REQUEST FOR INFORMATION (RFI)

FOR PROCUREMENT OF 04 X 1000 TON SELF PROPELLED FUEL BARGE

1. The Indian Navy under Ministry of Defence, Government of India, is planning to procure **Four (04) 1000 Ton Self Propelled Fuel Barge** under Buy (Indian-IDDM) from registered Indian Shipyards. With a view to identify probable shipyards who can undertake the construction of 04 x 1000 Ton Self Propelled Fuel Barge, the Shipyards are requested to forward information as sought in this RFI. The vessels are required to be delivered to **Mumbai (1st Barge)**, **Karwar, (2nd Barge)**, **Porbandar (3rd Barge)** and **Port for 4th Barge will be intimated subsequently.** The aim of seeking this RFI is also to finalise the specifications for the Fuel Barges 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 Fuel Barges. Few important technical parameters of the proposed Fuel 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 04 x 1000 Ton Self Propelled Fuel 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 04x 1000 Ton Self Propelled Fuel Barges.

PART- I

4. **Intended Use of Tugs (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 04 x 1000 Self Propelled Fuel Barges. Further following details are to be submitted: -

(a) Feasibility to build 1000 Ton Self Propelled Fuel Barges 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 Production Monitoring Technology to be indicated and clearly highlighted in the response. The details of design ToT, Construction ToT, and maintenance ToT, if any, with exact Scope of ToT be forwarded along with indicative costing.

(d) Budgetary quote of the 1000 Ton Self Propelled Fuel Barges with detailed break up of cost is to be submitted. This should include **Basic Cost of 1000 Ton Self Propelled Fuel Barges, Project Monitoring System (PMS), Handling of B&D spares, OBS, Special Maintenance Tools/ STTE, Training and Training Aggregate (training requirement and training schedule), Freight/ Transit Insurance Cost.** 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. Cost estimate is to be inclusive of taxes and tax amount to be reflected in the BQ provided.

(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 for delivery of the Vessels to ***IN*** at **Mumbai (1st Barge)**, **Karwar (2nd Barge)**, **Porbandar (3rd Barge)** and **Port for 4th Barge will be intimated subsequently** after conclusion of contract including the build strategy.

(h) 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.

(j) 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.

(j) 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.

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

(l) 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. Protocols/ security features to maintain cyber security of the barge be indicated. Further,

confirmation for acceptability and implementation of provisions wrt cyber security/ malicious codes as per DAP 20 may be indicated. In this regards, relevant DO letter from national security council/ secretrait number

(n) 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.

(p) Shipyard has to indicate inputs/ details wrt obsolescence management and upgradation of the component/ parts of equipment of the 04 X 1000 Ton Self Propelled Fuel Barges which may become obsolete during the life cycle of the barges, as per provisions of DAP 20 and amendments thereof.

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

(r) 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.

(s) 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.

(t) **Build Period**. Since these 1000 Ton Self Propelled Fuel Barges are envisaged to be built entirely as per Classification Society rules specifications, first Fuel Barge is expected to be built and delivered within **18 months** of the effective date of Contract, with delivery of subsequent Fuel Barges at an interval of **three months each**.

(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) Utilisation of Indigenous Military material and software and plan for material sourcing and cost implications vis-à-vis foreign sourcing materials i.a.w Para 11 and 13 of Chapter-II of DAP-20.

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

(vi) 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 should 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 (Rs Crs)		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 Bank Guarantee (PWBG) of an amount at the rate (5% of Contract Value, inclusive of taxes

and duties) promulgated by MoD at the time of tender submission will be required to be submitted after signing of contract. Shipyard should confirm acceptability of the same.

(h) **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 Fuel 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 Fuel 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 08 weeks **(05/01/24)**. 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**:-

Commander (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 04 x 1000 Ton Self Propelled Fuel 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 Defence 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 04 x 1000 Ton Self Propelled Fuel 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 04 x 1000 TON SELF PROPELLED FUEL BARGE

SECTION A – GENERAL

1.	**Aim**	RFI for procurement of four (04)1000 Ton Self-Propelled Fuel Barge capable of replenishing ships and submarines in harbour and at anchorage with LSHFHSD and AVCAT. Specific requirement of ***IN*** to be applied during design/ construction of the barges in addition to the rule requirements are appended in this section.
2.	**Functions**	(a) Replenishing ships and submarines in harbour and at anchorage with LSHFHSD and AVCAT. (b) Receive LSHFHSD and AVCAT from ships and submarines.
3.	**General** **Remarks**	(a) The barge is to be built as per IHQ MoD (N) approved Classification Society Rules (i.e. ABS/ BV/ DNV-GL/ IRS/ LR /RINA/ Class-NK). The notation for the barge and QAP for shipbuilding, including trials, should be finalised in consultation with Class and IHQ MoD (N). Classification Society is to certify that the Class notation proposed by the yard covers all the requirements of Build Specs to maximum extant. (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'. **Proposed class notations to be indicated in RFI response.** (c) Operation area of the Barge to be within coastal waters (i.e. 20 nm) from coast. (d) The barge should be able to operate up to 20 nm from coast line. The barge should be able to sustain itself at sea for a minimum of seven days while transiting from one port to another. (e) The barge should be capable of supplying light stores i.e, fresh and dry provision to ships upto 500 kg (capable of being lifted manually), when required. (f) The barge should comply with all the latest requirements of MARPOL/ MEPC and SOLAS regulations. (g) Following additional green ship design aspects are to be adhered to:- (i) Energy Efficiency Design Index (EEDI) Certificate.

		(ii) Hull form (at least five distinct variants) and trim (at least six variants with trim angle interval of 0.5° each) optimisation using Numerical/ CFD study in case the vessel is of new design or optimisation study reports are not held by the Shipyard. The procedure of optimisation study is to be *iaw* International Towing Tank Conference (ITTC) recommended procedures and guidelines and is to be reviewed by Classification Society. Hull form and design trim (design loading condition) of the barge shall be decided based on this study. (h) OCRC will be followed as per NO 28/13, i.e. Ops cycle of 24 months followed by Short Refit (SR) and Normal Refit (NR) alternatively. However, **Inter-docking interval for 05 years** to be catered in design/ material specifications used in the barge.
4.	**Speed**	(a) Maximum speed of 12 Kn upto 85% MCR. (b) Sustained : 10 Kn
5.	**Endurance**	800 Nm
6.	**Sea State**	Should be able to operate up to Sea State 4 and survive upto sea State 6.
7.	**Crew**	Total number of crew for the barge is **11**, including one Master and one Engineer.
8.	**Dimensions**	The principle dimensions of the barge should be as follows:- (a) Length - As per design (b) Beam (extreme) - Not less than 15 m (c) Draught (Deep) - Not more than 4 m
9.	**Environmental Conditions**	(a) Ambient environment parameters, as indicated be retained as follows for design of the barge. All equipment/ system of the barge should be able to function to full potential within the range of environmental condition (i) Ambient air temperature – upto 45^{o}C (ii) Average Machinery Temperature – upto 55^{o}C (iii) Sea Water Temperature – up to 40^{o}C (iv) Relative Humidity: Condensation at 35^{o}C – 95% condensation (b) The Marinised Package AC is to be designed to perform at rated conditions under the environmental conditions specified at (a) above. (c) All machinery, its sub-assemblies and control systems should be able to perform continuous operation with machinery compartment conditions.

