulded) : 7-9 meters

Draft (Design/Max) : 6.0 - 6.5 meters

Deadweight (DWT) : min 3000 MT at 5.95 meter

Gross Tonnage (GT) : Approx. 3500 GT

Deck Area : $\geq \min 550 \text{ m}^2 \text{ clear deck}, \geq 5 \text{ MT/m}^2 \text{ strength}$

Propulsion and Power System

Vessel shall be provided with a Hybrid system consisting of 4 Diesel fueled Generators and ESS (Liion Battery pack).

Main Propulsion : Vessel to be propelled by two electric motor driven azimuth thrusters

Main Generators : 4 x Gen-sets (HFHSD). Tier III compliant) abt.4500 to 6000 kW total,

690/440V/230V, 60Hz. 2 out of 4 Gen sets to be provided with PTO for

External Firefighting pumps

Energy Storage System (ESS): Lithium-ion battery system (~1 MWh) for peak shaving and DP support

Propulsion : 2 × Azimuth Thrusters (Electric driven) abt. 2000- 2,500 kW each

Bow Thrusters : 2 × Tunnel Thrusters (Electric driven) abt. 680-800 kW each

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Emergency Generator : 1 × Diesel Gen-set (SOLAS compliant, HFHSD only) abt. 100-130 kw

Service Speed : min.10 knots

Design Speed : 12 knots @ less than 85% MCR, in loaded condition.

DP System : DP-2 Dynamic Positioning with sensors [ONGC to provide Metocean data

for DP system requirements]

Equipment and Machineries

Capstans : 2x 5 t-10 t Electro hydraulic

Tugger winch : 2- 10t-15t Electro hydraulic, wire capacity 26mmx200m, brake

holding 15 t

Deck cranes : 1x Hydraulic slewing 4ton@12m,

Anchor Windlass : 2 x 10-12 t Electrical driven

Tank Capacities

MDO Fuel : minimum 1200 m³

Lub Oil : minimum 17 m3

Fresh Water : minimum 300 m³ (plus RO plant capacity 10t/day)

Fuel oil Cargo : minimum 450 m³

Ballast/Drill Water : $1,200 - 1,500 \text{ m}^3$

Dry Bulk : $250 - 300 \text{ m}^3$

Liquid Mud : minimum 450 m³

Brine : minimum 350 m³

Methanol/Noxious : minimum 160 m³

Pot water : minimum 450 m³

Base oil : minimum 160 m³

The above capacities of Fuel and Water can be reduced, considering the vessel principal dimensions don't exceed from specifications.

Accommodation & Safety

Accommodation : 36 personnel with hospital, Single/Double Cabins with

attached WC. Full air-conditioning, living standards- require compliance with MS (Seafarers accommodation) rule 2016. Light fitting shall be LED type. Noise and vibration levels to be

in accordance with IMO Resolution MSC.337(91)

Life Saving Equipment In accordance with M.S.(LSA) Rules, as amended, LSA Code,

UKOOA Type B Guidelines: Search & Rescue as per ONGC

requirements.

Life boat as per OSV CHEMICAL code to be provided if

applicable.

Fire Fighting In accordance with M.S. (FFA) Rules, as amended, FSS code,

OSV CHEMICAL CODE

FiFi-1 rated external system : Fire monitor- 2x1200-1400 m3/hr,

Fire pumps - 2 x abt. 1250-1700 m3/hrs

Vessel should be able to operate in FI-FI mode on DP, while have one Generator on St'by.

Sewage treatment plant 1 x Vacuum type System 4 to 5 m3/day. Biological type of 36

persons capacity

Navigation Equipment Navigational Equipment to be included as per SOLAS Chapter V

Integrated Bridge System, ECDIS, ARPA, AIS, Magnetic

compass, gyro compassx3 with repeaters, Auto pilotx1, X and

S band Radar, speed log, GPS Navigator, Navtex, Echo sounder, SVDR, BNWAS, Day light signaling lamp

Communication GMDSS Equipment's A3 area compliant,

> MF SSB+DSC x 1no., VHF R/T+DSC x 2nos., SES (Inmarsat-C) with EGC x 1no, 2nd SES (Inmarsat-C), SART x 2nos, EPIRB LRIT/SSAS, Portable handheld VHFX3, Portable UHF VSAT with Inmarsat fleet board band 500 back up Intercom, Internal LAN connection, PA&GA, Sound reception system, Sound powered telephone.

Other Equipment's includes but not limited to Incinerator, Main air compressor, Control : air compressor, Main Sea water pumps, Various types of pumps required for cargo transfer, oily water separator, Galley Equipment, other auxiliary systems, Air conditioning and refrigeration system, Main & Emergency Switchboards, Distribution transformers, DBs, Starters, Air Whistle, Anemometer, Navigation and signal lights, 24V DC system, Battery, Fire detection and alarm system, IAMS, Consoles, LED lights, Search lights with control panel, Loading computer

Environmental and Energy Compliance

IMO Tier III Compliant. The vessel shall comply with IMO EEDI

regulations

Waste Management Sewage treatment plant, oily water separator, dry/wet

waste compactors

Cold Ironing Shore power connection capability (440V, 3 phase, 50Hz))

Shore connection Standard IEC/PAS 80005-3-

Connection Port and STB side. Vessel to have appropriate

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Volt / Freq convertors, as needed.

