REQUEST FOR INFORMATION (RFI) FOR PROCUREMENT/ LEASING OF MINE COUNTER MEASURE VESSELS (MCMV)

1. The Ministry of Defence, Government of India, intends to procure/ lease 3-4 Mine Counter Measure Vessels (MCMV) for the Indian Navy (*IN*) from a foreign government or a shipyard backed/ funded by a foreign government which would offer sovereign guarantee through Government to Government (G2G) Agreement.

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

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

(b) **Part II**. The second part of the RFI states the methodology of seeking responses of Countries/ Shipyards. Submission of incomplete response format will render response liable for rejection**.**

PART- I

3. **The Intended Use of MCMV (Operational Requirements)**. Mine Counter Measure Vessel (MCMV) is capable to locate, classify and neutralize all types of ground and moored mines, mine laying, channel conditioning, route survey, sanitization, Local Naval Defence, Search & Rescue, MIO (Maritime Interdiction Operations) and VBSS (Visit Board Search and Seize) Ops. The intended use of the craft is specified in the Staff Requirements placed at **Appendix A** of this document.

4. **Quantity Required and Anticipated Delivery Time Frames**. 3-4 MCMVs are proposed to be procured/ leased. The anticipated delivery time lines for the first vessel is maximum of 10 months followed by delivery of subsequent vessels every 04 months. Vendors may indicate their comments on timelines for delivery.

5. **Operational Demonstration**. The identification of platform and operational demonstration will be conducted in accordance with Ch IX of DAP 2020. Lessors may indicate suggested operational demonstration methodology for which evaluation can be done prior formulating Lease Operational Requirement (LOR) and obtaining AoN.

6. **Important Parameters**.

(a) This RFI is intended to obtain response from foreign government or a shipyard backed/ funded by a foreign government which would offer sovereign guarantee, for a Government to Government Agreement for the following options:-

(i) **Option** 1. Procurement of in service/ decommissioned MCMVs which can be retrofitted to Indian Navy requirements as detailed in **Appendix A**.

(ii) **Option 2**. Lease of in service/ decommissioned MCMVs, which can be retrofitted to Indian Navy requirements as detailed in **Appendix A**, for 10 yrs extendable to 15 yrs with an option of acquiring the asset at the end of lease period at a price agreed at the beginning of the lease.

(b) Details of the crafts are specified in brief in the Staff Requirements placed at **Appendix A** of this document. Detailed specifications will be finalized through G2G agreement after verifying the offers as submitted by respondents. Feasibility to deliver the craft with specifications indicated at **Appendix A** is to be submitted by the respondents. The completion of all the requisite modifications and compliance of *IN* requirements will be determined by *IN* nominated quality inspection agency prior accepting delivery in appropriate stages.

(c) Response should clearly bring out option(s) being offered (*as indicated at Para 6(a) above*).

(d) If procurement is the chosen option by MoD/ GoI, it will be an outright purchase under Buy (Global) category of DAP 20.

(e) If lease is the chosen option by MoD/ GoI, ships are intended to be taken on Finance lease (*Refer Para 7(b) of Ch IX of DAP 2020*) or an Operating lease (*Dry lease*) for 10 yrs extendable upto 15 yrs, with an option to acquire the vessel at the end of the lease period on price agreed upon at the beginning of the lease.

(f) For both options, respondent needs to deliver the vessel post requisite modifications conforming to SRs as brought out at **Appendix 'A'** and any deviations, if any, are to be brought out clearly.

(g) Minimum residual life of the vessels offered should be greater than 20 yrs. Lessor is to indicate the total residual life of the vessel as on date of offer along with relevant justification.

(h) The ships have to be delivered at Mumbai and Vishakapatnam or as decided during the conclusion of G2G agreement.

(j) Details and schedule of training that will be provided by the lessor to be indicated viz total duration, total manpower, financial implications and place of training.

(k) The lessor needs to indicate any specific conditions of re-delivery/return of the asset to the Lessor. Such conditions typically needs to specify physical condition of asset at the time of return, asset maintenance records, and special checks – if any.