		(d) As the barges are required to operate in marine environment, therefore compliance to environmental standards (MARPOL) for weather, corrosion resistance etc be indicated.
10.	**Capacities**	(a) Fuel Oil (cargo)-1000 Ton (including 800 Ton LSHFHSD and 200 Ton AVCAT) (b) Fresh Water (cargo) - 50 Ton (c) Fuel Oil (propulsion) - As per endurance+25% reserve (d) Domestic Fresh Water - 4.5 to 5.5 Ton (e) Lub Oil - As per endurance +25% reserve

SECTION B – NAVIGATION

11	**Bridge**	Bridge should have large inclining windows for all around visibility to assist manoeuvring alongside. Clear View Screens (CVC) and Window wipers should be provided as per Class requirement.
12	**Magnetic Compass**	(a) One Class approved magnetic compass is to be provided on the bridge. (b) In addition, one Boat Compass as per Class Rules is to be provided.
13	**Navigational Equipment**	Complete fittings of Navigational equipment as per requirement of IMO/SOLAS/COLREGS and Class Rules are to be provided, which should include (not limited to the following):- (a) GPS (b) Gyro/ Gyro Repeater (c) Ships siren (d) AIS (e) Log (f) GMDSS (g) Nav Radar (h) Binoculars – 02 nos (j) Flood Lights on bridge top
14	**Echo Sounder**	One Class approved Echo Sounder with interface printer to be provided.
15	**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.
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 - (01) Bridge Top and (01) on mast (f) 5” Hand signaling Lantern One with stowage box (g) Portable loud hailers (h) Call up bells be provided between Galley and Wheel House, Master and Engineers Cabins. (j) Sound power telephone-As Req. (j) Class approved Internal Communication System- As required

SECTION D – HULL

18.	**Build** **Specification**	(a) The barge should be built to IHQ MoD (N) approved classification Society Standards (i.e. ABS/ BV/ DNV-GL/ IRS/ LR/ RINA/ Class-NK). (b) 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. (c) All equipment should be procured under inspection/ certification by Classification Society rules to meet the relevant specifications.
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.

<table>
<tr>
<td>22</td>
<td>Paint Scheme</td>
<td>(a) Class approved marine grade paint schemes are to be applied on the vessel with following minimum performance guarantee periods from paint OEM: -
<table>
<tr><th>Area/ Scheme</th><th>Performance Guarantee (Yrs)</th></tr>
<tr><td>External Underwater Area (upto Anti-corrosive)</td><td>10</td></tr>
<tr><td>External Underwater Area (Anti-fouling)</td><td>05</td></tr>
<tr><td>Machinery Compartments, Bilges, Ballast Tanks and Void Spaces (Anti-corrosive)</td><td>08</td></tr>
<tr><td>Fresh Water, AVCAT, Water compensated DO, FFO, DO, Lub Oil, Hydraulic Oil, Oil Sullage Tanks (Anti-corrosive)</td><td>05</td></tr>
<tr><td>Above Water Exterior and Weather Decks (upto Anti-corrosive)</td><td>05</td></tr>
<tr><td>Above Water Exterior and Weather Decks (Top Coat)</td><td>03</td></tr>
</table>
(b) Colour schemes for various external above water areas are to be as follows:-
(i) Hull - RAL 9011 (black)
(ii) Superstructure - IS 5/ 358 (Buff colour)
(iii) Funnel- RAL9011(black) And/or IS 5/358 (Buff colour)
(iv) Mast - IS 5/ 358 (Buff colour)

(c) Surface preparation, paint application, curing time etc. are to be ensure to the satisfaction of paint OEM and Classification Society rules.</td>
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<tr>
<td>23</td>
<td>Deck covering</td>
<td>Suitable Class approved Epoxy Deck covering is to be applied in the relevant internal compartments (wet spaces, main alleyways, crew compartments and bridge).</td>
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<tr>
<td>24</td>
<td>Mast</td>
<td>(a) A motorized foldable fixed mast to carry navigational lights, antenna and flags is to be provided.
(b) The height of the barge (upto top most point, with mast folded condition) should be maximum 8.5 m from waterline in light loading condition.</td>
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SECTION E – ENGINEERING, FIRE FIGHTING AND DAMAGE CONTROL

25	**Main and Auxiliary Machinery**	Main propulsion and auxiliary machinery is to be as per Classification Society rules. Engine controls, using modern, indigenous, COTS component, are to be provided in the Bridge and Engine Room. The engines should comply with IMO/ MARPOL requirements. Salient aspects of Main and Auxiliary machinery should be:- (a) Propulsion package and auxiliary machinery having indigenous product support are to be provided. (b) Twin shaft propulsion system with one diesel engine driving each shaft, reverse reduction gear box and fixed pitch propeller per shaft, with shaft locking arrangement is to be provided. (c) Auxiliary machinery is to be provided as required, to meet Class requirements. (d) Bridge and Engine Room should have Engine controls as per Class requirements. (e) Main and auxiliary machinery are to be mounted on anti-vibration mounts. (f) **Gear Box**. Reduction gear box of suitable reduction ratio are to be provided as per Classification Society rules. (g) **Steering Gear**. Steering gear should be Electro Hydraulic as per Classification Society norms. (h) **Oily Water Separator**. Oily water separator as per Class specifications is to be provided in AVCAT and LSHFHSD fuel systems to conform to latest IMO/MEPC regulations in force. (j) **Strainers/Filters**. Portable strainers with 200 micron mesh size are to be provided. (k) **Flow Meters**. The flow meters should be suitably installed on containing pipe length to cater for laminar/turbulent flow conditions. (l) **Blow Through System**. Blow Through System is to be provided to facilitate blow through after fuelling of AVCAT and LSHFHSD. (m) **Marinised Package AC Plant**. (i) Class certified Marinised Packaged AC Plant to be provided for all Living Spaces, Dining Hall, Office Space, Bridge and MCR to achieve temperature of 24 deg C.

(ii) AC plant to be provided local control panel supplied by the OEM catering for control and monitoring under all regimes of operation.

(iii) Remote monitoring of the AC plant is to be provided through suitable link.

(n) Following auxiliary machinery/equipment of adequate capacity are to be provided:-

Ser	Equipment	Qty
(i)	Diesel Generator of adequate capacity	- 02
(ii)	Emergency Generator set of adequate capacity to take the load	- 01
(iii)	Air Compressor (MD)	- 02
	Air Compressor (MD)	- As per Class
(iv)	Bilge/Ballast Pump	- 02
(v)	Dirty Oil Pump	- 02
(vi)	Fresh Water system comprising of following should be provided:-	
	(aa) Fresh water pumps	- 02
	(ab) Hydrophore	- 01 (1000 ltrs)

(ac) The barge is to be provided with fresh water tanks and domestic fresh water system as per MMD Standards with a hydrophore tank of at least 1000 ltr capacity.

(ad) Fresh water from Cargo Fresh Water Tank should be able to be used for domestic purpose also.

(ac) Automatic electric pumping system with additional annual pump of adequate capacity is to be provided for replenishment of hydrophore tank from cargo FW tanks.

