REQUEST FOR INFORMATION (RFI) FOR PROCUREMENT OF REMOTELY MANNED FAST INTERCEPTOR CRAFT- INDIGENOUS (RMFIC-I)

1. The Ministry of Defence, Government of India, intends to procure 20 (Twenty) Remotely manned Fast Interceptor Crafts- Indigenous (RMFIC-I) for the Indian Navy (*IN*) from registered Indian Shipyards. The RMFIC-I would be constructed in a phased manner over a period of 04 year (2026-2030).

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 RMFICs. Few important technical parameters of the proposed RMFICs are also mentioned.

(b) **Part II**. The second part of the RFI states the methodology of seeking responses of Shipyards. **Submission of incomplete response format will render the Shipyard liable for rejection. It is highlighted that in accordance with Paras 13, 70 and 92 of Chapter XII of DAP 20, there is a need to undertake capacity assessment of a shipyard prior recommending for issuance of RFP for ship or yard craft 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 Shipbuilding cases.

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 Remotely Manned Fast Interceptor Crafts.

PART- I

4. **The Intended Use of FIC (Operational Requirements)**. The RMFICs-I shall be capable *to carry out water front patrolling of coastal areas including harbour infrastructure such as the Command Headquarters, Naval Bases, Naval Dockyards, Break waters, Naval Jetties etc.* Inherent to this capability would be to escort High Value Units while entering/leaving harbour. RMFICs will provide protection to the strategic assets located in the vicinity of Naval bases and operate with Force Protection vessels and other craft deployed. In addition, RMFICs will carry out interception of high speed craft and seaward anti-terrorist patrols for security of coastal installations, naval harbours and own coast. RMFICs will operate in shallow waters and extreme tropical conditions. Additionally, RMFICs will also carry out independent deployments for minimum one day at sea including surveillance around group of islands. The RMFICs will also provide medical act as water ambulance for casualty evacuation of persons in need of urgent medical attention.

5. **Quantity Required and Anticipated Delivery Time Frames**. 20 RMFICs are proposed to be acquired. The anticipated delivery timelines for the RMFICs is proposed during 2026 to 2030 in lots of 4-5 ships per year. Shipyards are to indicate their comments on the build period and timelines for delivery.

6. **Important Parameters**. Details of the RMFICs are specified in brief in the Staff Requirements placed at **Appendix A** of this document. Detailed specifications will be given in the Request for Proposal (RFP) which will be issued to Shipyards who have responded to the Request for Information (RFI) and must meet the Qualification Criteria, after verifying their credentials and capabilities to construct the RMFICs. Further following details are to be submitted:-

(a) Feasibility to build the Remotely Manned Fast Interceptor Craft with 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, suitable justification(s) is to be submitted by the Shipyard.

(b) Shipyard is to submit the concept design for the upcoming indigenous technologies, if any, which will meet the intended purpose of the RMFICs and enhance its employability.

(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, be also commented upon along with indicative costing.

(d) Experience in building/ supply of craft which meet the requirements as listed in this RFI, along with details of customer/ clients and cost per RMFICs, delivery date will have to be submitted.

(e) 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.

(f) Budgetary quote of the RMFICs with detailed break up of cost is to be submitted. This should include material cost, labour cost, training cost, product support cost (if applicable) and taxes and duties (to be indicated separately) (as applicable). All entities factored in the costing are to be indicated in the break up.

(g) Price Variation Clause (PVC) will be applicable in this case i.a.w **Annexure VIII to Appendix M** of DAP-20.

(h) Information on whether the offered RMFICs/design is in use by any other Navy/ Indian Customer is also to be indicated.

(j) The RMFICs will be operated by Minimal Manpower/ Crew as mentioned in **Appendix A**. The maintenance of the RMFICs post guarantee period will be carried out by Headquarters through Annual Maintenance Contract (AMC). Training to ***IN*** personnel on operation and maintenance along with schedules is to be imparted by the shipyard/ OEM of equipment at Shipyards/ OEM premises and (or) ***IN*** premises. Shipyard to indicate acceptance for the same.

(k) Shipyards may consider this RFI as advance information to obtain requisite Government clearances on export / import clearances (if applicable) setting up of necessary infrastructure both in terms of manpower and material requirements.

(l) Shipyard have 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 amendment thereof.