(l) Lessors are required to state detailed scope , depth and range of Lease they are willing to provide viz details of the vessel, Insurance agency details, certification agencies etc

(m) The lessor has to clearly indicate any conditions precedent or insurance requirement applicable in the response for lease. Detailed response on insurance requirements along with cost implication from both an Indian and Foreign Vendor be included in the response. The insured amount is to be indicated specifically for each type of insurance which the lessor shall maintain throughout the contract period:-

(i) Comprehensive hull, war and allied perils insurance to cover for any physical damage to, or loss of, the vessels, and

(ii) Comprehensive liability insurance to cover for any liability (including third-party and direct claims). This also included loss, damage, injury and death to third party and its property.

(n) Rough Order of Magnitude Cost (ROM) of the crafts with detailed break up of cost is to be submitted for options (Procurement, Finance lease and Operating (Dry) lease) at Para 6(a). In case of lease, cost of procurement of the vessel at 5^{th} / 10^{th} / 15^{th} year also be indicated. The cost must include all liable taxes.

(p) Whether the respondent 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.

(q) Information on whether the offered craft/design is in use by any other Navy is also to be indicated.

(r) Lessor is required to provide details of manpower required to operate. The maintenance of the craft 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/ OEM of equipment at Shipyard/ OEM premises and (or) *IN* premises. Respondents to indicate acceptance for the same.

(s) Willingness of lessor to setup repair facility in India/ presence of authorised local service providers for undertaking post-sales support and maintenance of the equipment.

(t) Respondents 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. The lessor should indicate if there are and regulatory restrictions on the lessor's country and time taken to obtain said clearances,

(u) Payments terms will be finalized iaw DAP 20 during conclusion of G2G agreement.

(v) Willingness for Option Clause including the duration for which the Option Clause would be valid is to be indicated.

(w) The tentative delivery schedule for supply of the craft after conclusion of contract including the build strategy is to be indicated.

(x) If a shipyard is the respondent, then shipyard is to submit copy of Government license relevant for ship construction/ building activity.

(y) Respondent is to indicate the compliance and/ or conformity to various industrial and military standards related to operations and safety such as ISI, CE, MIL spec, etc., for various components/ sub-components of the craft.

(z) Respondent has to confirm its acceptance with the terms and conditions on obsolescence of the component/ parts of equipment of the craft which may become obsolete during the life cycle of the craft as per DAP 20 and amendments thereof. Any upgradation plan in case of obsolescence also be brought out.

(aa) Respondent to provide inputs on maintenance philosophy (ESP, AMC, PBL, etc.,) In this regard, Para 51 and Appendix F of Chapter II of DAP 20 is relevant. The details of B&D and OBS spares required and their supply mechanisms be provided.

7. Respondent should conform that following conditions are acceptable: -

(a) **Offset**. The vendor has to undertake offset contracts amounting to prescribed % of the value of commercial proposals (**Refer Appendix E to Chapter II of DAP 20**).

(b) **Integrity pact**. An integrity pact along with appropriate IPBG is a mandatory requirement in the instant case (**Refer Annexure I to Appendix O of schedule I, DAP 20**).

(c) **Performance-cum-Warranty Bond**. The percentage of contract value for which Performance-cum-Warranty Bond is required to be submitted after signing of contract will be decided during IGA conclusion iaw extant GOI provisions.

(d) **Indigenous Content (IC)**. The lease/ procurement of the craft will be as per DAP 2020 and accordingly shipyards have to submit the details regarding Indigenous Content(IC). The categorization for the procurement will be under Buy (Global) or Lease (Global) under Government to Government arrangement. The craft must meet the minimum IC parameters (**Refer Para 21 of Chapter 1 of DAP 20**).

(e) Classified information pertaining to the instant case shall not be divulged by lessor to any other agency

(f) The lease will be considered and made in accordance to DAP 2020 and will abide by governing laws of Republic of India.

PART- II

8. **Procedure for Response**

(a) Vendors must fill the form of response as given in **Annexure I to Appendix A to Chapter II of DAP 20**. Apart from filling details about Shipyard, details about the exact vessel/craft meeting generic technical specifications should also be carefully filled. Additional literature on the vessel/craft can also be attached with the form.

(b) The respondent 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 the Appendix A, has to be clearly indicated along with reasons.

(c) Compliance/ acceptance to each para above be clearly indicated and certified in the RFI response. **Appendix B** and **Appendix C** should also be carefully filled and attached with the form. Any other relevant additional literature or document on the craft can also be attached with the form.

