

**MAZAGON DOCK SHIPBUILDERS LIMITED**

(Formerly known as Mazagon Dock Ltd.)

CIN: U35100M**H1934GOI002079**

(A Government of India Undertaking)

Dockyard Road, Mazgaon, Mumbai 400010. India.

Certified – ISO 9001:2008 for Shipbuilding Division

Website: www.mazagondock.in**EXPRESSION OF INTEREST (EOI)**

Department	: Planning Additional Project – East Yard
E-mail ID	: atulkverma@mazdock.com / dsharma@mazdock.com
Phone no.	: 022 - 23763596
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EOI no.	: EY/PLG/AP/AUV/2020/04
EOI date	: 09 July 2020
EOI closing date & time	: 25 July 2020, 15:00hrs
EOI opening date & time	: 25 July 2020, 15:15hrs

**CALL FOR EXPRESSION OF INTEREST FOR PARTICIPATION IN
BUILDING AUTONOMOUS UNDERWATER VEHICLE (AUV)****1. Introduction**

- 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, Government of India.
- An EOI is invited from firms who are technically competent and have proven track record of undertaking work in Autonomous Underwater Vehicles (AUV). The vehicle is intended to be used for defence as well as commercial purposes. A brief tentative technical detail of required AUV is enclosed as **Annexure-1**.
- AUVs will be constructed on Transfer of Technology (TOT) basis at MDL, Mumbai.

- d) Interested parties should submit relevant documents of similar completed/on-going projects for evaluation. Firm can submit product catalogue of similar vessel, indicating physical & operation characteristics, essential features and other relevant details.
- e) The qualified firms of this EOI shall be short listed accordingly and a Non-Disclosure Agreement (NDA) shall be signed between MDL and each of these parties regarding the confidentiality of Techno Commercial Aspects. Other terms and conditions will be discussed & finalized with the shortlisted firms. Subsequently, tender will be issued only to these shortlisted firms through Limited Tender Enquiry (LTE). Shortlisting of firms will be done as per MDL procurement procedure based on prequalification (technical, commercial and financial) documents submitted by firm & this will be binding on bidders.

2. Pre-Qualification Criteria

Bidder shall Submit

a) **Technical Qualification: -**

The bidder shall submit the following as a part of technical qualification.

- i. Bidders Company Profile.
- ii. List of infrastructure/equipment's held by them along with details of their manufacturing facilities.
- iii. Details and personnel (Project Management Team) with designation, qualification and experience to determine their capabilities.
- iv. Bidder to submit relevant documents for the similar project / work performed during last 03 years. A brief tentative technical detail of required AUV is enclosed as **Annexure-1**. Firm can submit product catalogue of similar vessel, indicating physical & operation characteristics, essential features and other relevant details.
- v. Bidder to submit a declaration on its letter head stating that firm is not under any litigation and under any notice of ineligibility issued by Govt. of India/State Govt./ Public Sector Undertakings etc.
- vi. ISO 9001:2005 or higher certificate

b) **Financial Qualification: -**

- i. Shall have Avg Annual turnover of **Rs. 50 Cr (min)** during the last three years ending as on 31 Mar 2020 to participate in this EOI.
- ii. The Bidder shall enclose with its Proposal as per **Annexure-2**, certificate issued by Chartered Accountant with their seal and signature, stating the firms net worth & turnover during the past three years.

- iii. Bidder shall demonstrate access to unutilised line of credit / overdraft facility / cash credit facility from its consortium of banks. Alternatively, or complementarily should demonstrate liquid asset in form of cash / marketable securities in its balance sheet.

3. Instruction to Bidders Responding to EOI: -

- a) MDL reserves the right to modify, expand, restrict, scrap this proposal or reject any Expression of Interest without assigning any reason thereof.
- b) MDL reserves the right to make inquiries with any of the clients listed by the bidders in their previous experience record. Further MDL may ask the firm to make presentation to understand the capability of the firm w.r.t project planning, capability, experience, approach methodology etc.
- c) The interested parties may visit MDL facilities at Mumbai and Nhava to assess the workplace and get first-hand information regarding the infrastructure.
- d) It may be noted that MDL will not reimburse any cost incurred by the bidders towards the preparation and submission of the EOI.
- e) The proposal and all associated correspondence shall be in English.
- f) MDL reserves the right to visit the work facility of bidders to verify the adequacy of specialised work being undertaken vis a vis the infrastructure available. In the absence of adequate infrastructure facilities, the offer submitted is liable for rejection and hence will not be considered for prequalification.