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

(n) Willingness to participate in the bid for procurement of Remotely Manned Fast Interceptor Crafts (RMFICs).

(p) The tentative delivery schedule/ build period for supply of the RMFICs after conclusion of contract including the build strategy.

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

(r) 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 ISI, CE, MIL spec, etc., for various components/ sub-components of the RMFICs as applicable.

(s) Shipyard has to indicate inputs/ details wrt obsolescence management and upgradation of the component/ parts of equipment of the RMFICs which may become obsolete during the life cycle of the RMFICs as per provisions of DAP 20 and amendments thereof.

(t) Shipyards 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.

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

(i) Displacement / dimensions of the RMFICs.

(ii) Proposed Delivery Schedule of the RMFICs.

(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 RMFICs.

(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.

7. The Shipyard should conform 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 submission 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 Technical Evaluation Committee (TEC) to check its compliance with.

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

(e) The Shipyard would be required to accept the general conditions of contract given in the Standard Contract Document at **Chapter VI of DAP 2020.**

(f) **Integrity Pact (if applicable)**. An integrity pact is a mandatory requirement in the instant case **(**Refer **Annexure I to Appendix O of Schedule I, Chapter II of DAP -20)**.

(i) **Pre Contract Integrity Pact (PCIP)**. All Shipyards 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 of DAP-20. 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). 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:-

(a) 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.

(b) Insurance Surety Bond – The format and guidelines pertaining to the same shall be issued / notified by the Ministry of Defence.

(c) 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 Bank Guarantee**. Performance-cum-Warranty Bank Guarantee (PWBG) both equal to 3% of contract value till 31 Dec 23 of the contract inclusive of taxes and duties (Refer MOD Acquisition Wing Secretariat Note No 4(4)/ D (Acq)/20 dated 27 Sep 21) is required to be submitted after signing of contract. The amount of PWBG will be applicable as per the rate promulgated by MoD from time to time and in force at the time of tender submission.

(h) **Indigenous Content (IC)**. The construction of the RMFICs-I will be as per DAP 2020 and accordingly shipyards are required to submit the details regarding Indigenous Content(IC). The categorization for the procurement is intended to be under Buy (Indian-IDDM)/ Buy (Indian). The RMFICs must meet the minimum IC parameters iaw Para 21 of Chapter 1 of DAP 20. The Shipyards are to also comment on the categorisation and IC content as per DAP 20.

PART- II

8. **Procedure for Response**

(a) Shipyards 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 Shipyard, details about the exact vessel/RMFICs meeting our generic technical specifications should also be carefully filled. Additional literature on the vessel/RMFICs can also be attached with the form.

(b) 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: 011-26886430
Fax: 011-26886426
E-mail: dsp@navy.gov.in

(c) Last date of acceptance of filled form is 08 weeks from uploading of RFI. The Shipyards short listed for issue of RFP would be intimated.

(d) Shipyards, if required, can communicate to the project officer of 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),
Tele: 011-26886434,
Fax: 011-26886426/ 26886439
E-mail: dsp@navy.gov.in

9. The Government of India invites responses to this request only from registered Indian Shipyards who qualify 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.

(c) Possess infrastructure and capacity (considering the existing and future work load) for undertaking the construction of the Vessels.

(d) The shipyard should be in possession of Warship Construction License as per Annexure I to Appendix C of chapter 12 (Details to be provided)

10. The Government of India invites to this request only from Indian Shipyards. The end user of the RMFICs is the Indian Navy.

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 Shipbuilding Cases

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

Appendix A
(Refers to Para 6)

OPERATIONAL/TECHNICAL SPECIFICATIONS FOR REMOTELY MANNED FAST INTERCEPTOR CRAFTS (RMFICs)-I

1. **Aim of RFI**. To finalize the specifications of Remotely Manned Fast Interceptor (RMFICs-I), to meet the Indian Navy's requirements.

