REQUEST FOR INFORMATION (RFI)

FOR PROCUREMENT OF 02 X 500 TON SELF PROPELLED WATER BARGE

1. The Indian Navy under Ministry of Defence, Government of India, is planning to procure **02 x 500 Ton Self Propelled (SP) Water Barges** from registered Indian Shipyards. With a view to identify probable shipyards who can undertake the construction of 02 x 500 Ton SP Water Barges, the Shipyards are requested to forward information as sought in this RFI. The aim of seeking this RFI is also to finalise the specifications for the Barge with inputs from the Shipyards.

2. This Request for Information (RFI) consists of three parts as indicated below:-

(a) **Part I**. The first part of the RFI incorporates operational characteristics and features that should be met by the Barge. Few important technical parameters of the proposed Barges are also mentioned.

(b) **Part II**. The second part of the RFI states the methodology of seeking response of Shipyards. **It is highlighted that in accordance with Paras 13, 70 and 92 of Chapter II of Defence Acquisition Procedure (DAP) 20, there is a need to undertake capacity assessment of a shipyard prior recommending for issuance of Request for Proposal (RFP) for ship or Yardcraft construction irrespective of shipyard's response to this RFI** (Appendix C to Chapter XII of DAP 20 relevant).

(c) **Part III**. Guidelines for Framing Criteria for Vendor Selection/ Pre-Qualification in respect of 02 x 500 Ton SP Water Barges under Buy (Indian-IDDM) category.

3. Apart from the information sought as per the Appendices, the shipyards may also forward technical details/brochure/preliminary design/literature, etc., as deemed appropriate with respect to this said RFI for Procurement of 02 x 500 Ton SP Water Barges.

PART- I

4. **Intended Use of Barges (Operational Requirements)**. These are specified in the brief requirements placed at **Appendix A** of this document.

5. **Important Technical Parameters**. Important Technical Parameters are placed at **Appendix A** of this document. Detailed specifications will be given in the RFP which will be issued to Shipyard after verifying their credentials and capabilities to construct 500 Ton SP Water Barge. Further following details are to be submitted:-

(a) Feasibility to build 500 Ton SP Water Barge as per technical/ operational parameters and specifications indicated at **Appendix A**. The shipyards are required to furnish details for each of the operational and technical parameters as brought out in **Appendix A**. Any modification to the parameter/ specifications listed at **Appendix A**, can be suggested by the Shipyard with suitable justification(s).

(b) Shipyard to submit the concept design for the Vessel and option of providing upcoming technologies, if any, which will meet the intended purpose of the Vessel and enhance its employability. Further, Shipyard to indicate Technological advancement in the field of Yardcraft construction/ recommendations for induction of new equipment/ systems onboard the Yardcraft.

(c) Agreement and / or collaboration with firms with regard to Design and Construction of the Vessel.

(d) Budgetary quote of the 500 Ton SP Water Barges with detailed break up of cost is to be submitted. This should include **Basic Cost of 500 Ton SP Water Barges, Project Monitoring System (PMS), Handling of B&D spares, OBS, Special Maintenance Tools/ STTE, Training and Training Aggregate, Freight/ Transit Insurance Cost and AMC (as applicable).** All entities factored in the costing are to be indicated in the break up. Details of import duties, if any applicable, to be indicated separately.

(e) Information on whether the offered Vessel/ design is in use by any other Indian Customer is to be indicated.

(f) The Vessel will be operated by Manpower/ Crew as indicated in **Appendix A**. The maintenance of the Vessel post guarantee period will be carried out by Naval Dockyards/ Naval Repair Yards. Training to ***IN*** personnel on operation and maintenance is to be imparted by the Shipyard/ Original Equipment Manufacturer (OEM) of equipment at Shipyards/ OEM premises and (or) ***IN*** premises. Shipyard to submit proposed training schedule for crew and maintainers covering all the equipment fit and auxiliary systems installed in the Vessel in accordance with DAP-20. Further, shipyard to indicate acceptance to conduct the training at OEM premises and shipyard premises for the crew and maintainers.

(g) The tentative delivery schedule/ build period for delivery of the Vessels to ***IN*** at **Mumbai (01)** and **Karwar (01)** after conclusion of contract including the build strategy.

(j) Shipyards may consider this RFI as advance information to obtain requisite Government clearances and setting up of necessary infrastructure both in terms of manpower and material requirements.

(k) Shipyard has to confirm its acceptance with the terms of payment as per Chapter XII, Section B, Para 79 and Appendix B to Chapter XII of DAP 20 and amendments thereof.

(l) Experience in building/ supply of Vessel which meets the requirement as listed in this document, along with details of customer/ clients and cost per Vessel, delivery date, etc. will have to be submitted.

(m) Willingness for Option Clause as per Para 93 of Chapter II of DAP 20.

(n) The shipyard to submit copy of Government license relevant for ship construction/ building activity.

(p) Shipyard is to indicate the compliance and/ or conformity to various industrial and classification society rules and standards related to operations and safety such as Indian Standards Institute (ISI), CE, MIL (Military) Spec, Information Technology (IT) related etc., for various components/ sub-components of the Vessel as applicable.

(q) Whether the shipyard would be able to comply with all provisions of DAP 20 or not. If not, which Para/ Clause of DAP 20 would not be agreed to, with reasons, needs to be submitted.

(r) Shipyards to provide inputs on maintenance philosophy (Engineering Support Package (ESP), Annual Maintenance Contract (AMC), Performance Based Logistics (PBL), etc.). In this regard, Para 51 and Appendix F of Chapter II of DAP 20 is relevant.

(s) Shipyard has to confirm its acceptance with the terms and conditions on obsolescence of the component/ parts of equipment of the Vessel, which may become obsolete, during the life cycle of the Vessel as per DAP 20 and amendments thereof. Further, Shipyard to submit details/plan for envisaged upgradation of equipment for obsolescence management and details with respect to repair facilities may also be submitted.

(t) Shipyard has to confirm its acceptance to follow all the provisions of Chapter XII, Section-B of DAP 20 regarding acquisition of Yardcraft and Auxiliaries on competitive basis. If not, which Para/ Clause of Chapter XII of DAP 20 would not be agreed to, with reasons, needs to be submitted.