(d) The filled form should be dispatched at under mentioned address:-

Cmde (Ship Production),
Directorate of Ship Production
9th Floor, Chanakya Bhawan,
Chanakyapuri, New Delhi- 110021
Tele: 011-26886427
Fax: 011-26886439
E-mail: dspp4.dsp@navy.gov.in

(e) Last date of acceptance of filled form is 07 Oct 21 (*08 weeks from uploading of RFI*).

(f) Respondents, if required, can communicate to the project officer of IHQ MoD(N)/ DSP with below mentioned contact details for seeking clarification/ information on the

documents {like Navy Order (NO), Naval Construction Document (NCD)} mentioned in this RFI.

Lt Cdr (SP)-MCMV
Tele: 011-26886432,
Fax: 011-26886439
E-mail: dspp4.dsp@navy.gov.in

9. This information is being issued with no financial commitment and the Ministry of Defence (MoD) reserves the right to change or vary any part thereof at any stage. The Government of India also reserves the right to withdraw the case should it be so necessary at any stage. The acquisition process would be carried out under the provisions of DAP 2020 available on www.mod.nic.in.

10. The Government of India invites to this request only from foreign government or a shipyard backed/ funded by a foreign government who is willing for a government to government agreement who qualify the criteria as enumerated below:-

(a) The vendor should be a shipyard who has built vessel(s) of similar specifications in the past or from a navy who is presently operating similar vessels.

(b) In case of a shipyard, financial status should meet the specifications as mentioned at **Appendix C to Chapter XII of DAP 20**.

(c) Shipyard who possess infrastructure and capacity (considering the existing and future work load) for undertaking the requisite modification of the vessels.

11. The end user of the crafts is the Indian Navy.

12. The applicant language of communication for all activities connected to this RFI and tasks thereof shall be in English.

13. All documents to be submitted should be in English language. Original documents, not available in English language should be translated in English and attested by Commercial attaché or equivalent rank official in Indian Embassy in respective country or appropriate legal authority in respective country authorised to certify the true copies & endorsed by Indian Embassy official.

14. MoD reserves the right to cancel this process of RFI at any time without any financial or otherwise liability and without assigning any reasons thereof.

Appendix A
(Refers to Para 3)

OPERATIONAL/TECHNICAL SPECIFICATIONS FOR MINE COUNTER MEASURE VESSEL (MCMV)

SECTION A – ROLES AND CAPABILITIES		
1.	Role	**Operational Roles**. The Primary, Secondary and Constabulary roles that these ships are envisaged to perform are as follows:- (a) **Primary Roles**. To locate, classify and neutralise all types of ground and moored mines. (b) **Secondary Roles**. (i) Mine Laying (ii) Channel conditioning/route survey/sanitisation. (iii) Local Naval Defence. (iv) Search and Rescue. (c) **Constabulary Role**. MIO and VBSS Ops.
2.	Capabilities	(a) Mine Hunting and Mine Neutralisation with a MCM Command and Control System as follows:- (i) Mine Hunting utilising equipment capable of mine detection and mine classification using Hull Mounted Sonar and Side Scan Sonars (SSS), Unmanned Underwater Vehicles (UUVs) such as Autonomous Underwater Vehicle (AUV)/Propelled Variable Depth Sonar (PVDS) and Mine Identification & Disposal Vehicles. (ii) Mine Neutralisation utilising Expendable Mine Identification and Disposal Vehicle. (iii) MCM Command and Control system to plan, execute and evaluate MCM and survey missions. (b) Adequate anti-surface warfare capability for LIMO.

		(c) Adequate anti-air capability for self defence. (d) High degree of automation to reduce manpower and improved habitability. (e) Automated weapon, sensor and machinery monitoring systems including CAAIO. (f) Suitable RIB for MIO/VBSS operations at sea. (g) NBCD and FF capability. (h) Enclosed Bridge with suitably located Ops Room. (j) Adequate NCO and communication capability. (k) Adequate redundancies in terms of equipment, viz. Emergency cabling, redundancy of networks, dispersal of switchboards, uninterrupted power supplies adequate margins of 'growth' to retrofit equipment and carryout Mid Life upgrade. (l) Incorporate very low acoustic, magnetic, electrical and pressure signatures. (m) Facilitate precise navigation and manoeuvring. (n) High shock resistance against underwater explosions. (p) Capable of embarking divers with diving stores in addition to the ship's complement. (q) Dynamic Positioning System (DPS) integrated with Integrated Platform Management System (IPMS) and MCM Command and Control System. (r) High internal, impact and damage stability. (s) Conformity of equipment fit to latest IMO/MARPOL/MEPC regulations in force, wherever applicable. (t) Latest ship design concepts with ergonomic design and crew comfort.