(vii)	Fuel oil pump	- 02
(viii)	Centrifuge:-	
	(aa) Fresh Centrifuge	- 01
	(ab) Lub Oil Centrifuge	- 01

		(ix) General Service Pump/Fire Pump - 02 (x) Each STP is to be installed in a dedicated Gas Tight compartment fitted with 02 H_2S sensors. Audio-visual alarm shall be required. (xi) Cargo Pumps:- (aa) LSHFHSD with variable Frequency drive to vary the fuel pumping rate from 0-300TPH - 03 (02 Main 150 TPH + 01 Standby 150 TPH) (ab) AVCAT - 01 (50 TPH) (xii) Semi rotary Hand Pump of adequate capacity - 02 (xiii) Lub Oil Pump of adequate capacity - 02 (xiv) Stripping Pump of adequate capacity - 01 (xv) Tank Content Gauges/Level indicators with Audio visual alarm for 95% filling up of tanks meeting Classification Society requirements. – 01 (p) Work bench with bench vice, fixed power grinder and generic tools should be provided. (q) Provision for recirculation of AVCAT from tank to tank with adequate redundancy along with pump, associated filters, separators and absorbers should be provided. (r) All materials for pipes/ valves/ pipe fittings of various systems are to be as per Class specifications
26	**Portable pumps**	Portable pumps are to be provided, as follows:- (a) 01 x 37 TPH DD Emergency Fire Pump. (b) 02 x 20 TPH MD Submersible Pumps. (c) 01 x 40 TPH MD Submersible Pump. (d) Portable starters are to be provided with submersible pumps.
27	**BASCCA (EE)**	BASSCA(EE)/ ESLA sets be provided to cater for 100% crew. Disposition to be as per Class rules to meet escape requirements of crew from various compartments.

28	**Sewage Treatment Plant**	(a) One MARPOL approved electro catalytic/ biological STP of adequate capacity installed in a dedicated Gas Tight compartment fitted with two (02) H_2S sensors and audio visual alarm at MCR and bridge to be provided. (b) STP compartment should have dedicated ventilation arrangement to enable required number of air changes as per Class Rules.
29	**Fire Fighting and Damage Control**	The following fire-fighting 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) A dedicated fixed foam based fire-fighting system is to be provided on top of fuel tanks with fixed foam tank of adequate capacity for fighting fuel fire. (c) Automatic Fire Detection and alarm system should be provided in all compartments as per Classification Society norms along with a centralised monitoring panel provided in the bridge. (d) The machinery compartments and fuel tank areas should be provided with the following:- (i) Suitable fire fighting arrangement for machinery fire. (ii) Foam Inlet Tubes for fighting Bilge Fire. (iii) Ladder sprinkling and cooling system. (e) Flood warning system should be provided in all compartments located below waterline other than tanks, along with a centralised monitoring panel in the bridge. (f) Adequate no of BASCCA (Fire Fighting) sets as per Classification Society rules (minimum 04 nos) to be provided. (g) Escape hatches in machinery compartments and mess decks with escape route marking should be provided. (h) Adequate no of Bristol Fire Fighting suits as per Classification Society rules to be provided. (j) Separate Fire Fighting System for galley meeting Classification Society requirement should be provided. Additionally, Portable K/ F - Class Galley Fire extinguishers should be provided. (k) A charging panel should be provided from the ship's HP air system capable of charging two BASCCA sets simultaneously upto 300 bar. (l) Suitable BA compressor (300 bar capacity, Qty: 01 per barge), certified by Class, be provided for charging of BASCCA and ELSA sets as indicated in the SRs. Existing ***IN*** SOTRs also may be used for

		guidance by the shipyard. One (01) no Metallic Blast Bay Tank (MBBT) per barge to be provided for crew safety while BA charging. (m) Fixed dewatering arrangement should be provided as per Classification Society rules. (n) Fixed bilge eductors should be provided in all underwater compartments. (p) Fixed shoring arrangement should be provided in hatches of all underwater compartments that do not have direct access to weather deck. (q) Surveillance and monitoring system, such as CCTV should be provided to monitor all unmanned compartments and hazardous areas.

SECTION F – ELECTRICAL

30	**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. (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 200watts are to be provided at suitable positions, duly complying with Class Specifications. (iv) Emergency lights fittings of 24 V complying with Class Specifications are to be supplied in each compartment. (v) Adequate number of hand held lamps with suitable length of flexible cable complying with 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. The Shore Supply Connection Box (SSCB) should be connected by permanent cables to the switch-board and should have suitable terminals for connecting the flexible cables. Shore supply cable of 100 m length with stowage arrangement near the Shore Supply Connection Box (SSCB) is to be provided by the Shipyard. (f) **Batteries**. Adequate number of maintenance free batteries of contemporary technology, with suitable charging arrangement conforming to Classification Society rules are to be provided. (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 etc which are external to the equipment will be EBXL cables as per Class Society specification. LFH cables are to be used for internal wiring. (k) **Transformers and Rectifiers**. Transformers and rectifiers, confirming to Class Specifications. (l) **Electrical Equipment/ Machinery and Fittings**. All electrical equipment/ machinery and fittings are to be selected from the standard range and sourced from Class approved list of **reputed** vendors. Electrical equipment should be able to perform to full potential under the environmental conditions to which barge is expected to be exposed. (l) **Window Wipers**. Class approved Window wipers and CVS are to be provisioned. (m) **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.

		(n) **HV Mats.** Class approved High voltage insulated synthetic mats are to be used in Switchboards, Convertor Rooms Equipment Rooms, Battery Compartments. (p) **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.
31	**Controls**	Basic machinery control in the bridge is to be provided iaw class requirement.
32	**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.

SECTION G – ACCOMMODATION AND HABITABILITY

33	**Accommodation**	Following accommodation and associated facilities are to be provided meeting IMO/ MLC and relevant ISO/Class standards for indoor environment, ambient noise, vibration and illumination :- (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. One gets urinal is to be provided in addition in crew wash spaces.
34	**Galley**	(a) A common galley is to be provided for the 11 crew for the barge, including one Master and one Engineer. (b) One pantry with serving bay to be provided. A dining hall with seating capacity of 10 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 Its (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 m 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.
35	**Medical Facilities**	One first aid boxes one each in the crew mess, bridge, engine Room and Masters' cabin to be provided.
36	**Recreational facilities**	Three smart colour LED TVs (one of the Master / Engineer and the other for the crew) and SRE to be provided.

SECTION H - SEAMANSHIP, LIFE SAVING AND SAFETY EQUIPMENT

37	**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.
38	**Life Saving**	(a) One Gemini (with OBM) of 10 men seating capacity with 25 HP OBM, certified by Class, with suitable lowering and hoisting arrangements, viz, Electric operated Single Arm Davit of SWL 500 Kgs is to be provided.