(u) **Acceptance Trials**. Shipyard to submit details with respect to Acceptance Trials, including parameters for product evaluation.

(v) **Alternatives for same/better Operational Requirements**. Shipyard to provide inputs/recommendation with respect to any alternatives to meet the same/better operational requirements.

(w) **Compliance to Environmental Norms**. Shipyard to submit compliance to environmental standard for weather, corrosion resistance etc.

(x) **Undertaking Certificate**. Shipyard to submit an undertaking that in the past they have never been banned/debarred from doing business dealing with MoD/GoI/ or any other Govt organization.

(y) **Indigenous Content (IC)**. Shipyard to submit details of IC in the Vessel to meet the minimum IC requirement in accordance with Para 21 of Chapter I of DAP 20. The categorisation for the procurement is intended to be under Buy (Indian - IDDM).

(z) Shipyards are required to provide following details:-

(i) Displacement / dimensions of the Vessel.

(ii) Proposed Delivery Schedule of the Vessel.

(iii) Details pertaining to capacity, infrastructure, financial status of the Shipyard to be furnished and how it is intended to be used to meet the delivery schedule of the Vessel.

(iv) Past experience of Shipyard in executing similar projects.

(v) Details of present order book status to be furnished.

6. The Shipyard should confirm that following conditions are acceptable: -

(a) The solicitation of offers will be as per 'Single Stage -Two Bid System'. It would imply that a 'Request for Proposal' would be issued soliciting the technical and commercial offers together, but in two separate sealed envelopes. The validity of commercial offers would be at least 18 months from the date of submitting of offers.

(b) The financial assessment parameters would be evaluated by a Financial Parameter Evaluation Team (FPET) constituted by SHQ prior to Technical Evaluation Committee (TEC). The technical offers would be evaluated by a TEC to check its compliance with RFP.

(c) Amongst the Shipyards cleared by TEC, a Contract Negotiations Committee (CNC) would decide the lowest cost bidder (L1) and conclude the appropriate contract.

(d) Vendor would be bound to provide product support for time period specified in the RFP, which includes spares and maintenance tools/jigs/fixtures for field and component level repairs. Documentation for training/ maintenance/ repairs are also to be provided.

(e) The vendor would be required to accept the general conditions of contract given in the Standard Contract Document at **Chapter VI** of **DAP 20.**

(f) **Integrity Pact and Earnest Money Deposit (if applicable)**. An Integrity Pact is to be submitted at the time of bid submission as indicated below (Refer **Annexure I** to **Appendix O** of **Schedule I**, **Chapter II** of **DAP 20)**:-

(i) **Pre Contract Integrity Pact (PCIP)**. All vendors will be required to submit a PCIP **for all procurement schemes above Rs 20 Crores** along with their technical and commercial offers. **Earnest Money Deposit (EMD) will act as security for PCIP till signing of contract**. **Format of EMD is given at Annexure I to Appendix O of schedule I to Chapter II**. **Post signing of contract, PCIP will be covered by PWBG till completion of contract**.

(ii) EMD would be applicable as follows :-

Estimated Cost of Procurement Scheme (in Crores)		EMD Amount
Above (not including)	To (including)	
-	100	Nil
100	150	30 Lakh
150	300	70 Lakh
300	1000	2 Crore
1000	2000	5 Crore
2000	3000	10 Crore
3000	5000	15 Crore
5000	-	25 Crore

(iii) EMD is not required from Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organization or the concerned Ministry or Department or Startups as recognized by Department of Industrial Policy & Promotion (DIPP), in accordance with the Ministry of Finance memorandum bearing No. F.20/2/2014-PPD (pt.) dated 25 Jul 2017 (as amended from time to time). Defence Public Sector Units (DPSUs) are not required to submit EMD when nominated as ab-initio single vendor. DPSUs will submit all BGs and EMD as applicable while participating in multi-vendor cases with private vendors.

(iv) **Format of EMD**. The Bid Security may be accepted in the following forms, safeguarding the Buyer's interest in all respect:-

(aa) Bank Guarantee from any Indian Public or Private Schedule Commercial Bank notified by RBI or first-class banks of international repute. The format of the Bank Guarantee for Bid Security is provided at Annexure 1 to Appendix O of schedule I to Chapter II. The bidder may also submit EMD in the form of electronic Bank Guarantee (e-BG). UIN Number of beneficiary (Directorate of Ship Production) is **NCDGS1230P**.

(bb) Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque shall be payable in an acceptable form. The Beneficiary Bank Details for furnishing the same are as follows:-

(IFSC CODE- SBIN0000691)
State Bank of India New Delhi Main Branch
C Block, 11 Parliament Street
New Delhi, Pin: 110001

(v) **Validity of EMD**. The EMD will be valid for eighteen months or till signing of contract, whichever is later. The EMD shall be extended from time to time as required by the buyer and agreed by the bidder. No interest shall be payable by the buyer to the Bidder(s) on the EMD for the period of its currency. For unsuccessful bidders EMD will be returned on declaration of successful bidder(s).

(g) **Performance-cum-Warranty Bond**. Performance-cum-Warranty Bond both equal to 3% value of the contract inclusive of taxes and duties is required to be submitted after signing of contract as per current PWBG rate promulgated by Ministry of Defence (MoD). However, the final amount of PWBG will be applicable as per the rate promulgated by MoD from time to time and in force at the time of tender submission.

(h) **Performance Bank Guarantee for AMC**. A Performance Guarantee by the way of a Bank Guarantee of a sum equal to 5% of the total price of AMC for contracted duration is required to be submitted after signing of contract as per current rate promulgated by Ministry of Defence (MoD). However, the final amount of BG will be applicable as per the rate promulgated by MoD from time to time and in force at the time of tender submission.

(j) **Indigenous Content (IC)**. The procurement of the Vessel will be as per DAP 20, and accordingly shipyards are required to submit the details regarding Indigenous Content (IC). The categorisation for the procurement is intended to be under Buy (Indian - IDDM). The Vessel must meet the minimum IC parameters in accordance with Para 21 of Chapter I of DAP 20. The Shipyard is also required to comment on the categorisation and IC content as per DAP 20. The category wise (less Strategic Partnership model cases) summary of IC as per cost of the **Base Contract Price** (**i.e. Total Contract Price less taxes and duties**) will be as under:-

Ser	Category	IC
(a)	Buy (Indian-IDDM)	Indigenous design and ≥ 50%

PART-II

7. **Procedure for Response**

(a) Vendors must fill the form of response as given in **Appendix B** (as per **Annexure II** to **Appendix A** to **Chapter II** of **DAP 20)** and **Appendix C** of this document. Apart from filling details about company, details about the exact product meeting other generic technical specifications should also be carefully filled. Additional literature on the design and construction of Barges can also be attached with the form.