SECTION B – OPERATIONAL CHARACTERISTICS		
1.	Mission Duration	The ship should be capable of sustaining its mission for at least 10 days at economical speed.
2.	Op Cycle	The ship is to follow Ops-cum-Refit cycle of **≥** 18 months duration followed by a period of refit.
3.	Speed	(a) Economical – 12 – 14 Kts (b) MCM Operations – 0 to 6 Kts (c) For Manoeuvring whilst ROV operations – Upto 6 Kts
4.	Degaussing	The ship should have computerised tri-axial DG system catering for automatic compensation with ship's RLG. Automatic compensation for ship's heading and manual latitude correction upto 70 deg N/S latitude. The degaussing system should be capable of reducing both the permanent and induced magnetism.
SECTION C- WEAPONS, SENSORS NAV AND COMMUNICATION EQUIPMENT		
1.	Weapons	(a) Self defence and LIMO armament to include the following:- (i) One light weight 20/30 mm anti-surface NSG with EOFCS. (ii) Two 12.7 mm SRCGs for Force Protection Measures (**would be provided by *IN***). (iii) High power search lights with remote activation and control (**would be provided by *IN***). (iv) Acoustic Warning Device (**would be provided by *IN***). (b) Very Short Range Air Defence System (VSHORADS) provided by *IN*. (c) Smalls arms as per allowance list. (d) Demolition stores (**would be provided by *IN***).

2.	Sonars	The ship is to be fitted with a Hull Mounted Sonar and a SSS for mine detection and classification, integrated with the MCM Command and Control system.
3.	MCM Command & Control System	The ship is to be fitted with a MCM Command and Control System capable of Planning, Execution and Evaluating MCM missions. The system should be capable of being interfaced with ship borne sensors and all Mine Hunting equipment onboard. The MCM Command and Control system should have suitable data recording facility.
4.	Mine Identification and Disposal System	The ship is to be fitted with system capable of launching, recovering and guiding Expendable and/or Reusable Mine Identification & Disposal Remotely Operated Vehicles (ROVs), Autonomous Underwater Vehicles (AUVs)/Propelled Variable Depth Sonar (PVDS) for detection, classification and identification of mines and subsequent mine disposal. All equipment for mine detection classification and identification are to be integrated with the MCM Command and Control System. The control of the vehicles is to be through a ship borne control console and a portable control unit.
5.	Autonomous Underwater Vehicle (AUVs)	The MCMV should be able to operate Unmanned Underwater Vehicles like AUVs/PVDS integrated with the MCM Command and Control System. The AUVs/PVDS should be capable of operating in wide range of depth from shallow to deep waters and have extended endurance. The AUV should be able to operate in autonomous, semi-autonomous, supervised or in tethered mode.
6.	Stowage	The stowage in a sheltered 'hangarage' space for AUVs/PVDS, ROVs, Mine Identification and Disposal vehicle is to be provided.
7.	Data Compatibility	All the sensors in the MCM suite (Hull mounted sonar, AUVs/PVDS, ROVs and SSS) should have suitable data recording facility with features for filtering, stowage in portable device for transportation. The data recorded should be compatible with the requisite format for Mine Warfare Data Centre (MWDC) of the Indian Navy.
8.	Underwater Telephone	Underwater Telephone with a flush transducer is to be provided.

9.	XBT	Expendable Bathy Thermograph (XBT) for measurement of the sea water temperature at various depths.
10.	Ammunition	(a) Magazine space for adequate ammunition for the guns including small arms. (b) Magazine space for stowage of five VSHORADS. (c) Magazine for storing Expendable ROVs. (d) Magazine for demolition stores.
11.	Situational Awareness System with Data Link	(a) The ship is to be fitted with a suitable situational awareness system with data link for network centric operations and quick response for situations at sea. (b) The ship should also have a Ship Data Network (SDN), which should form the backbone for networking all weapons, sensors, Ship's house Hold Data (SHHD) and MCM equipment and integrating the Situational awareness system with data link to enable exchange of data between ship borne systems. Networks like IPMS, IBS and ACCS are to be interfaced to SDN via suitable gateways, if required. (c) **Versatile Control Console (VCS)**. The VCS for internal communication is to be analog and thus not interfaced with SDN. (d) **Administrative LAN (ALAN)**. The ship is to be fitted with an integrated ALAN system for networking all offices and accommodation spaces. The ALAN is to be independent of SDN.
12.	Navigation Systems	(a) All navigational aids should be available onboard the ship, viz. Integrated Bridge System (IBS), ECDIS, AIS, LRIT, DGPS, two I-band COTS radars with ARPA displays etc. The system fitted should comply with the latest IMO regulations. (b) Integrated Navigation System to collate all positional inputs and give the most accurate position. (c) Other navigational aids would include gyro, log, echo sounder, DGPS, GPS, wind speed and direction indicator, magnetic compass and GPS for boats.