		(b) Lifesaving Apparatus (LSA) plan is to be provided as per IMO/SOLAS and Class requirements. (i) Two in nos 20 men life rafts, one each on port and stbd side are to be provided. (ii) **General Service Life Jackets** (GSLJs) for 145% crew to be provided. (iii) Eight nos **Hazardous Duty Life Jackets (HDLJs**) to be provided. (iv) Life buoys and MOB markers are to be provided on upper deck/ as per design iaw IMO/ SOLAS requirements (v) One each lifebuoy with Man Overhead Light and Smoke Markers on both Bridge Wings (P&S) and on QD. (vi) Any other item mended, as per IMO/SOLAS/ Class rules, to be additionally provided.
39	**Safety Equipment**.	The following safety equipment for marine use are to be provided:- (a) Safety Helmets - 11 (b) Ear Plugs - 11 pairs (c) Safety Gloves - 25 pairs (d) Anti Splash Goggles - 4 (e) Dust Protectors - 11 (f) Safety Harness - 4

SECTION J – ARMAMENT

Not Applicable

SECTION K – MISCELLANEOUS

40	**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.
41	**Test Equipment**	Test equipment iaw Classification Society rules.
42	**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.
43	**AMC**	NA
44	**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.
45	**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.
46.	**Cargo Storage**	**Configuration** (a) LSHFHSD – 800 T (b) AVCAT - 200 T **Note:-** (i) LSHFHSD and aviation fuel should be separated by a cofferdam or air space.

		(ii) 50 T fresh water is to be provided in each configuration. (iii) 25 T storage space for provisions, spares and naval stores in each configuration. (iv) Bonding and earthing arrangements are to be provided for all tanks. (v) Any of the aforesaid configurations may be adopted as per the specific requirement of the vessel. (vi) In case of Configuration VI, one 50 T tank should be divided into two sections. (vii) Separate Flow meters for LSHFHSD and AVCAT to be provided with capacity of reading minimum 0.1 KL. Two flow meter to be provided as spare. (viii) In case of configuration VI, one 50 T tank should be divided into two section.
47.	**Rate of Filling**	(a) The fuel barge should be able to embark fuel at the rate of 300 T per hour. (b) It should be able to fuel other ships upto the rate of 300T per hour at 25 m delivery head. (c) Inboard end coupling for replacement of fuel should be compatible with 6'' and 4'' composite light-weight fuelling hoses.
48.	**Fuelling Hoses**	48 Mtr (6M x 8 Nos) fuel hoses of 6'' dia for LSHFHSD and 48 Mtr (6M x 8 Nos) of 4'' dia for AVCAT to be provided. Suitable covered stowage space with securing arrangement for the hoses is to be catered on upper deck.
49.	**List Of Mandatory Fist Out Fit Allowance Lists, Tools And Damage Control/ Fire Fighting Apparatus**	List placed at **Annex- I** to **Appendix A**

LIST OF MANDATORY FIST OUT FIT ALLOWANCE LISTS, TOOLS AND DAMAGE CONTROL/ FIRE FIGHTING APPARATUS

(OEM recommended spares, as applicable to be also provided)

I. HULL

Ser	Item Description	Deno	Qty
1	Aluminium Step ladder (6'3" MAX)	Nos.	1
2	Brush Scrubbing Large	Nos.	8
3	Brush Soft Tools Watch Maker	Nos.	10
4	Brushes Stiff Tools	Nos.	10
5	Paint Roller 7" (177-8 MM) C/W Artificial Fur and Handle	Nos.	12
6	Grease Gun Body Hand Operated	Nos.	2
7	Paint Spraying Equipment Complete	Nos.	2
8	5" Angle Grinder	Nos.	2
9	Cup Wire Brush 70 mm HSS	Nos.	4
10	7" Angle Grinder	Nos.	2
11	Cup Wire Brush 100 mm HSS	Nos.	4
12	Hammer Drill	Nos.	1
13	Portable Welding Machine Supply Volt-230 Frequency-50HZ	Nos.	1
14	Portable Exhaust Fan 220/230 Single Phase	Nos.	2
15	Aluminum Extending Ladder LG. 8 FT. Extendable 15 to 20	Nos.	2
16	Vacuum Cleaner (Domestic)	Nos.	2
17	Electric Grinder	Nos.	2
18	Electric Needle Scaler	Nos.	2
19	Electric Wire Brush	Nos.	2
20	Circular Wood Working Saw	Nos.	2
21	Protective Goggles	Nos.	5
22	Circular Wood Working Saw	Nos.	1
23	Cordless Drilling Machine	Nos.	1
24	ARC Sensitive Welding Helmet	Nos.	1
25	High Pressure Water Jet Machine	Nos.	2
26	Industrial Vacuum Cleaner	Nos.	2
27	Brazing Blow Pipe	Nos.	2
28	Cordless Screw Driver with Accessories	Nos.	1
29	Rivet Pop Gun	Nos.	2
30	Chipping Hammer Kit	Nos.	1
31	Hydraulic Nut Cracker	Nos.	2
32	Long Neck Straight Grinder	Nos.	1
33	Smart Kit	Nos.	1
34	Dust Protector Mask	Nos.	15
35	Ear Plugs	Nos.	15
36	Jigsaw	Nos.	1
37	Saw Abrasive disk, Masonry (Heavy Duty Cutter)	Nos.	1
38	Planer Plastic & Wood Working Universal	Nos.	1
39	Wrench Impact, Electric	Nos.	4
40	Power Bit Set (161 pieces)	Nos.	1
41	Cutter Bolt (12" x30")	Nos.	1
42	101 Piece Mechanic Tool Set	Nos.	1

Ser	Item Description	Deno	Qty
43	Agitator Paints Haker Type	Nos.	1
44	Shear , Metal Cutting Electric	Nos.	1
45	Demolition Hammer	Nos.	1
46	Heat Gun Electric	Nos.	1
47	Cordless Grinder	Nos.	1
48	2-Speed all Purpose Drill	Nos.	1
49	Cut - off saw	Nos.	1
50	Drilling Machine, Well Percussion	Nos.	1
51	Inclinometer, Electric	Nos.	1
52	Ultrasonic Leak Detector	Nos.	1
53	Mortise Lock Lever Left Handed	Nos.	5
54	Cuttogen Nozzle Type A-16, Dia 1/16" (435-1108-357)	Nos.	2
55	Regulator Acetylene	Nos.	2
56	Regulator Acetylene Oxygen Cutting Two Stage Bore 13	Nos.	1
57	Key for Gas Cylinder	Nos.	2
58	Welding Goggle (Goggles and Eye Protector With Tinted Glass)	Nos.	1
59	Mallet Carpenters	Nos.	1
60	Water Proof Emery Paper P180 (9"X11")	Nos.	20
61	Grease XG 276	Kg.	10
62	Guard Rail Wire (PVC Coated)	Mtr.	20
63	Punches Steel Starting and Driving 25 MM	Nos.	1
64	Punch Steel Starting 7/8"	Nos.	1
65	Punch Steel Starting Driving 20 MM	Nos.	1
66	Punch Steel Starting Driving 16 MM	Nos.	1
67	Punch Steel Starting Driving 12 MM	Nos.	1
68	Under Water Repair Compound	Kg.	2
69	Polyvinyl acetate Dispersion Based adhesive	Kg.	2
70	Araldite PY 880	Kg.	2
71	Araldite GY 250	Kg.	2
72	Grease LG 380	Kg.	2
73	Sheet Insertion Rubber 100CM Wide, 3MM, 2PLY	Kg.	2
74	Rubber Sheet Solid Cloth Insert Thick 1/32" Width 48"	Kg.	2
75	Sheet Rubber 200CM x 100CM x1MM	Kg.	2
76	Sheet Rubber 100 CM Width 200CM Length, 1.5MM Thickness	Kg.	2
77	Zinc Reference Electrode	Nos.	4
78	Chemical Splash Protective Goggle (INSI)	Nos.	2
79	Manometer	Nos.	1
80	Portable H2S Gas Detector	Nos.	2
81	Alarm, Gas Automatic (fixed)	Nos.	2