SINGLE SHEET SPECIFICATIONS - RMFIC	
Manning and Carrying Capacity	(a) The Minimal / Remotely manned FIC-I should be capable of being manned by single operator from a single workstation either onboard or a remote station ashore. (b) It should have a lifesaving capacity of 14 personnel. (c) The crew may comprise of two personnel-Primary and Alternate operator. Additional personnel may embark as per mission requirement.
Displacement	17 Tons +/- 10%
Draught	Not exceeding 1 m.
Length	Between 13 to 17m.
Maximum Speed	Maximum speed of not less than 45 kn at environmental conditions mentioned at Section 'A'/Para 7.
Slow Speed	Be capable of running at slow speeds. Engines are to be capable of running at minimum 33% load view patrolling in harbour at low speed (speed within harbour are limited to 8 kn as per local harbour orders).
Economical Speed	Economical Speed to be more than 15 kn.
Sustained Speed	Sustained Speed to be more than 45 kn.
Range	Be able to operate up to a distance of 40 nm from coast.
Endurance	Not less than 200 nm at speed of 15 kn with 25% fuel remaining onboard as reserve.
Sea Worthiness	The Remotely Manned FIC-I should be sea-worthy upto Sea State 4 and able to patrol upto Sea State 3.

	SECTION A – GENERAL	
1.	**Primary Roles**	The **Remotely Manned FIC-I** would be required to:- (a) Escort high value units, such as Aircraft Carriers, Tankers, Cruisers, Destroyers, Frigates, Submarines etc while entering/leaving harbour. (b) Carry out water front patrolling of coastal area including harbour infrastructure such as the Command Headquarters, naval bases, naval dockyards, break waters, naval jetties etc. (c) Protect strategic assets located in the vicinity of naval bases viz the BARC at Mumbai and Advanced Operating Base (AOB) etc. (d) Carry out sea front patrolling of coast line of major metro cities such as Mumbai, Chennai etc. (e) Operate with Force Protection vessels and other craft deployed. (f) Carry out interception of high speed craft. (g) Carry out seaward anti-terrorist patrols for security of coastal installations, naval harbours and own coast. (h) To meet role of water ambulance for casualty evacuation of persons in need of urgent medical attention. (j) Seaward security of coastal and offshore naval assets. (k) Compliant Visit Board Search and Seize (VBSS) operations (with team embarked). (l) Range clearance of Naval Coastal Batteries. (m) Aid to civil power and assistance to civil authorities during natural disasters.
2.	**Essential Features**	The **Remotely Manned FIC-I** should:- (a) Be capable of operating in shallow waters. (b) Be able to operate in extreme tropical conditions. (c) Be able to do independent deployments for one day at sea including surveillance around group of islands.

		(d) Have an expected service life of about ten years for the machinery, equipment and hull. (e) Be built as per IHQ MoD (N) approved Classification Society Standards (ABS/BV/DNV-GL/IRS/LR/RINA). Certificate is to be provided by the Classification Society confirming that Class Notations have been provided for all functional requirements indicated. In addition, IMO Code for Structural Fire Protection for High Speed Craft shall also be met. (f) Be able to carry out sustained operations for about 10-12 hrs per day, with an annual exploitation of about 3000 hrs. (g) Be capable of running at slow speeds. Engines are to be capable of running at minimum 33% load view patrolling in harbour at low speed (speed within harbour are limited to 8 kn as per local harbour orders). (h) Have a high degree of automation to reduce manpower and improve habitability. (j) Be possible to operate by a single operator (instead of four) from a single workstation. The workstation would be duplicated ashore and connected with the vessel via RF and satellite link. It would be possible to execute all functions of the vessel using local or remote workstation. It would be possible to hand over control of the vessel from one workstation to the other. (k) Be 'mono hull' construction. (l) Be able to operate up to a distance of 40 nm from coast. (m) Have arrangement to prevent towing rope from getting entangled in water jet.
3.	**Dimensions**	The principal dimensions of the **Remotely Manned FIC-I** should be:- (a) Length Overall - Between 13 to 17m. (b) Draught - Not exceeding 1 m. (c) Displacement - 17 Tons +/- 10%
4.	**Speed**	The **Remotely Manned FIC-I** should have :- (a) Maximum speed of not less than 45 kn at environmental conditions mentioned at Para 7. (b) Sustained Speed to be more than 45 kn.