(b) The Shipyard to submit separate enclosure clearly indicating compliance with the operational/ technical specifications placed at **Appendix A** of this RFI. Non-Compliance to any of the parameters listed in **Appendix A**, has to be clearly indicated along with reasons.

(c) Compliance/ acceptance to Paras 5 and 6 at Part-I above are to be clearly indicated and certified in response. Any other relevant additional literature or document on the Barges can also be attached with the RFI response form.

(d) The duly filled RFI response should be dispatched to the under mentioned address:-

Cmde (Ship Production)
Directorate of Ship Production
9th Floor, Chanakya Bhawan,
Chanakyapuri, New Delhi- 110021
Tele: 011-26886427
Fax: 011-21610614
E-mail: dsp@navy.gov.in

(e) Last date of acceptance of filled RFI response is **07 Nov 23** (08 weeks from uploading of RFI). The Shipyards short listed for issuance of RFP would be intimated based on Technical Capacity Assessment as per Appendix C to Chapter XII of DAP 20.

(f) Shipyards, if required, can communicate to the Project Officer of DSP with below mentioned contact details for seeking clarification/ information on the documents (such as Navy Order (NO), Naval Construction Document (NCD), etc) mentioned in this document:-

Cdr (Ship Production)
Directorate of Ship Production
8th Floor, Chanakya Bhawan,
Chanakyapuri, New Delhi- 110021
Tele: 011-26886433
Fax: 011- 21610614
E-mail: dsp@navy.gov.in

8. The Government of India invites responses to this request from registered Indian Shipyards who qualify the criteria/ willing to meet the criteria as enumerated below :-

(a) Financial Assessment Parameters as per **Annexure II** to **Appendix C** to **Chapter XII** of **DAP 20**.

(b) The shipyard should have been qualified by Technical Capacity Assessment as per **Annexure I** to **Appendix C** to **Chapter XII** of **DAP 20** or willing to be assessed as per the aforesaid technical capacity assessment parameters.

9. The end user of 02 x 500 Ton SP Water Barges is the Indian Navy.

10. Shipyard to submit information with respect to utilisation of Indigenous Military Material and Software, indicating the plan for material sourcing and cost implications vis-a-vis foreign sourcing of materials, iaw Paras 11 and 13 of Chapter II of DAP-20, if applicable.

11. This information is being issued with no financial commitment and the Ministry of Defense reserves the right to change or vary any part thereof at any stage. The Government of India also reserves the right to withdraw it, should it be so necessary at any stage. The acquisition process would be carried out under the provisions of DAP 20.

PART- III

Guidelines for Framing Criteria for Vendor Selection/ Prequalification in respect of 02 x 500 Ton SP Water Barges under Buy (Indian-IDDM) Category

12. The guidelines prescribed for short-listing/ pre-qualification of Indian vendors in case of shipbuilding cases are detailed in **Chapter XII** of **DAP 20** and Financial Assessment Parameters as per **Annexure II** to **Appendix C** to **Chapter XII** of **DAP 20**. The relevant details are placed at **Appendix D**.

13. **SME/MSME/Startup Certification.** Shipyard to provide certificate/relevant documents of being a SME, MSME or Startup, if applicable.

Appendix A
(Refers to Para 5 of RFI)

OPERATIONAL/TECHNICAL SPECIFICATIONS FOR 500 TON SELF PROPELLED WATER BARGES

SECTION A - GENERAL		
1.	**Aim**	To lay down the staff requirements for 500 T Self Propelled Water Barge capable of replenishing water for ships and submarines in harbour (alongside) and at anchorage.
2.	**Functions**	Provide freshwater to ships and submarines in harbour and at anchorage.
3.	**General Remarks**	(a) The barge is to be built as per IHQ MoD (N) approved Classification Society Standards (ABS/BV/DNV-GL/IRS/LR/RINA/ClassNK). The notation for the barge and QAP for shipbuilding, including trials, should be finalised in consultation with IHQ MoD (N). Classification Society is to certify that the Class notation proposed by the yard covers all the requirements of build specs/ guideline specifications. (b) A certificate is to be provided by the Classification Society confirming that 'Class Notations have been provided for all functional requirements indicated in RFP'. (c) The barge should have the capability of quick turn around (that is rapid replenishment of her tanks, for the next tasking). (d) The barge should be capable of supplying light stores to the ships. The barge should be capable of carrying light stores upto five Tons. (e) The barge should have an expected life of 20 years. (f) The barge should comply with all the latest requirements of MARPOL/ MEPC and SOLAS regulations. (g) Separate Feed Water and Fresh Water pumps are to be provided for embarkation/ disembarkation with 100% redundancy to make the barge self-sufficient. (h) The barge should have configuration of tanks with variable capacity as per the design/ hull form. (j) The barge should have flexibility to utilise tanks in various configuration to accommodate fresh and feed water as per requirement.