II. ENGINEERING

Ser	Description	Denom	Qty
1	Hoist chain, Steel Guard, hand operated swivel hook (Max working load 500 kg)	Nos	2
2	Bearing Puller and extractor set	Set	1
3	Wrench pipe chain	Nos	2
4	Grease Gun Metallic connection	Nos	2
5	32 mm Hose rubber complete with end connection 10 m long	Nos	2
6	General purpose dial Gauge	Nos	2
7	Scrapers Engineering 8"	Nos	2
8	Infra-red Temperature Indicator	Nos	1
9	Ear Muffs with communication system	Nos	6
10	Dial Gauges with stand (for alignment checks)	Nos	2
11	Portable Electric Drilling machine (2-15 mm) Bosch / Black and Decker	Nos	2
12	Allen Screws – various sizes	Set	2
13	Vernier Callipers	Nos	1
14	Thickness gauges / Feeler gauges-12 inch	Set	1
15	Thread pitch measuring devices	Set	1
16	Micrometer 0-25 mm	Nos	1
17	Electric (spark protected) Spanner	Set	2
18	Universal torque wrench	Set	2
19	Hydraulic jack	Nos	2
20	Ratchet spanner	Set	2
21	Portable Welding machine with one complete set of consumables	Nos	1
22	Snap On Tool Kit Set 9100 GMBO Metric Set A	Set	1
23	Clock deck 9" dial 8 day	Nos	3
24	Inside Calliper -12 inch	Nos	1
25	Outside Caliper – 12 inch	Nos	1
26	Steel ruler -12 inch	Nos	1
27	Steel Measuring Tape	Nos	1
28	Flat Nose pliers 6'	Nos	1
29	Round Nose Pliers	Nos	1
30	Flat Files with wooden Handles -12 inch (Smooth, 2nd Cut, Rough)	Set.	1
31	Files 12 inch (Round, Half Round, Square-Smooth and 2nd cut)	Set	1
32	Hacksaw Frame 12 inch	Nos	1
33	Hacksaw Blades	Nos	12
34	Lub Oil Test Kit Kittiwake India FG-KI-100-KW	Nos	1
35	Chisel with handle cross cut edge	Nos	1
36	Chisel Flat ½ inch and 1 inch	Nos	2 each
37	Hollow Punch ¼, ½, ¾ inck	Nos	1 each
38	Double Ended Spanners (6-41 mm)	Set	1
39	Socket Wrenches(4-41 mm)	Set	1

Ser	Description	Denom	Qty
40	Box Wrenches(6-41 mm)	Set	1
41	Portable Drill with drill bits upto ½ inch	Set	1
42	Oil Can ½ ltr Capacity MS Galvanised	Nos	1
43	Galvanised Buckets 10 litres	Nos	2
44	Wire Rope Sling 2.5 mtr length *3/4 inch	Nos	1
45	Oil Joints 1/8 ", 1/16", 1/32"	Sheet	2
46	Oil Packing 4 mm-25 mm	Sheet	1
47	Rubber sheet 1/16, 1/8. ¼, ½ inch	Sheet	2 each
48	Grinding Paste Coarse and Fine	Box	1 each
49	Wire brush with handle	Nos	4
50	Brasso	Tin	2
51	Painting Brushes 1", 2", 3", 4"	Nos	2 each
52	Steel Wedges 250 mm, 150 mm	Nos	2 each

III **ELECTRICAL**

Ser	D e s c r i p t i o n	Denomiation	Qty
1	Digital Multimeter upto 1000 V (Portable)	Nos	1
2	Insulation Tester	Nos	1
3	Neon Tester	Nos	1
4	Screw driver large 12"	Nos	1
5	Screw driver 3"	Nos	1
6	Screw driver 6"	Nos	1
7	Insulated screw driver	Nos	1
8	Spanner adjustable	Nos	1
9	Spanner set from ¼" to 1"	Nos	1SET
10	Insulated plier	Nos	1
11	Nose-plier small	Nos	1
12	Electric torch 9" x 2 ½" dia	Nos	1
13	Scissors	Nos	1
14	Rubber Gloves	Nos	2Pairs
15	Flexible cable TRS, 10 AMP	Reel	1 Reel
16	Knife trimming	Nos	1
17	Insulation tape	Roll	3
18	Grease x G-274	Kgs	1
19	Soldering Iron	Nos	1
20	Flux	Kgs	1/2
21	Emery paper No. 0, 1, 2, 3, 4	Nos	5 Each
22	Test lamp – LED type	Nos	1each
23	Polythene container for distilled water (10 liters)	Nos	1
24	Solder 13 SWG	Kgs	½ Kg
25	HV Insulated Synthetic Mats	Nos	5

LIST OF FIRE FIGHTING / DAMAGE CONTROL APPLIANCES

FIRE FIGHTING EUIPMENTS

Ser	Description	Part No	Specifications	Deno	Qty	Vendors
1	DIVIDING BREACHING	N4210-003053	IS : 905 (BRASS)	NO	1	OPEN TENDER ENQUIRY
2	COUPLING DOUBLE FEMALE	N4210-003054	IS : 901 (BRASS)	NO	2	OPEN TENDER ENQUIRY
3	COUPLING DOUBLE MALE	N4210-003055	IS : 901 (BRASS)	NO	2	OPEN TENDER ENQUIRY
4	EXTINGUISHER FIRE CO2, 2 KG (SQUEEZE GRIP TYPE)	N4210-P009445	EG/4707/03/NBCD/ CO2 2KG	NO	10	OPEN TENDER ENQUIRY
5	9 LITRE AFFF EXTINGUISHER	NSN4210-720466924	NB/0695/9LTR AFFF DT 22 FEB 17	NO	15	OPEN TENDER ENQUIRY
6	FOAM LIQUID AFFF 20 LTR PLASTIC CONTAINER	N4210-000800 / K7-4210-000802	IS : 4989 – 2006 (Rev 3/ JSS 4210-30: 2016 (REV 1)	NO	10	OPEN TENDER ENQUIRY
7	FIRE COAT (MEDIUM) FOR FIRE FIGHTER SUIT	N8415-002577	EG/4789/01/FFS/NBCD (Rev 1) as promulgated vide IHQ MoD(N)/DME letter EG/4742/01/NBCD dt 15 Apr 11	NO	2	OPEN TENDER ENQUIRY
8	FIRE COAT (SMALL) FOR FIRE FIGHTER SUIT	N8415-002576	EG/4789/01/FFS/NBCD (Rev 1) as promulgated vide IHQ MoD(N)/DME letter EG/4742/01/NBCD dt 15 Apr 11	NO	2	OPEN TENDER ENQUIRY
9	TROUSER (MEDIUM) FOR FIRE FIGHTER SUIT	N8415-002578	EG/4789/01/FFS/NBCD (Rev 1) as promulgated vide IHQ MoD(N)/DME letter	NO	2	OPEN TENDER ENQUIRY