		(c) Economical Speed to be more than 15 kn.
5.	**Endurance**	Not less than 200 nm at speed of 15 kn with 25% fuel remaining onboard as reserve.
6.	**Propulsion**	Two suitably rated inboard Diesel Engines coupled to reversible gearboxes driving Articulated Surface Drive or Waterjets, meeting the speed requirement specified above should be installed.
7.	**Equipment Operating Conditions**	The equipment and machinery should be marinised and capable of satisfactory operation, under the following environmental conditions:- (a) Ambient air temperature from Zero to +45° C. (b) Water temperature from 01 to + 38° C. (c) Max relative humidity of 90% at +32° C. (d) Salinity of water up to 36000 ppm. (e) Water density from 1010 to 1025 Kg/m3. (f) Harbour waters which have incidence of water hyacinth, contaminants like polythene bags of varying size and mud sediments.
8.	**Mission Control System**	(a) There should be a single system known as Mission Control System (MCS) for control of weapons, sensors, communication, navigation, spotlights, cameras, siren, steering and propulsion. Adequate redundancy is to be inbuilt to the system. The MCS, along with data transfer protocols and network switches is to be fully developed by the shipyard in consultation with equipment OEMs. (b) The MCS should be fitted at the coxswain post. (c) A single operator manning the MCS should be able to control and monitor all systems of the FIC and perform all designed roles. (d) Each integrated system should provide alarm to MCS in case of malfunction. (e) It should be able to do fault identification of any system integrated with the MCS from the coxswain post (f) The MCS in the coxswain post shall be duplicated in a Shore Control Station (SCS).

		(g) The MCS and SCS should be connected via datalink over commercial satellite and V/UHF. There should be adequate redundancy in each circuit of the datalink.
9.	**Shore Control Station**	(a) The role of the Shore Control Station (SCS) is to facilitate remote control of the FIC. (b) The SCS should be in the form of a shipping container located ashore. (c) It should be self-sufficient for power generation, air conditioning and operator seating. (d) Redundancy for power supply and air conditioning shall be catered. (e) It should be easy to transport by road on trucks used for shipping containers. (f) Each SCS should contain at least 3 to 4 MCS, each of which would be manned by a single operator. (g) Each MCS within the SCS should exercise complete remote control over one FIC through the datalink. (h) The remote control should be over RF as well as satellite and should have 100% redundancy.
10.	**Sea Worthiness**	The **Remotely Manned FIC-I** should be sea-worthy upto Sea State 4 and able to patrol upto Sea State 3.
11.	**Design and Construction**	The **Remotely Manned FIC-I** shall be designed and constructed as per High Speed Craft HSC/ HSLC rules (as applicable) for naval vessels of one of the *IN* approved Classification Societies i.e. ABS/BV/DNV-GL/IRS/LR/RINA/Class-NK. Main propulsion machinery is to be as per Classification society standards. The **Remotely Manned FIC-I** should be of aluminum/GRP construction. All the fittings should be corrosion protective material. Upper deck canopy should be bullet proof (NIJ Type 3, while glass should be NIJ Type 2). Carbon Fibre/epoxy resin or aluminum or low weight high strength advanced composite/ fibre glass may be used complying class rules for construction to provide light weight and low maintenance requirement in service. Automatic drainage system should be provided for draining water shipped on deck during operations.
12.	**Ergonomics**	Latest design concept for, Minimal / Remotely manned FIC-I with respect to automation, functional aspects and crew comfort, are to be included. The seats for crew shall be a shock-mitigating suspension type as per latest COTS specifications.
13.	**Manning and Carrying Capacity**	(a) The Minimal / Remotely manned FIC-I should be capable of being manned by single operator from a single workstation either onboard or a remote station ashore.

		(b) It should have a lifesaving capacity of 14 personnel. (c) The crew may comprise of two personnel-Primary and Alternate operator. Additional personnel may embark as per mission requirement.

SECTION B – ARMAMENT		
1.	**Weapons and Sensors**	The **Remotely Manned FIC-I** should be fitted with following weapons for LIMO:- (a) 01 x 12.7 mm SRCG with EOFCS mounted on coxswain post with day and night capability. Armour plating is to be designed, without limiting Coxswain's field of view. The SRCGs are to be sited with maximum coverage, both in training and elevation, to ensure maximum 'A' arcs. (b) 02 x Acoustic Warning Device (AWD). (c) 02 x High Power Search Lights with remote activation and control from Bridge. (d) 01 x fixed loud hailer that is capable of 360 deg rotation. (e) Check fire bell arrangement and visual alarm indications iaw policy guidelines issued by IHQ MoD (N)/DSR. (f) Small Arms as per warrant allowance promulgated by IHQ MoD (N)/DONA. (g) All the above systems, except small arms should be fully controllable from the MCS and SCS.