		(d) Standard Naval IFF system (transponder only) should also be fitted. (e) Remote control of Main and auxiliary machinery is to be provided.
13.	CCTV	(a) The CCTV camera for external surveillance is to as follows:- (i) **<u>Forward Section</u>**. One Pan Tilt Zoom (PTZ) camera each on Port and Stbd side, at a suitable location near the Bridge Wings/ Bridge Top. (ii) **<u>Amidships Section</u>**. One Pan Tilt Zoom (PTZ) camera each on Port and Stbd side, in the midship section. (iii) **<u>Gangway Monitoring</u>**. Two fixed cameras each on port and stbd side, near the gangways. (iv) **<u>Aft Section</u>**. Two Pan Tilt Zoom (PTZ) cameras at a suitable location in the aft section of the ship for surveillance in rear section for monitoring minesweeping and mine hunting operations. (b) The CCTV requirement for internal compartments is as follows:- (i) Entrance to the magazines, armoury, galley, ship's canteen and main alleyways. (ii) Compartments used to store hazardous/ inflammable stores. (iii) Compartments fitted with safe for imprest.
14.	Communication Outfit and Data Link	(a) The ship should have an Advanced Composite Communication Suite (ACCS) integrating all external communication equipment in all modes (Voice, Video and IP based data) to the communication data-bus. The number of aerials should be limited by using the concept of 'common aerial working' or similar concept. The ACCS should be fully compatible with the data link equipment. The communication equipment is to be as follows:-

		(i) Sufficient V/UHF sets. (ii) Software Defined Radios (SDR) covering V/UHF, HF and Data communication. (iii) SATCOM (fixed & Portable) equipment on indigenous satellite as well as INMARSAT. (iv) VLF (for reception of VLF broadcast and plot transfer) equipment. (v) HF sets for long distance two-way communication i.e receive HF digital broadcast and transmit high speed digital messages and plots. (vi) Equipment which are part of IMO regulations. (vii) Cryptographic equipment. (viii) Speech secrecy and data security equipment. (ix) Portable (HF and V/UHF). (x) Visual Signaling equipment.
SECTION D - MACHINERY AND POWER GENERATION		
1.	Type of Propulsion	Existing Propulsion system with speed and noise requirements as mentioned in these requirements.
2.	Auxiliaries	Auxiliary systems like AC, refrigeration and ventilation, fire main, salvage, ballast and other relevant auxiliary systems as per class requirements and considered necessary for meeting operational requirements to be provided.
3.	IPMS	The Integrated Platform Management System (IPMS) shall be dual redundant Gigabit Ethernet Network, distributed architecture system covering the ship machinery and systems. The purpose of the integrated system shall be to provide control and monitoring of the propulsion machinery, power generation and distribution, auxiliary machinery and Damage control

		(NBCD) machinery and systems through corresponding sub-systems.
4.	Power Generation and Distribution	(a) An independent APMS system with switchboard should be provided to cater for 100% reserve power and redundancy vis-à-vis maximum electrical load envisaged at any operating regimes of the ship assuming an ideal loading of generators to 80% of the nominal rating. The APMS system is to be suitably interfaced with IPMS. (b) Generators should be suitable for unattended parallel operations. (c) The electrical system and machinery and associated equipment shall conform to naval standards over and above other classification rules.
5.	Emergency DA	Emergency DA to be provided to cater for emergency power supply for communication and navigation equipment.
6.	RO Plant	The ship should be fitted with RO plants and water storage capacity to enable sustained operations as per endurance and when employed in shallow waters (upto 20 m depth).
7.	Cold and Cool Room	Cold and Cool rooms to carry fresh victuals for at least 15 days and dry provision store to keep rations for at least 30 days should be provided.
8.	Material	All machinery, auxiliaries, equipment are to be made of non-ferrous material to the extent feasible.
9.	Vibration Calibration System	A suitable system to undertake online vibration monitoring of various critical equipment is to be provided. This system should be integrated with IPMS and should have features for data recording, analysis and remote monitoring ashore by a suitable shore based facility.
SECTION E- DESIGN CONSIDERATIONS		
1.	Displacement	As per existing design.
2.	Dimensions	As per existing design.
3.	Draught	As per existing design.