			EG/4742/01/NBCD dt 15 Apr 11			
10	TROUSER (SMALL) FOR FIRE FIGHTER SUIT	N8415-002579	EG/4789/01/FFS/NBCD (Rev 1) as promulgated vide IHQ MoD(N)/DME letter EG/4742/01/NBCD dt 15 Apr 11	NO	2	OPEN TENDER ENQUIRY
11	RUBBER BOOTS FOR FIRE FIGHTER SUIT - (SIZE – 9)	N8430-001178	EG/4789/01/FFS/NBCD (Rev 1) as promulgated vide IHQ MoD(N)/DME letter EG/4742/01/NBCD dt 15 Apr 11	PR	2	OPEN TENDER ENQUIRY
12	RUBBER BOOTS FOR FIRE FIGHTER SUIT - (SIZE – 8)	N8430-001177	EG/4789/01/FFS/NBCD (Rev 1) as promulgated vide IHQ MoD(N)/DME letter EG/4742/01/NBCD dt 15 Apr 11	PR	2	OPEN TENDER ENQUIRY
13	GLOVES FOR FIRE FIGHTER	N8415-002580	EG/4789/01/FFS/NBCD (Rev 1) as promulgated vide IHQ MoD(N)/DME letter EG/4742/01/NBCD dt 15 Apr 11	PR	4	OPEN TENDER ENQUIRY
14	ANTIFLASH HOOD FOR FIRE FIGHTERS	N8415-002575	EG/4789/01/FFS/NBCD (Rev 1) as promulgated vide IHQ MoD(N)/DME letter EG/4742/01/NBCD dt 15 Apr 11	No	4	OPEN TENDER ENQUIRY
15	HELMET WITH HEAD LAMP FOR FF AND DC	N8415-002738	EG/4707/09/NBCD	No	4	OPEN TENDER BASIS
16	FB 5 (X) FOAM MAKING BRANCH PIPE WITH PICK UP ASSEMBLY	N4210-P009442	IS : 2097	No	2	OPEN TENDER BASIS
17	HOSE IMPERMABLE WITH INSTANTANEOUS	N4210-P009489	**HOSE** IS: 636:2018 (Rev 4) TYPE 3 **COUPLING** IS : 90 : 1993 REV 4	No	7	OPEN TENDER BASIS

	COUPLING 50MM DIA X 15 MTR		(MATERIAL LTB 2 O IS 318)			
18	HOSE IMPERMABLE WITH INSTANTANEOUS COUPLING. 70MM x 12 MTR	N4210-000684	**HOSE** IS: 636:2018 (Rev 4) TYPE 3 **COUPLING** IS : 90 : 1993 REV 4 (MATERIAL LTB 2 O IS 318)	No	8	OPEN TENDER BASIS
19	PORTABLE ENGINE DRIVEN 37 TPH FIRE PUMP	EM3010B-DC8Y-DE	EG/4797/NBCD/ED /HIGH CAPACITY – VERSION 1	No	1	M/S WPIL LTD. (M/S MODY INDUSTRIES (FC) PVT LTD) PLOT NO C41, ROAD NO. 34, WAGLE INDUSTRIAL ESTATE, THANE-400604 TEL: 022-25823850, 25811642-44
20	VARIABLE DELIVERY NOZZLE	NSN4210-720472079	NB/0695/VDN DT 17 MAY 16	No	2	OPEN TENDER BASIS

DAMAGE CONTROL EQUIPMENTS

Ser	Description	Part No	Specifications	Deno	Qty	Vendors
21	BAND MULTIPURPOSE FOR 20 MM – 50 MM DIA PIPES	N4320-001074	DQAN DRG. NO. 13795'a'TO137 97'a'	NO	2	OPEN TENDER ENQUIRY
22	BAND MULTIPURPOSE FOR 50 MM – 100 MM DIA PIPES	N4320-001075	DQAN DRG. NO. 13798'a'TO138 01'a'	NO	2	OPEN TENDER ENQUIRY

23	CEMENT RAPID HARDENING	N8040-000093	EG/4742/01/NBCD DT 28 MAR 13	KG	20	OPEN TENDER ENQUIRY
24	CIRCULAR PAD (SET OF THREE SIZES – L,M&S) AND STRONG BACK WITH 'J' BOLT	N5330-395671	DQAN DRG. NO. DQAN/14663 'a' AND DQAN/14698 (a)	SET	1	OPEN TENDER ENQUIRY
25	CIRCULAR STOPPER PLATE COMPLETE WITH FITTINGS	N4510-P009467	DQAN DRG. NO. DQAN/14674 (a)	NO	2	OPEN TENDER ENQUIRY
26	PLUG SQ TAPERED SOFT WOOD 100 MM X 38 MM X 25 MM	N5510-001249	NHQ/NCD/1305-05	NO	4	OPEN TENDER ENQUIRY
27	PLUG SQ TAPERED SOFT WOOD 150 MM X 50 MM X 38 MM	N5510-001246	NHQ/NCD/1305-07	NO	4	OPEN TENDER ENQUIRY
28	PLUG SQ TAPERED SOFT WOOD 150 MM X 75 MM X 50 MM	N5510-001250	NHQ/NCD/1305-10	NO	4	OPEN TENDER ENQUIRY
29	PLUG TAPERED SOFT WOOD 150 MM X 50 MM X 25 MM	N5510-001242	NHQ/NCD/1305-06	NO	4	OPEN TENDER ENQUIRY
30	PLUG TAPERED SOFT WOOD 200 MM X 100 MM X 75 MM	N5510-001243	NHQ/NCD/1305-03	NO	4	OPEN TENDER ENQUIRY
31	PLUG TAPERED SOFT WOOD 300 MM X 150 MM X 100 MM	N5510-001244	NHQ/NCD/1305-11	NO	4	OPEN TENDER ENQUIRY
32	TIMBER PLANKING T/G 75X225X3000 MM	N5510-001232	IS : 4424 & NHQ/NCD-1307-01	NO	1	OPEN TENDER BASIS
33	TIMBER SHORE SOFT WOOD HIM SEASON 100X100X3000 MM	N5510-001234	IS : 4424 & NHQ/NCD-1307-01	NO	1	OPEN TENDER BASIS
34	WEDGE SOFT WOOD 100X 25X25 MM THICK	N5110-000526	NHQ/NCD/1306-04	NO	2	OPEN TENDER BASIS
35	WEDGE SOFT WOOD 125X 50X25 MM THICK	N5110-000527	NHQ/NCD/1306-01	NO	2	OPEN TENDER BASIS
36	HARD WOOD WEDGE	N5510-001251	NHQ/DME/CNAL 244	NO	2	OPEN TENDER BASIS
37	WOODEN MALLET (MEDIUM)	N5120-424701	IS : 2922	NO	2	OPEN TENDER BASIS

38	PORTABLE SUBMERSIBLE PUMP MOTOR DRIVEN 20 TPH WITH ACCESSORIES INCLUDING STARTER	EM3010B – M120NM-380V, 415V, 440V	EG/4797/02/NBCD/ 20 TPH MD SUB	NO	2	M/S WPIL LTD, THANE PLOT NO C-41, ROAD NO 34, WAGLE INDUSTRIAL ESTATE, THANE-400604, MAHARASHTRA
39	PORTABLE SUBMERSIBLE PUMP MOTOR DRIVEN 40 TPH WITH ACCESSORIES INCLUDING STARTER	EM3010B-M504N(M)/EM3010B-M504N-M-40TPH-SUB-440V/415V/380-60/50HZ	NB/0695/CNAL/40 TPH SUB PUMP DT 09 SEP 2015	NO	1	M/S WPIL LTD, THANE PLOT NO C-41, ROAD NO 34, WAGLE INDUSTRIAL ESTATE, THANE-400604, MAHARASHTRA