		(k) The main and auxiliary machinery of the barge should permit a continuous operation of 48 hrs.
4.	**Speed**	(a) Maximum speed of 12 Kn upto 85% MCR. (b) Sustained : 10 Kn
5.	**Dimensions**	The principal dimensions of the barge should be as per the design approved by the Classification Society rules. Beam not less than 8m and Draught not more than 4m.
6.	**Endurance**	150 Nm @ sustained speed of 10 Kn.
7.	**Sea State**	Should be able to operate up to Sea State 4 and survive upto sea state 5.
8.	**Crew**	Crew has to be maintained to 11 as per Standard Manning Plan.
9.	**Environmental Conditions**	All equipment should be marinised and capable of performing under the following ambient conditions:- (a) Ambient Air Temperature - up to 45 °C (b) Average machinery Space Temperature - up to 55 ° C (c) Sea Water Temperature - up to 40^{o} C (d) Relative Humidity condensation at 35 ° C - 100% Condensation at 35 °C (e) The Marinised Package AC is to be designed to perform at rated conditions under the environmental conditions specified at (a) - (d) above. (f) All machinery, its sub-assemblies and control systems should be able to perform continuous operation with machinery compartment conditions as follows:- Normal Operating Temperature - Upto 55^{0}C
SECTION B - NAVIGATION		
10.	**Bridge**	Bridge should have large inclining windows for all around visibility to assist manoeuvring alongside. All front windows should have Clear View screen mechanism and other windows should have either Clear View Screen mechanism or marinised Window Wipers.
11.	**Magnetic Compass**	One Class approved magnetic compass is to be provided on the bridge. In addition, one boat compass to be provided.
12.	**Navigational Equipment**	Following Class approved Navigational aids to be provided:- (a) Two GPS

		(b) One AIS (c) One Nav Radar
13.	**Echo Sounder**	One Class approved Echo Sounder with interface printer to be provided.
14.	**Fog Horn**	Two Class approved electric fog horns are to be provided on top of the wheel house with local operating controls and provision for remote operations from the bridge.
15.	**Electric Horn**	Class approved Electric Horn to be positioned, with operating controls on the Bridge.
16.	**Nav Light**	As per International Regulation for Prevention of Collision at Sea (IRPCS) - 1972. Battery and backup supply is to be provided for the navigation lights.
		SECTION C - COMMUNICATION
17.	**Communication**	Following Class approved communication facilities are to be provided:- (a) VHF MMB Tx/Rx with DSC - Two (b) VHF hand held Radio sets - Five MOTOTRBO XIRP8668i (c) SART TBR - 600 - One (OEM M/s Thrane & Thrane) (d) EPIRB 406 MHZ - One (OEM M/s Thrane & Thrane) (e) Megaphone - Two (one at Bridge top and one on the mast) (f) 5" Hand signaling Lantern with stowage box - One (g) Portable loud hailers - Two (h) Call up bells - As Req. (j) Sound power telephone - As Req. (k) Class approved Internal Communication System - One
SECTION D – HULL, MACHINERY FIRE FIGHTING AND DAMAGE CONTROL		
18.	**Build Specification**	The barge should be built to IHQ MoD (N) approved classification society standards (ABS/BV/DNV-GL/IRS/LR/RINA/ Class NK). The Seller is to provide a certificate from the nominated Class Society that the barge

		has been built to approved Class Notations and the vessel (design and build) complies with all aspects of the Built Specifications. The Seller shall therefore share a copy of GLS/ Build Specifications with the nominated Class society and finalize the contract with Class accordingly. All Hull equipment being procured to meet the relevant specifications under inspection/ certification by Classification Society.
19.	**Hull Material**	The barge is to be built of Class approved steel suitable for the type and function of barge.
20.	**Stability**	Should be designed to have intact and damaged stability as per the Classification Society Rules.
21.	**U/W Hull Protection**	Cathodic Protection through Sacrificial Anodes is to be provided.
22.	**Paint Scheme**	Suitable Class approved Marine grade paint scheme is to be applied on surfaces. Surface preparation, paint application, curing time etc. are to be ensure to the satisfaction of paint OEM and Classification Society. Navy Order 53/16 regarding paint scheme is required to be followed.
23.	**Deck covering**	Suitable Class approved Epoxy Deck covering is to be applied in the relevant internal compartments (wet spaces, main alleyways, crew compartments and bridge.
24.	**Mast**	A motorized foldable fixed mast to carry navigational lights, antenna and flags is to be provided.
25.	**Capacities**	(a) Water (cargo) - 500 Ton (including fresh & feed water) (b) Fuel Oil (propulsion) - As per endurance + 25% reserve (c) Domestic Fresh Water - 4.5 to 5.5 Ton (d) Lub Oil - As per endurance + 25% reserve * Minimum of 10 Tanks having capacity of 50T each is required to be included in the vessel design.
26.	**Main and Auxiliary Machinery**	(a) Propulsion package and auxiliary machinery having indigenous product support to be provided as approved by Classification Society. Main Engine to be selected as per build Specifications, to meet the speed requirement. Suitable rated indigenous Main Engine and Diesel Generators compliant to latest IMO/ MARPOL standards and as per class to be provided. No acoustic enclosures are necessary for DA. (b) Twin shaft propulsion system, with one diesel engine, reverse reduction gear box and fixed pitch propeller, per shaft. The propellers are to be out board rotating when the vessel is proceeding ahead.

		(c) Main and Auxiliary machinery as required, and should be capable of unrestricted operation under the following environmental conditions :- (i) Ambient air temperature : up to 45 ^{0}C (ii) Sea water temperature : up to 35 ^{0}C (iii) Maximum temperature in engine room (for Control and monitoring system only) : up to 55 ^{0}C (iv) Relative humidity (for Control and monitoring system only) : 95 % Condensation at 35 ^{0}C (d) Engine controls to be as per class specifications requirements. (e) Main and Auxiliary Machinery are to be mounted on suitable AV mounts approved by Classifications Society meeting all technical requirements. Bellows/ compensators to be provided as per Classification Society Rules. (f) The pumping rate for the fresh water should be 40 TPH variable to 60 TPH. A VFD centrifugal pump, meeting Class requirements be provided to cater the supply of FW for smaller and larger vessels. (g) Main and Auxiliary machinery of adequate capacities meeting all technical requirements as per Classification Society are to be provided. These include the following:- (i) Diesel Alternators (DA) of adequate capacity. Suitably related Diesel Generators, conforming to latest Classification Society rules/ specifications and suitable for marine use for providing supply to various onboard consumers is to be provided. The quantity and rating of the DA should be in accordance with the load requirements of various consumers, catering for adequate levels of redundancies stipulated as per Class regulations for the vessels. The DG shall be self-regulated and self-excited. The maximum permissible loading of DGs as a percentage of the rated capacity and suitable growth margins as per class regulations should be considered while determining the DG capacity. An electrical load analysis chart justifying the proposed capacities of the DGs shall be prepared by