4.	Sea Keeping	(a) The ship should be capable of the following:- (i) Operational seaworthiness upto Sea State 3. (ii) Survivability upto Sea State 7. (iii) Transit on all headings upto Sea State 4 and most suitable heading in Sea State 5.
5.	Stability	The vessel should satisfy the stability requirements for both intact and damaged condition, including growth margins as per NES 109 – 2000 for Naval vessels in military role.
6.	Type of Hull Form	As per existing design.
7.	Habitability	Latest ship design concepts wrt ergonomics/functional aspects and crew comfort are to be adopted. Equipment is to be sited so as to cause minimum discomfort/ disturbance to crew in operational compartments and messes. Modular and ergonomically designed furniture should be fitted onboard using lightweight composite (fire-resistant) material. The bunks are to be provided for 110% of the ship's complement.
8.	Complement	As per existing specifications.
9.	Stealth Features	The ship should have minimal magnetic, acoustic, pressure and electrical signature as part of ship design and selection of equipment. The signatures would require to be commensurate with that for MCM operations.
10.	Boats	(a) One RIB (4.7 m) capable of being handled by non-ferrous crane. (b) One Gemini craft with wooden chocks for stowage. (c) One OBM tank for stowage/cleaning of OBMs. (d) RIB to be re-configurable for FPM role with provision for fitting LMG/MMG.
11.	Davits/ Lifting gear	At least two non-magnetic anti-shock cranes of suitable capacity for hoisting/lowering of Mine Identification and Detection System, ROVs, AUVs/PVDS and SSS are to be provided.
12.	Service Life	The ship should have a service life of at least 20 years.

13.	Towing	Capability and towing arrangement for towing similar class of ships. Towing arrangement forward and aft including emergency disengaging facility.
14.	Accommodation /Domestic arrangement	(a) One cabin for CO with attached toilet, shower and pantry. Suitable number of two bed cabins for other officers, multibunk cabins for senior and junior sailors. (b) Ward room for officers, dining halls along with recreational space for sailors, suitable galleys, laundry, adequate WCs and bathrooms.
15.	Medical	Two-bed sick bay along with other medical facilities.
16.	Diving and EOD Equipment	The ship is to be provided with Diving and Explosive Ordnance Disposal Equipment and a Diving hyperbaric chamber for supporting four divers upto 90m depth.
17.	NBCD	The ship should be designed to pass through an NBCD fallout area and should therefore be designed with a citadel and AFUs covering sections essential for optimum operational performance of the vessel. It should have the following in addition:- (a) Addressable fire, flood, smoke and gas (in selected compartments) detection and alarm systems. (b) Magazine automatic fire fighting systems with independent sensors. (c) Compartment flood, fire and smoke monitoring and alarm systems. (d) Fixed major firefighting systems (Watermist) in all machinery compartments along with standby firefighting system. (e) Fire fighting system integrated with the addressable fire detection system based on new age extinguishing agents for entire ship. (f) Independent DCHQ for controlling all NBC/ DC and FF system and their monitoring and indication.

		(g) Automatic galley firefighting system. (h) Ship Installed Radiac System (SIRS). (j) Battle Damage Control System (BDCS). (k) Pre-wetting system. (l) Adequate provisioning of DC and FF lockers throughout the ship for complete stowage of CNAL items. (m) Provision of fixed smoke extraction fans in each zones with multiple intake points and remotely operated from DCHQ. (n) Provisioning of emergency bulkhead connections. (p) Provision for fixed shores in all red risk zone hatches. (q) Outside the galley a lockable arrangement for switching ON/OFF all the galley equipment to be provided. (r) Remote indications of galley equipment in DCHQ to be provided. (s) Ship Installed Chemical Agent Detection System (SICADS).
18.	Watertight and Gas tight Integrity	(a) Water tight boundaries are to be provided as per Naval standards. All watertight boundaries should extend upto V line and all openings below the V line should be watertight. Other openings may be air/weather tight depending on design. (b) Air pressure test to be done in accordance with existing guidelines. (c) Citadels to be provided and tested as per Naval standards. Ventilation is to be iaw NES 102.