4. Bid Rejection Criteria: -MDL may at its sole discretion and at any time during the evaluation of proposal, disqualify any bidder, if they have:

- a) Bids received after due date.
- b) Bidder's failure to furnish sufficient or complete details for evaluation of the bids within the given period.
- c) Incomplete / misleading / false / ambiguous in the proof of eligibility requirements.
- d) Failed to produce timely clarifications related thereto, when sought.
- e) Bids not meeting qualification criteria mentioned at Para 2 above.
- f) Declared ineligible by the Government of India / State govt. / Public sector undertaking.
- g) Bids with technical requirements and or terms not acceptable to MDL.
- h) Information relating to the evaluation, clarification and recommendation for pre-qualification shall not be disclosed to bidders or any other persons not officially concerned with such process until the pre-qualification process is completed. Any effort by the bidder to influence MDL prequalification process may result in rejection of his EOI.

5. Submission of Proposal Against Expression of Interest: -

Proposal (Original + one soft copy) super-scribing the enquiry number, enquiry subject, last date for receipt of EOI and shall be addressed to '*Chief Manager (Planning-East Yard), Mazagon Dock Shipbuilders Limited, Dockyard road, Mumbai400010*', with all credentials mentioned above.

6. The contact point for any clarification / correspondence at MDL, Mumbai is:

Sanjay K Singh
AGM (PIg-EY)

Atul Kr. Verma/ Deepak Sharma
CM(PIg-EY)

Contact No- 022-23763591

Contact no- 022-23763596

Yours faithfully,
For Mazagon Dock Shipbuilders Limited,

HOD (Commercial-EY)

List of annexures:

- a. Annexure - 1: Brief Technical details of AUV
- b. Annexure - 2: Format for Financial Capability

Annexure-1**Brief tentative technical Details of required Autonomous Underwater Vehicle (AUV)**

MDL looks forward to finalize a collaborator to build AUV (Autonomous Underwater Vehicle) intended to be used for naval as well as commercial purposes (some of these salient features are enumerated below). MDL expects the collaborators to provide the option of best vehicle with optimum performance and high range of operation. Collaborators may add on additional features for its best performance and can be mentioned in their technical specification.

Sr. No.	Descriptions	Firm to Specify
Operational features		
01	<ul style="list-style-type: none"> a) Operational range (at various speed) b) Mission depth c) Mode of deployment: Can it be launched from surface craft, rotary wing aircraft, and submarine. d) Capability of vessel to operate in each mode: (Autonomous / semi-autonomous/Remote) e) Manoeuvrability capability of vehicle, Turning Radius. f) Whether vessel is a modular design? g) Details of payload sensors that the AUV may be equipped with. h) Endurance (at various speed and power option) i) Stealth features j) Details of payloads with its specification available for various defence application: <ul style="list-style-type: none"> i) Mine Countermeasures (MCM) ii) Rapid Environmental assessment (REA) iii) Intelligence, surveillance and reconnaissance (ISR) iv) Anti-Submarine Warfare (ASW) k) Details of the payload with its specification for various commercial and Research purposes: <ul style="list-style-type: none"> i) FPSO, Rigs, Subsea Works ii) Mining, Bathymetry iii) Deep Water Survey, Inspection l) Details of comprehensive software suite for mission planning, real time mission monitoring as well as data post processing m) Low acoustic signature, magnetic field around the vehicle body, Radar cross section, IR signature n) Replaceable payload modules /Sensor modules for military and commercial purposes o) Vehicle operation capability in varying condition of temperature and humidity. 	
Physical features		

02	<ul style="list-style-type: none"> a) Dimension of the craft (Length, Depth, O.D.). b) Displacement. c) Operational life of vehicle. d) Weight. e) Speed (Maximum and Economical). f) Stability calculation of the vehicle (if yes, whether it is certified from any international classification society under IACS). g) Any other International certification/compliance report relevant to vehicle or equipment. h) Reserve Buoyancy. i) Hull form and material of construction 	
Propulsion and Power Management system		
03	<ul style="list-style-type: none"> a) Type of propulsion. b) Type of propeller and rudder. c) Type of power generation (such as rechargeable batteries, aluminium based semi-fuels) on craft and its specification. d) Power Management System for the vehicle e) Mention the equipment fitted on the vehicle and its power rating. f) Redundancy in propulsion and power management system. 	
Navigation and Communication		
04	<ul style="list-style-type: none"> a) Elaborate on the navigational equipment with its operation and Technical parameters. b) Details of Communication options with its range of connectivity to control station. c) Modes of connectivity of AUV with control station. 	
Emergency system and Safety		
05	<ul style="list-style-type: none"> a) Mention the emergency response of the AUV. b) Equipment installed to ensure safety of vessel under emergency situation. 	

Annexure-2**FORMAT FOR FINANCIAL CAPABILITY**

Sl. No.	Last three Financial Year	Annual Turnover	Profit after Tax (PAT)	Net worth as at the end of the financial year
1				
2				
3				

To be signed by the Authorized Signatory of the Applicant with Name, Designation, seal and date.

Certificate from Chartered Accountant:

This is to certify that _____ (name of the Applicant) has received the payments shown above against the respective years and that the net worth is as computed.

Name of the Authorized Signatory representing Auditing firm: Designation:

**Name of firm (Chartered Accountant): Signature of the Authorized Signatory:
Seal of Audit firm.**