		the builder and approved by the Class authority during design and construction stages of the vessel. (ii) Emergency DA of adequate capacity. The capacity of EDA shall be such that it meets the emergency loads requirements of critical consumers onboard as per Classification society rules. (iii) Marinised AC Plants of adequate capacity. (iv) Air compressors of adequate capacity depending on the consumer requirement meeting Classification Society Requirements. (v) Fuel and oil centrifuges of adequate capacity. (vi) Fuel transfer pumps of adequate capacity. (vii) Lub oil transfer pumps of adequate capacity meeting. (viii) Lub oil stripping pumps (both fixed and portable) of adequate capacity. (ix) Bilge pumps of adequate capacity. (x) Firemain Pump of adequate capacity. (xi) General Service Sea Water Pump of adequate capacity. (xii) Tank Content Gauges. (xiii) Semi Rotary Hand Pump of adequate capacity. (h) **Gear Box**. Reduction gear box of suitable reduction ratio are to be provided as per Classification Society rules. (j) **Steering Gear**. Steering gear should be Electro Hydraulic as per Classification Society norms. (k) Adequate maintenance envelope to be provided for each engineering equipment/ system meeting Classification Society Requirements. (l) Press fit/ Weld less pipes and flangeless couplings with front and back connect is to be used for domestic fresh water, chilled water and auxiliary sea water cooling system including bilge system.

		(m) Machinery compartment bilges are to be easily accessible and provided with bilge wells and limber holes. (n) Fuel specification is to be as per HFHSD meeting IS 1460:2000. (p) Material specification of the ship system is to be as per Classification Society Rules. (q) Suitable hot lagging to be provided for all hot sections of equipment/ systems so that the lagging surface temperature does not exceed 35 ^{0}C. (r) Flow meter in suction and discharge line of cargo pump meeting Classification Society requirements.
	SECTION E - ELECTRICAL	
27.	**Power Generation and Distribution System**	The following electrical equipment and fittings are to be provided:- (a) **Generators**. DGs of suitable capacity with to meet the electrical load under various conditions, are to be catered. The DG is to be chosen from the standard range of approved DGs as approved by the Classification Society Rules. The alternator should conform to latest classifications society rules/ specifications and standards for marine use. Suitably related Diesel Generators, conforming to latest Classification Society rules/ specifications and suitable for marine use for providing supply to various onboard consumers is to be provided. The quantity and rating of the DA should be in accordance with the load requirements of various consumers, catering for adequate levels of redundancies stipulated as per Class regulations for the vessels. The DG shall be self-regulated and self-excited. The maximum permissible loading of DGs as a percentage of the rated capacity and suitable growth margins as per class regulations should be considered while determining the DG capacity. An electrical load analysis chart justifying the proposed capacities of the DGs shall be prepared by the builder and approved by the Class authority during design and construction stages of the vessel. (b) **Power Supply**. Suitably rated power supplies conforming to latest Classification Society regulations according to the load requirements of the craft (and load chart calculations), with adequate levels of redundancies as per Class Specifications is to be provided. 230 V AC, 50 Hz, 1 Phase, 4 wire supply system derived from the primary supply, (obtained through secondary star connected transformer) with earthing of neutral to vessel's hull for domestic and COTS equipment is to be provided.

		(c) **Lighting**. The following general lighting and fittings are to be provided :- (i) The Barge's lighting supply would be 230V,50Hz, 1Ph and the entire vessel would be fitted with LED light fittings conforming to latest Classifications Society rules/ specifications and standards for marine use. (ii) Navigation lights should conform to latest Classification Society regulations. (iii) Adequate number of flood lights of 200 watts are to be provided at suitable positions, duly complying to Class Specifications. (iv) Emergency lights fittings of 24 V complying to Class Specifications are to be supplied in each compartment. (v) Adequate number of hand held lamps with suitable length of flexible cable complying to Class Specifications to be provided. (d) **Main Switch Board**. The Main Switch Board/ Distribution Panels should confirm to Class Specifications. (e) **Shore Supply Arrangements**. A water tight shore supply connection box (with enclosure protection IP 57 or higher) of suitable rating conforming to latest Classifications society rules/ specifications and standards for marine use should be fitted. (f) **Batteries**. Adequate number of maintenance free batteries of contemporary technology, with suitable charging arrangement conforming to Classification Society rules are to be provided. Adequate number of maintenance free batteries of contemporary technology, with suitable charging arrangement conforming to classification society rules for marine use are to be provided. The batteries are required to cater for emergency/ back up supplies onboard for critical consumers and should be of a suitable capacity to withstand high starting current, in case envisaged to be used for high cranking applications. All norms pertaining to the batteries should be as per Classification Society rules. (g) **Motors, Starters and Control Panels**. All motors, starters and control panel should conform to classification

		rules suitable for marine use and procured from Class approved list of reputed vendors. (h) **Cables**. Cables for all lighting, power, shore supply and equipment is to be as approved by the Classification Society. (j) **Transformers and Rectifiers**. Transformers and rectifiers, confirming to Class Specifications. (k) All electrical equipment/ machinery and fittings are to be selected from the standard range and sourced from Class approved list of **reputed** vendors. (l) All electrical equipment shall be suitable for continuous operation in environmental conditions as follows:- (i) An ambient air temperature of 55°C for machinery / equipment located in all spaces including machinery spaces, galley and weather deck. (ii) Sea Water temperature - 35°C. (iii) Relative humidity - 95% at 35°C. (iv) Electrical cables - Rating of electric cables shall be based on an ambient temperature of 55°C for all spaces. (v) All the electric equipment shall be capable of continuous operation when fitted at any direction up to an angle of 35 degree from vertical plane passing through the center line of the equipment. (m) **Window Wipers**. Class approved Window wipers is to be provisioned. (n) **Cabin Fan**. Class approved Industrial fans with metal casing operating on 230 V AC are to be provided in accommodation spaces, offices and manned stores/ space. (p) **HV Mats**. Class approved High voltage insulated synthetic mats are to be used in Switchboards, Convertor Rooms Equipment Rooms, Battery Compartments. (q) **Galley Power Supply Isolating Switch.** To ensure safety of galley spaces, galley equipment are required to be controlled by a single isolating switch, which is to be