GENERAL ITEMS

Ser	Description	Part No	Specifications	Deno	Qty	Vendors
40	300 BAR BASSCA SETS WITH CARBON COMPOSITE CYLINDER	NSN4240-720461346	NB/0695/CNAL/300 BAR BASSCA DT 12 AUG 16	NO	4	OPEN TENDER ENQUIRY
41	PORTABLE HP BREATHING AIR COMPRESSOR	N4310-003783	EG/4707/02/1/NBCD & AS AMENDMENT LETTER NO EG/4742/01/A/NBCD DT 11 JUN 13	NO	01	(A) M/S BAUER COMPRESSOR INDIA PVT LTD, PIMPRI CHINCHWAD INDUSTRIAL AREA, BHOSARI,

						PUNE 411026 (B) M/S ELGI SAUER COMPRESSORS LTD, III ELGI INDUCTRIAL COMPLEX SINGANALLUR COIMBATOR – 641005 (C) M/S GDBM (INDIA) PVT LTD, 35, MITTAL CHMABERS, NARIMAN POINT, MUMBAI – 400021 (D) M/S GOENKA ENGG & INDUSTRIAL PVT LTD, GOENKA HOUSE, 43-44, DDA COMMERCIAL COMPLEX, NEW DELHI - 110048
42	JUBILEE CLIP, 500 MM	N4730-079959	NHQ/DME/CNAL 405	NO	2	OPEN TENDER BASIS
43	JUBILEE CLIP, 800 MM	N4730-080135	NHQ/DME/CNAL 406	NO	2	OPEN TENDER BASIS
44	FIBRE GLASS CLOTH 0.5 MM THICKNESS 1M WIDTH	N0461-R012713	NES 801, PART 2, ISSUE 2	MTR	20	OPEN TENDER BASIS
45	EMERGENCY LIFE SUPPORT APPARATUS (ELSA)	N4240-P009409	DQAN/GS/QAP/01 & As Amendment 1 Letter No. 687449/DQAN/	NO	17	OPEN TENDER ENQUIRY

			GS dt 11 Sep 98			
46	FLOOD LIGHT BATTERY OPERATED	N6230-001003	EE/03/8926 1/13/2000	NO	3	OPEN TENDER ENQUIRY
47	HAND HACKSAW BLADE, A250X12.5X0.63X1.0 – IS : 2594 HS	N5110-007565	IS : 2594	NO	2	OPEN TENDER BASIS
48	OAKUM WHITE	N5330-006770	IND/TC/2211 (c)	KG	5	OPEN TENDER BASIS
49	CROSS CUT SAW, GRADE 3, LENGTH – 500 MM	N5110-007577	IS : 5098, GRADE – 3	NO	2	OPEN TENDER BASIS
50	ENGINEER'S SCREW DRIVER 1.6X10X200 MM PR	N5120-000054	IS:844 TABLE - 3	NO	2	OPEN TENDER BASIS
51	SPANNER ADJUSTABLE 200 MM	N5120-424737	IS : 6149 TYPE A, GRADE –1	NO	2	OPEN TENDER BASIS
52	SPANNER WHEEL 305 MM AF	N5120-002025	DPIN/882 (a)	NO	2	OPEN TENDER BASIS

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 to meet the objectives of the equipment/ better operational requirements 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 1000 Ton Self Propelled Fuel 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 1000 Ton Self Propelled Fuel Barges offered to meet the							

	specified requirements and build period from date of order	
11	Detailed specifications of commercially off the shelf (COTS) 1000 Ton Self Propelled Fuel 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 04 x 1000 TON SELF PROPELLED FUEL BARGES UNDER BUY (INDIAN-IDDM) CATEGORY

1. The guidelines prescribed for short-listing/ pre-qualification of Indian vendors in this instant case of 04 x 1000 Ton Self Propelled Fuel 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 Defence, 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 defence 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 defence 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.

ABBREVIATIONS

Sl.	Abbreviation	Full Form
1.	ACBS	Air Circuit Breakers
2.	ACCS	Advanced Integrated Composite Communications System
3.	ACOS	Auto Changeover Switches
4.	ACS	Auxiliary Control System
5.	AED	Automatic External Defibrillator
6.	AELS	Automatic Emergency Lantern
7.	AFDS	Automatic Fire Detection and Suppression
8.	AFFF	Aqueous Film Forming Foam System
9.	AIO	Action Information Organisation
10.	AIS	Automatic Identification System
11.	ALAN	Advanced Local Area Network
12.	ALS	Advanced Life Support
13.	AMDR-3D	Automatic Missile Detection Radar – 3 Dimensional
14.	APMS	Automatic Power Management System
15.	APT	Air Pressure Testing
16.	ASP	Aft Steering Post
17.	ASW	Anti-Submarine Warfare
18.	ATDS	Anti-Torpedo Defence System
19.	ATE	Automatic Test Equipment
20.	AVCAT	Aviation Category
21.	AVR	Automatic Voltage Regulator
22.	AVRE	Audio Video Reproduction Equipment
23.	AWOS	Automatic Weather Observation System
24.	B&D Spares	Base & Depot Spares
25.	BASCCA	Breathing Apparatus Self Contained Compress Air
26.	BDCS	Battle Damage Control System
27.	BIT	Built-In Test
28.	BITE	Built-In Test Equipment
29.	BR	Book of Reference
30.	BS	Build Specification / British Standards
31.	CAD	Computer Aided Design
32.	CALS	Computer Aided Logistics Support
33.	CAM	Computer Aided Manufacture
34.	CBRN	Chemical Biological Radiological & Nuclear
35.	CIWS	Close- In Weapon System
36.	CMS	Combat Management System
37.	CNAL	Comprehensive NBCD Allowance List

Sl.	Abbreviation	Full Form
38.	CIWS	Close- In Weapon System
39.	COMINT	Communication Intelligence
40.	COTS	Commercial of The Shelf
41.	CPL	Comprehensive Part Identification List
42.	CST	Contractor's Sea Trials
43.	CTD	Colour Tactical Displays
44.	DA	Diesel Alternators
45.	DBS	Distribution Boards
46.	DC	Damage Control
47.	DC&FF	Damage Control & Fire Fighting
48.	DCHQ	Damage Control Headquarters
49.	DCP	Dry Chemical Powder
50.	ECCM	Electronic Counter Counter Measure
51.	ECDIS	Electronic Chart Display & Information System
52.	ECM	Electronic Counter Measure
53.	ECP	Emergency Conning Position
54.	ELINT	Electronic Intelligence
55.	ELSA	Emergency Life Saving Apparatus
56.	EMC	Electro Magnetic Compatibility
57.	EMI	Electro Magnetic Interference
58.	EMIPT	Electromagnetic Compatibility and Interference Prediction Tool
59.	ENC	Electronic Navigation Chart
60.	EOFCS	Electro Optical Fire Control System
61.	EOIRST	Electro Optical Infra – Red Search and Track
62.	EOT	Engine Order Telegraph
63.	EPROM	Erasable Programme Read Only Memory
64.	ESD	Electro Static Discharge
65.	ESM	Electronic Support Measure
66.	ESS	Environmental Stress Screening
67.	FATS	Factory Acceptance Trials
68.	FCP	Fire Control Panel
69.	FCS	Fire Control System
70.	FCR	Fire Control Radar
71.	FDCS	Flight Deck Communication System
72.	FDO	Flight Deck Officer
73.	FLYCO	Flying Control Post
74.	FOV	Field of View
75.	FOST	Flag Officer Sea Training