Automation and Digitalization

Vessel Management System: PMS, energy optimization, load shedding, alarms, CCTV

Remote Monitoring : Telemetry via satellite, IoT for engine health and

vessel parameters

Additional monitoring requirements: ONGC will provide specification for systems needed onboard

for Datalogger and Electronic Fuel Monitoring System

[EFMS]

Hull structure and material specification

Platform Supply Vessel is designed for a wide variety of operations to carry multiple types of deck and hold cargoes, firefighting capability, and dynamic positioning. The PSV construction shall be of mild steel construction.

Considering the size and type of the vessel, High tensile steel may be specially considered.

Main deck to be constructed for a deck load of 5 t/m 2 in the cargo area.

Main deck to be constructed with grid structure of longitudinal and transverse solid Tprofiles/girders with wooden deck in between.

The cargo deck (main deck) shall have no sheer or camber.

Material Protection

Protective coating to comply with performance standard for protective coating (PSPC) and Antifouling system (AFS) for underwater hull. Syears painting scheme for under water hull and water ballast tanks.

Vessel's hull to have an Impressed Current Cathodic Protection (ICCP) system for protection against corrosion. Additional aluminum anodes as required.

Low friction silicon paints to be considered for external hull.

Regulatory Compliance and Documentation

Require compliance with prevailing IMO Conventions & Codes, M.S. Act, M.S.Rules including orders/instructions/circulars of the GOI, but not limited to SOLAS, MARPOL, ICLL, Tonnage Convention, Prevention of Collison at Sea, OSV Chemical Code, COLREG, HKC, AFS and noise code, depending on the date of Keel lay / delivery, as applicable. Require compliance with all applicable IRS Main Rules and Regulations for the Construction and Classification of Steel Ships

Cargo Lashing Arrangement / Cargo Securing Lashing

gear to be according to Builder's standard.

D rings & Lashing sockets to be arranged on main deck.

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Special Equipment for Cargo Handling

Loose tanks for cargo (Dry cement tanks) - Vertical dry bulk tanks with conical bottom shape to be fitted.

One (1) off bulk handling system to be installed for storage and transfer of dry cement / barite.

Bulk Handling System consists of:

2 screw compressors (one as standby, approx. 25 m³/min, 80 psi/5.6 bar).

Freshwater-cooled after coolers, lube oil coolers, and water separators.

2 refrigerated air dryers.

1 vacuum mucking ejector.

Loading /Discharging Systems for Liquid Cargo

Cargo Discharge Pumps:

- 2 Fuel Oil Pumps: Centrifugal with air ejector, 150 m³/h, electric-driven, frequencycontrolled.
- Two Fresh Water Pump: Centrifugal with air ejector, 150 m³/h, electric-driven, frequencycontrolled.
- 2 Mud Pumps: Eccentric screw pump, 75 m³/h each, electric-driven, frequency-controlled.
- 1 Brine pump: Eccentric screw pump, 75 m³/h each, electric-driven, frequency-controlled.
- 1 Ballast/Drill water Pump: Two-spindle screw pump, 150 m³/h, electric-driven, frequencycontrolled (one as backup for fresh water pump).
- Electric Driven Agitators: In each mud tank (number calculated by supplier).
- 1 Base oil pump: Electrical driven, capacity not less than 100 m3/hour at 90 meters head.
- 2 Methanol pumps: 100 m3 /hr at 90 M head, Hydraulic or electric driven

Roll Reduction system:

1 passive roll reduction tank (ballast water medium).

Sanitary System

Sanitary fresh water supply system with 2 pumps (one working and one standby), UV-sterilizer with filter, calorifier and 1 water pre-pressurized expansion tank.

Black and Water Discharge System

Black water vacuum system for toilets. Biological type STP suitable for grey and black water, waste bio sludge tank and one transfer pump to shore connection.

Fuel Oil System

Consisting of 2 bunkering station (one on port and one on stbd side main deck) two fuel oil settling tank, 2 fuel oil service tanks, transfer pump and with suitable oil purification system.

Lubrication Oil System

Consisting of 1 No. lube oil transfer pump for main engines, 1 No. clean oil transfer pump

(tunnel/bow thrusters), 1 clean oil transfer pump (propulsion thrusters), 1 waste oil transfer pump, 1 portable waste oil pump (hydraulic power pack and thrusters) 1 sludge pump Separate filling pipe to each store tank from bunker stations.

Cooling System

Cooling system shall be arranged with Central plate coolers for machinery (designed for 35°C seawater).

Compressed Air System

Consists of 2 air-cooled starting air compressors (30 bar for main engines) working air supply derived from starting air system (reduced from 30 to 7 bar) with different working air outlets. Suitable air receivers and air dryers also shall be provided

Exhaust Gas System

SCR system for exhaust air treatment shall be provided. Exhaust pipes with combined spark arrester and silencer (main and auxiliary engines) shall be provided

Ballast System

The vessel's ballast tanks to be arranged as a ring main which enables transfer of ballast water between ballast tanks and handling of ballast water to and from sea. The ballast system to be remote operated.

Bilge System

2 bilge pumps (capacity per class requirements) with one bilge holding tank with approved Oily water separator of suitable capacity shall be provided.

Fire Fighting system

CO2 based firefighting system shall be provided onboard.

Water based Local mist shall be provided to the Main DG sets, incinerator, purifiers etc based on vessel requirements.

Note: The above covers the base requirements of platform supply vessel with approx. 3000 DWT & 12 knots vessel speed. Values & capacities, Systems, Machineries etc mentioned in this document are for indicative purpose only. Same shall be verified & updated for meeting the desired vessel requirements during the detailed design/vessel spec preparation.