		located at a readily accessible position outside the galley, adjacent to the main entrance. The same should be complying to Class Society rules. To ensure safety if galley equipment are required to be controlled by a single isolating switch, which is to be located at a readily accessible position outside the galley, adjacent to the main entrance.
28.	**Controls**	Use of COTS components in basic machinery control on the bridge is to be provided.
29.	**Ventilation**	(a) Adequate forced ventilation should be provided in the machinery spaces, accommodation and in the Bridge/wheel house. (b) Engine room to have forced supply and exhaust ventilation. (c) WCs, galleys and showers should have forced exhaust and forced supply. Exhaust is to be of double the capacity of supply related ventilation.
30.	**BASCCA (EE)**	Provision is to be made for BASCCA (EE) sets for the complete crew along with suitable arrangements.
31.	**Portable Pumps**	The following portable pumps are to be provided along with suction and discharge hoses and all the other accessories:- (a) 1 X 37 TPH (or higher) DD non-submersible pump be provided. (b) 1 X 40 TPH (or higher) and 2 X 20 TPH MD submersible pumps be provided.
32.	**Oil Water Separator**	One in number oil water separator of suitable and capacity complying with MARPOL requirements, is to be provided.
33.	**Sewage Treatment Plant**	One IMP/ MARPOL approved electro-catalytic/ biological STP of adequate facility with H_2S sensors (MCR and bridge) and sufficient ventilation arrangement of the compartment be provided.
34.	**Fire Fighting**	The following firefighting appliances should be positioned and are to be procured from vendors approved by Classification Society:- (a) Fire fighting appliances to be provided as per the regulations of Classification Society. Lockers to be provided for stowage of the items. (b) Fixed Fire Fighting systems of Machinery Spaces through Indigenous Fire Fighting System meeting Classification Society Requirements. (c) A fireman ring, below Number 1 deck, with adequate sea water pressure, is to be provided to meet the

		requirements of fire fighting as per Classification Society Requirements. (d) Portable fire fighting and damage control equipment are to be provided as per Specifications provided by Classification Society. (e) Fire Hydrants are to be of Double Lug meeting Classification Society Requirements.
SECTION F - ACCOMMODATION AND HABITABILITY		
35.	**Accommodation**	Following accommodation and associated facilities are to be provided:- (a) Two cabins with attached WC and bath are to be provided for the Master and the engineer. (b) One four bunk cabin for engine room crew. (c) One six bunk mess for deck crew. (d) Two sets of Separate WCs and Showers for the crew are to be provided. (e) Split ACs for crew accommodation and wheelhouse.
36.	**Galley**	(a) A common galley is to be provided for the Master, Engineer and crew of 9 personnel. (b) One pantry with serving bay to be provided. A dining hall with seating capacity of 6 personnel to be provided. Separate enclosures for master & engineer and crew to be provided. (c) The galley should be modular and equipped with modern equipment. These should include the following:- (i) Electric cooking Range with Two Hot Plates (of 5 kw each) (ii) Oven (of 3 kw) (iii) Frost Free Refrigerator of 350 lts (iv) Electric Kettle (v) Hot Case (vi) Hot water geyser/boiler (vii) Water Cooler with Aquaguard Type Water purification system.

		(viii) Stainless steel sink with a fresh water nickel silver tap with splash back and drain board. (ix) SS rack type shelves mounted above serving hatch on the bulkhead common with the dining hall. (x) One salt water tap is to be provided 500 mm above the deck, with a sill around, to restrict water splash. (d) One wire mesh locker for storage of potato and onions on upper deck. (e) One provision store room and a stainless steel top table, with a large provision cupboard and metal drawers under.
37.	**Medical Facilities**	First aid boxes one each in the crew mess, bridge, engine Room and Masters' cabin to be provided.
38.	**Recreational facilities**	Two smart colour LED TVs (one of the Master / Engineer and the other for the crew) and SRE to be provided.
SECTION G - SEAMANSHIP, LIFE SAVING AND SAFETY EQUIPMENT		
39.	**Seamanship Fittings**	(a) **Anchor and Chain Cable**. As per Classification Society Rules. (b) **Anchor Windlass**. As per Classification Society Rules. (c) **Mooring Towing and Berthing Gears**. As per Classification Society Rules. (d) **Awnings**. Awnings for all the exposed decks are to be provided. Arrangements for fitment of stanchions to be accordingly made on deck. (e) **Guard Rails**. Suitable guard rails for safety of personnel, are to be fitted all around the Yardcraft.
40.	**Life Saving**	(a) One Gemini (with OBM) with suitable lowering and hoisting arrangements, viz, Electric operated Single Arm Davit of SWL 500 Kgs is to be provided. (b) **Life Rafts**. 1 x 20 men life rafts. (c) **Life Jackets**. Life jackets for 100 % crew plus 10%.
SECTION H - MISCELLANEOUS		
41.	**Documentation**	Complete inventory of spares and the relevant documentation of equipment and machinery to be provided. As fitted drawings, maintenance, repairs and refit documents, Catalogue of spares / D 787 for OBS and B&D inventory and Passports for all the machinery are to be provided, along with the barge. A detailed Engineering

		Maintenance Schedule (Equipment and Systems) should be prepared and submitted four months prior to commissioning. The final revised Maintenance Schedule is to be available at time of Commissioning of the vessel. The documentation is to be provided in IETM level II format.
42.	**Test Equipment**	Test equipment iaw Classification Society Rules.
43.	**On board and Outfit Spares**	The maintenance tools, test equipment and software (as applicable) used for onboard repair/ maintenance would be supplied by the vendor as part of OBS. The OBS supplied must cater for break down maintenance, routines falling due within two years after delivery of the vessel. The OBS has to be recommended based on the likely consumption rate of the spares and on the exploitation pattern of the system/ equipment. The spares are to be supplied in a standard metal boxes, duly preserved for long term duration of at least two years.
44.	**AMC**	All COTS equipment should be provided with at least five years AMC.
45.	**B & D Spares**	The vendor should forward recommended list of B&D Spares for the equipment/ system to sustain five years of exploitation. The B&D spares list should comprise of long lead time spares, spares required as insurance spares and OBS replenishment for a period of five years post commissioning of the vessel.
46.	**Life Term Product Support**	The shipyard is to submit a scheme to provide product support for a minimum period of 20 years to be reckoned from the date of delivery of the last barge. This could be in the form of a contractual commitment from various equipment suppliers. In case any equipment is likely to become obsolete, the manufacturer should be committed to give a requirement of 'Life Time Buy' of spares. The maker should also ensure the supply of these items prior to discontinuation of the production facilities.
47.	**Pest Control**	Latest anti-rodent/ anti-cockroach/ anti-flies & mosquito repellant devices to be provided in all accommodation areas, dining halls, galley and store rooms. These compartments should also be provided with anti-rodent paint scheme.
48.	**Weather Covers**	Two sets of light weight waterproof PVC coated nylon fabric shall be supplied for all weather deck fittings, openings and machinery/ items.
49.	**Facilities for Overseeing Team**	Necessary furnished air conditioned office space with associated office support arrangements and transport shall be provided to the overseer and representative of the Buyer till completion of all Contractual liabilities/ obligations.