19.	Rules and Regulations	The international conventions and regulations, as listed below and as applicable, are to be applied as far as the operability of the ship as military vessel allows it:- (a) International Convention for Safety of Life at Sea (SOLAS). (b) 1972 International Convention for Prevention of Collision at Sea. (c) International Convention for Prevention of Pollution from Ships (MARPOL) along with IMO Regulations MEPC 159/55 for sewage, galley waste, garbage disposal etc. (d) ICOS (IMO- International Code of Signals). (e) ISO 9943 – Ventilation and Air – Treatment of Galleys and Pantries with Cooking Appliances (f) Effluent/emission treatment for overboard and underwater discharges and funnel discharges, commensurate with the International Convention for the Prevention of Pollution from ships 1973, Protocol 1978. (g) Rules of Navigation and Tonnage Regulations for Suez and Panama Canal Authorities, including Measurement. (h) International Convention on Load lines, 1966 and the International Convention on Tonnage Measurement. (j) Growth Margin to be in accordance with NES 109 criteria for warships. (k) **Classification Standards**. The ship is to be built as per ABS/ BV/ DNV/ GL/ LR/ RINA classification society rules.

Appendix B

{Refers to Para 8(c)}

QUESTIONNAIRE FOR MINE COUNTER MEASURE VESSELs

1. What will be the displacement/ dimensions of the ships?

2. What are the comments on proposed Delivery Schedule of the Vessel?

3. What is the capacity/ infrastructure of the shipyard to meet the delivery schedule?

4. Conditions for usage, if any, in case of leasing?

5. What would be the approximate cost of the vessel (for procurement and leasing, post retro fitment as per the requirements indicated at **Appendix A**) and shipyards financial capability to undertake the project?

6. What is the past experience of shipyard in similar projects?

7. What are your order book status?

8. Details to be submitted for generating/ refining/ rationalizing the SQRs prior issuance of RFP.

9. Furnish details that go into determining the cost of the scheme, including factors such as Annual Maintenance Contract (AMC), product support package, training, documentation, etc.,

10. Furnish details of capability clearance certificate to indigenously design and develop the required equipment/ platform.

11. What are the applicable key technologies and materials required for manufacturing of the equipment/ system/ platform and the extent of their availability or accessibility in case they are not available in India?

12. Availability of the equipment/ system/ platform in the Indian market, level of Indigenization, delivery capability, maintenance support, life time support, etc.

Appendix C

{Refers to Para 8(c)}

VENDOR INFORMATION PROFORMA

1. **Name of the Foreign Government/ 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**.

(a) Category of Industry(Large/ medium/ small Scale) :_____

(b) Annual turnover : _____(in INR)

(c) Number of employees in firm: _____

(d) Details of manufacturing infrastructure: _____

(e) Earlier contracts with Indian Ministry of Defence / Government agencies:

Contract Number	**Equipment**	**Quantity**	**Cost**

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 be provided with the following minimum details:-

Ser	**Description**	**Unit Cost**	**Remarks**
(i)	Outright Procurement (including modifications for *IN*)		
(ii)	Leasing for 10Yrs		
(iii)	Lease for 15 Yrs		
(iv)	Procurement at 5Yrs		
(v)	Procurement at 10 yrs		
(vi)	Procurement at 15Yrs		
(vii)	Cost of Insurance		
(viii)	Any other Cost		

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

11. Any other relevant information: _____.

12. **Declaration**

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

within five (05) working days of occurrence.

(b) It is certified that design and development in indigenous and belong to the _____ (Vendor) and / or _____ (its Indian Sub Vendor). The Indigenous Content in the said equipment is _____ % as on date and likely to be raised to _____ % by _____ (date). The certification for the same is enclosed.

(c) It is certified that the complete set of design and production drawing are available and source code for all software applications/ programmes are also available with the _____ Vendor and that these would be produced for verification when required.

Note: - Certification for 12(b) and (c) is required only if claiming IDDM category.

(d) 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 organisation and that there is no inquiry going on by CBI/ ED/ any other Government agency against the firm.

(Authorised Signatory)