Sl.	Abbreviation	Full Form
76.	FPP	Fixed Pitch Propellers
77.	FRP	Fiber Reinforcement Plastic
78.	GLS	Guideline Specification
79.	GMDSS	Global Maritime Distress and Safety Service
80.	GPS	Global Positioning System
81.	GSLJS	General Service Life Jackets
82.	HATS	Harbour Acceptance Trials
83.	HCOS	Hand Change Over Switches
84.	HDLJS	Hazardous Duty Life Jackets
85.	HF	High Frequency
86.	HMS	Hull Mounted Sonar
87.	HPU	Hydraulic Power Pack
88.	HSDM	High Speed Data Modem
89.	IAC	Integrated ASW Computer
90.	IBS	Integrated Bridge System
91.	ICAF	Integrated Compressed Air Foam System (for Cooling)
92.	ICCP	Impressed Current Cathodic Protection System
93.	ICM	Inter Connectivity Matrix
94.	IDD	Interface Definition Document
95.	IETM	Interactive Electronic Technical Manual
96.	IFF	Identification of Friend & Foe
97.	ILMS	Integrated Logistics Management System
98.	IMCS	Integrated Machinery Control System
99.	IMD	Indian Metrology Department
100.	IMO	International Maritime Organization
101.	INBR	Indian Navy Book of Reference
102.	INCAT	Indian Naval Catalogue
103.	INCRETE	Indian Navy Common Range Electrical Test Equipment
104.	IPMCS	Integrated Propulsion Machinery Control System
105.	IPMS	Integrated Platform Management System
106.	IRPCS	International Regulations for Preventing Collisions at Sea
107.	IRSS	Infra-Red Suppression Support Device
108.	IRL	Indigenous Rocket Launcher
109.	ITF	Installation Test Firing
110.	JSDH	Junior Sailor Dining Hall
111.	LAN	Local Area Network
112.	LFH	Limited Fire Hazard
113.	LFVDS	Low Frequency Variable Depth Sonar

Sl.	Abbreviation	Full Form
114.	LOA	Length Over All
115.	LSHSD	Low Sulphur High Speed Diesel
116.	LSO	Landing Safety Officer
117.	MARPOL	Marine Pollution (International Convention for the Prevention of Pollution from Ships
118.	MCR	Machinery Control Room
119.	MFCS	Multi-Function Consoles
120.	MFD	Multi-Function Displays
121.	MFW	Multi-Function Workstation
122.	MIL	Military Specification
123.	MIO	Maritime Interdiction Operations
124.	MMB	Mobile Maritime Broadcast
125.	MMI	Man Machine Interface
126.	MR GUN	Medium Range Gun
127.	MRLS	Manufacturer Recommended List of Spares
128.	MSO	Main Signal Office
129.	MTBF	Mean Time Between Failure
130.	MTTR	Mean Time to Repair
131.	NBCD	Nuclear Biological Chemical & Defence
132.	NBCDO	Nuclear Biological Chemical Defence Organisation
133.	NCD	Naval Construction Document
134.	NEC	Naval EMC Center
135.	NECP -500	Naval EMC Center Publication
136.	NES	Naval Engineering Standards
137.	NIST	National Institute of Standards & Technology
138.	NLCP	Navigational Light Control Panel
139.	NMER	Naval Magazine and Explosive Regulations
140.	NTP	Network Time Protocol
141.	NO	Navy Order
142.	NPOL	National Physical Oceanographic Laboratory
143.	NSQRS	Naval Staff Qualitative Requirements
144.	NVD	Night Vision Device
145.	NVG	Night Vision Goggle
146.	OBMS	Out Board Motor
147.	OBS	On Board Spares
148.	ODA	Offshore Defence Advisory
149.	OEM	Original Equipment Manufacturer
150.	P&S	Port & Starboard
151.	PIL	Part Identification List

Sl.	Abbreviation	Full Form
152.	PMS	Project Monitoring System
153.	POL	Petroleum Oil and Lubricants
154.	PSI	Propulsion System Integration
155.	RFP	Request for Proposal
156.	RHIBS	Rigid Hull Inflatable Boat
157.	RLG/FOG	Ring Laser Gyro / Fibre Optic Gyro
158.	RU STORE	Ready Use Store
159.	SADL	Stand Alone Data Link
160.	SAG	Surface Action Group
161.	SAM	Surface to Air Missile
162.	SAP	System Application Programming
163.	SAS	Ship Alongside Supply
164.	SATS	Sea Acceptance Trials
165.	SCB	Shore Power Circuit Breaker
166.	SDN	Ship Data Network
167.	SECEM	Secure Email
168.	SFD	Ship Fit Definition
169.	SHF	Super High Frequency
170.	SHHD	Ship House Holding Data
171.	SHIPEDF	Ship Electromagnetic Design Framework
172.	SHOL	Ship Helicopter Operating Limitations
173.	SIA	System Integration Authority
174.	SIRS	Ship Installed Radiac System
175.	SOLAS	Safety of Life at Sea
176.	SOTRS	Statement of Technical Requirement
177.	SRGM	Short Range Gun Mount
178.	SRSAM	Short Range Surface to Air Missile
179.	SSST	Small Ship Satellite Terminal
180.	SPM	Shock Pulse Monitoring System
181.	SSM	Surface to Surface Missile
182.	SSCBS	Shore Supply Connection Boxes
183.	STP	Sewage Treatment Plant
184.	STPS	Shielded Twisted Pair
185.	STW	Setting To Work
186.	SWL	Safe Working Load
187.	TACS	Total Atmospheric Control System
188.	TBO	Time Between Overhaul
189.	TDP	Technical Data Package

Sl.	Abbreviation	Full Form
190.	TEC	Technical Evaluation Committee
191.	TNC	Technical Negotiation Committee
192.	UHF	Ultra-High Frequency
193.	UHF SATCOM	Ultra-High Frequency Satellite Communication
194.	UPS	Uninterrupted Power Supply
195.	USG	Ultrasonography
196.	UTP	Unshielded Twisted Pair
197.	VA	Vulnerability Assessment
198.	VBSS	Visit Board Search Seizure
199.	VCBS	Vacuum Circuit Breaker
200.	VCS	Voice Control System
201.	VHF	Very High Frequency
202.	VLF	Very Low Frequency
203.	VPNS	Virtual Private Network
204.	WAN	Wide Area Network
205.	WESEE	Weapon & Electronics System Equipment Establishment
206.	WMO	World Meteorological Organization
207.	WOT	Warship Overseeing Team
208.	WPS	Warship Production Superintendent
209.	WSDS	Wind Speed & Direction System
210.	UWCS	Underwater Wire-Less Communication System
211.	ITTC	International Towing Tank Conference