50.	**Training**	Training is to be imparted to the crew of the Vessel and maintainers, by the OEM/ OEM reps/ seller, for the operation and maintenance of machinery and equipment installed onboard.
51.	**Project Monitoring**	The latest techniques of Project Monitoring are to be employed by the Seller to ensure phased and planned construction of the Vessel. The plan and progress of the project including all the correspondence, drawings and documents shall be available online for exchange. A comprehensive application for exchange of information with all agencies like IHQ MoD(N), Seller/ Shipyard, Overseeing team, etc., shall be made available by the Seller.
52.	**Noise & Vibration**	Noise and Vibration standards are to be met as per Classification Society rules and standards.

Appendix B
(Refer to Para 7(a) of RFI)

VENDOR INFORMATION PROFORMA

1. **Name of the Vendor/ Company/ Firm and Unique ID (if any)**.

_____

(Company profile including Share Holding pattern, in brief, to be attached). In the eventuality of the firm emerging as L1, Contract will be concluded in the name and address of the firm, as indicated here). Vendors are to undertake that any subsequent proposal for change in name of firm or address, will be intimated to IHQ MoD(N) at the first available opportunity and supporting documents be furnished accordingly within five working days of their approval by the competent authority.

2. **Type (Tick the relevant category)**.

Original Equipment Manufacturer (OEM) Yes/ No
Authorised Vendor of foreign Firm Yes/ No (attach details, if yes)
Others (give specific details) _____

3. **Contact Details**.

Postal Address: _____

City**:** _____ State**:** _____
Pin Code**:** _____ Tele **:** _____
Fax: _____ URL/Web Site**:** _____
Email: _____

4. **Local Branch/ Liaison Office in Delhi (if any)**.

Name & Address: _____
Pin code: _____Tel : _____Fax: _____ E mail : _____

5. **Financial Details**. Category of Industry (Large/ medium/ small Scale):_____

6. **Certification by Quality Assurance Organisation**.

Name of Agency	Certification	Applicable from (Date &Year)	Valid till (Date &Year)

7. **Details of Registration**.

Agency	Registration No.	Validity(Date)	Equipment
DGS&D			
DGQA/DGAQA/ DGNAI			
OFB			
DRDO			
Any other Government Agency			

8. **Membership of FICCI/ ASSOCHAM/ CII or other Industrial Associations**.

Name of Organization: _____

Membership Number: _____

9. **Equipment/ Product Profile (to be submitted for each product separately)**

(a) Name of Product : _____
(IDDM Capability be indicated against the product)
(Should be given category wise for e.g. all products under night vision devices to be mentioned together)

(b) Description (attach technical literature): _____

(c) Whether OEM or Integrator : _____

(d) Name and address of Foreign collaborator (if any): _____

(e) Industrial License Number : _____

(f) Indigenous component of the product (in percentage)**:** _____

(g) Status (in service / design & development stage): _____

(h) Production capacity per annum:_____

(j) Countries / agencies where equipment supplied earlier (give details of quantity supplied) : _____

(k) Estimated price of the equipment _____

10. Alternatives for meeting the objectives of the equipment set forth in the document.

11. Any other relevant information: _____.

12. **Declaration**

(a) It is certified that the above information is true and any changes will be intimated at the earliest**.**

(b) It is certified that in the past that _____ (name of firm) has never been banned/debarred for doing business dealings with MoD/ GoI/ any other Government Organization and that there is no inquiry going on by CBI/ED/any other Government agency against the firm.

(Authorised Signatory)

Appendix C
(Refer to Para 7(a) of RFI)

ADDITIONAL INFORMATION PROFORMA
(INDIAN SHIPYARDS)

1.	Year Established							
2.	Type of Organisation size/Classification of Yard							
3.	Organisation setup and availability of skilled Manpower							
4.	Details of design, planning and production facilities/infrastructure including slipways/ dry docks and wet basin/water front (attach brochures etc.)							
5.	Annual build capacity (in tonnage)							
6.	Details of future expansion and business development planned							
7.	Vessels delivered in last 05 years. (attach previous order copies for 500 Ton SP Water Barge/Similar Vessel only)							
	Yard	Customer	Type of vessel	Dwt,grt	Order date	Start production	Contractual delivery	Actual delivery
8.	Orders in hand (attach order copies for similar ships/ Vessels only)							
	Yard	Customer	Type of vessel	Dwt, grt	Order date	Start production	% completed	Expected delivery
9	Financial information (in INR for Indian vendors and in US dollars for foreign vendors)							
	(a)	Annual turnover in the last three financial years (year wise)						
	(b)	Profits made						
	(c)	Net Worth = equity+ reserves						
	(d)	Debt/Equity ratio						
	(e)	Quick Ratio = (current assets long term debts)/current liabilities						
	(f)	Attach copies of certified published annual report showing turnover and financial status in support of above information						

10	Detailed specifications of 500 Ton SP Water Barges offered to meet the specified requirements and build period from date of order	
11	Detailed specifications of commercially off the shelf (COTS) 500 Ton SP Water Barges, if available for outright purchase, if any	

(Authorised Signatory)

Appendix D
(Refers Para 12 of RFI)

GUIDELINES FOR FRAMING CRITERIA FOR VENDOR SELECTION/ PREQUALIFICATION IN RESPECT OF 02 x 500 TON SELF-PROPELLED WATER BARGES UNDER BUY (INDIAN-IDDM) CATEGORY

1. The guidelines prescribed for short-listing/ pre-qualification of Indian vendors in this instant case of 02 x 500 Ton SP Water Barges under Buy (Indian-IDDM) category is enumerated in the succeeding paragraphs. **Paragraph 2** deals with the parameters that may be considered for short-listing of vendors, whereas **Paragraph 3** amplifies the process for applying selected parameters to the process of Vendor Short listing.

2. **Parameters**

(a) **General Parameters**.

(i) Applicant Entity should be an Indian Vendor as defined at Paragraph 20 of Chapter I of DAP 2020.

(ii) Business dealing with applicant Entity or any of its allied entities should not have been suspended or banned, by MoD/ SHQ or any Government Department or organization (as defined in Guidelines for Penalties in Business Dealings with Entities issued vide Ministry of Defense, D(Vigilance) MoD ID No 31013/I/2006-D (Vig) Vol II dated 21 Nov 2016). None of the Promoters and Directors of applicant entity should be a wilful defaulter.

(iii) "Entities" will include companies, with whom the Ministry of Defence has entered into, or intends to enter into, or could enter into contracts or agreements.

(iv) "Applicant entity" may be a company, subsidiary, an associate company (as defined in the Companies Act, 2013), a consortium or a Joint Venture (JV).

(b) **Technical Parameters**.

(i) Vendor shall be a manufacturing entity or a system integrator of defense equipment and not a trading company, except in cases where the OEM participates only through its authorized Vendors.

(ii) Minimum **two years**' experience in **broad areas like manufacturing/ electronics/ explosives etc. as applicable in the instant procurement case**. If not, then cumulative experience of at least three years in above areas, resulting in gaining of competence for

manufacturing the proposed product. (In case the SHQ feels that for a particular equipment a lesser experience could be accepted, then the same should be got approved by the competent authority before including the same in the RFP).

(iii) Where product involves integration, previous experience of not less than one year/ one project in integration of systems/ equipment shall be required.

(c) **Financial Parameters**. For RFI of Shipbuilding cases (acquisition of Ships, Yardcraft & Submarines), financial parameters stipulated at Annexure II to Appendix C, Chapter XII, DAP-20 shall be followed.

(d) **Other Parameters**.

(i) **Industrial License (IL)**. Vendors should be either holding a valid defense industrial license or should have applied for the same before responding to RFP. In any case the vendor must confirm holding of IL before commencement of FET. (Items requiring IL will be as per DIPP Press Note 3 of 2014 as amended from time to time).

(ii) **Registration**. Registered for a minimum of two years (one year for SMEs). Minimum number of years not applicable for JVs constituted specifically for a project.

3. **Stipulations for Applying Parameters**.

(a) **Areas like manufacturing/ electronics/ explosives etc**. referred at Paragraph 2(b)(ii) should be defined in each case of procurement.

(b) In case the Applicant Entity is unable to meet the Financial Parameters by itself, it may rely on its **Holding Company** (as defined in the Companies Act, 2013 and amendments thereof) ("Companies Act") for fulfilment of the Financial Parameters, in which case reliance must be placed on the Holding Company towards fulfilment of **ALL** the Financial Parameters.

(c) In case the Applicant Entity is unable to meet one or more of the Technical Parameters by itself, it may rely on a Group Company(ies) for fulfilment of the Technical Parameters. A Group Company in relation to the Applicant Entity may be:-

(i) A company of which the Applicant Entity it is an Associate Company. Such company should have ownership, directly or indirectly, of at least 26% of the voting shares of the Applicant Entity.

(ii) A company which is an Associate Company of the Applicant Entity. The Applicant Entity should have ownership directly or indirectly, of at least **26%** of the voting shares of such Associate Company.

(iii) A Company with whom the Applicant Entity is commonly owned, directly or indirectly, for at least **26%** of the voting shares by another company. For example: An Applicant Company A is an Associate Company of Company B, in which B holds at least 26%. Further, C is also an Associate Company of B, in which B holds at least 26%. In this case the Applicant Company may use the credentials of C as well.

(iv) The Holding Company and Subsidiary Companies (as defined under the Companies Act) of the Applicant Entity.

(d) The Applicant entity may be a single entity or a group of entities (the "Consortium"), coming together to implement the project. In such case:-

(i) The credentials of only those members or their related entities may be counted, who have at least **26%** equity stake in the Consortium.

(ii) Each Consortium should have a designated Lead Member.

(iii) For Technical Parameters, **any of the Consortium members or their Group Companies** may meet the criteria.

(iv) For Financial Parameters; the Turnover and Net Worth of the Consortium Member shall be reckoned **proportionate to Consortium Member's equity stake** in the Consortium, and each Consortium member should meet the other criteria pertaining to Insolvency and Credit Rating. In case the Consortium Member relies on its Holding Company for any one of the above-mentioned Financial Parameters, then reliance must be placed on the Holding Company for meeting **all the financial Parameters**.

(e) Vendors should provide all necessary self-authenticated documentation in support of their achievement of criteria. Such documentation should inter-alia include:-

(i) Details of projects/ supply orders successfully executed in the last two years.

(ii) Annual reports for three years of applicant entity, parent and associate companies, consortium and JV partners.

(iii) Details of shareholders, promoters, associated, allied and JV companies.

(iv) Details of vigilance action, viz. ongoing investigation and suspension/ debarment/ blacklisting actions against the applicant entity or any of its allied entities, parent company or consortium and JV partners, if any by any Department/agency of Central Government.

(v) A certificate from CA/CS indicating the financial parameters for the last three years as per Paragraph 2(c).

(**Note**: If a vendor is already a supplier to MoD and/ or has already provided the above documents in such cases, it should be necessary for the vendor to resubmit only such documentations as is necessary to update the above).

(f) Any vendor furnishing false information will be liable for action as per existing guidelines.

(g) Based on these generic parameters, more specific criteria should be evolved by the SHQ with regard to Technical and Financial parameters {Paras 2(b) and 2(c) above} in each procurement case depending upon requirements peculiar to each case keeping in view the overall need to ensure wider vendor participation. The specific criteria evolved by the SHQ for each case, as per these guidelines, may be got approved by the competent authority before including the same in the RFPs.

4. The criteria for vendor selection shall be clearly stipulated in RFPs so as to maintain transparency. Care shall be taken to ensure that the stipulated criteria are not open to subjectivity and arbitrary interpretation.