2.	**Magazines and Gun Wharf Stores**	(a) Magazine/ Magazine locker for 12.7mm SRCG ammunition boxes and complete EP of small arms ammunition. (b) RU Lockers in the vicinity of small arms posts. (c) 01 x Pyrotechnic Locker. (d) Hand Grenade and Scare Charge RU Lockers as per specifications laid down by IHQ MoD (N)/DSR policy letter WP/2664 dated 08 Jul 15. (e) Armoury for small arms with alarm, surveillance and suitable securing arrangements as per Art. 1208 (g) of INMER. (f) One bullet proof jacket (NIJ Type 3) is to be provided. (g) One bullet proof helmet (NIJ Type 3A) and Microphone Headset enabled to be provided.

SECTION C – NAVIGATION		
1.	**Coxswain Post**	(a) The coxswain post should have Mission Control System (MCS) with one chair. (b) The MCS should be suitably sited so that the coxswain has a clear and unrestricted all-round clear vision with minimal visual obstructions. (c) Window wipers are to be provided with fresh water facility to clean window glass. (d) Two way communication between Coxswain Post and Upper Deck Posts.
2.	**NAVAIDS**	Integrated Navigation Suite for **Remotely Manned FIC-I** should be provided iaw IHQ MoD (N)/DSR policy letter WP/0204 dated 02 Dec 19 or its latest version. All the navigational equipment of the vessel should be capable of being controlled by the MCS. In addition following COTS NAVAIDS are to be provided:- (a) One **Remotely Manned FIC-I** Compass (Class approved). (b) One portable GPS.

<table>
<tr><td></td><td></td><td>(c) Solid-state gyro compass.

(d) MFD which supports VER S-63 charts are to be provided to ensure timely updation and common reference with IN ships.</td></tr>
<tr><td>3.</td><td><u>Nav Lights</u></td><td>Navigational lights as per International Regulations for Prevention of Collisions at Sea, 1972 should be provided. It should be possible to control the nav lights from the MCS.</td></tr>
<tr><td>4.</td><td><u>Miscellaneous Equipment</u></td><td>The following equipment should also be fitted/provided :-

(a) Two high definition, high beam, marinised search lights with two 90 AH maintenance free batteries mounted on rotating mechanism. These should be controllable from the MCS.

(b) Four portable high magnification marine binoculars and four portable night vision binoculars.

(c) Police siren/light of suitable size with appropriate light characteristics to aid in providing ample alert to the vessels in vicinity. This should be controllable from the MCS.

(d) One LASER range finder.

(e) One complete gears set for reduced VBSS party, comprising of one officer and eight sailors.

(f) An Optical Surveillance System should be fitted, with adequate cameras to provide all around visibility upto 12nm. There should be no blind arcs. It should be integrated in the MCS. It should have zoom features as follows:-

<table><tr><td>Zoom Range</td><td>Optical - Minimum 30 X

Digital - Minimum 12X</td></tr></table></td></tr>
<tr><td>5.</td><td><u>Steering System</u></td><td>Provision for steering the vessel in case of failure of one propulsion (Water jet or Articulated Surface Drive) is to be provided.</td></tr>
<tr><td>6.</td><td><u>Anemometer</u></td><td>Integrated anemometer should be provided to give wind direction and speed.</td></tr>
<tr><td colspan="3"><u>SECTION D – COMMUNICATION</u></td></tr>
<tr><td>1.</td><td><u>Communication Sets/Equipment</u></td><td>(a) The MCS should have integrated internal and external communication.

(b) A single operator should be able to use all forms of communication from the MCS.

(c) Data Link is to be provided between Remotely Manned FIC-I and Shore Control Station (SCS) over RF and</td></tr>
</table>

		Satcom, with adequate redundancy. RF and Satcom terminals, as required shall be provided. (d) Real time data / video streaming, data logging, recording provision of alarms, health reports of FIC's machinery/sensors and remote operation of machinery and sensors should be feasible from SCS. (e) The SCS should be capable of connection to the Navy's NC3I network or INCOP. (f) V/UHF Communication equipment installed are to be compatible with other maritime security agencies (IN, CG, Marine, Police, Customs, etc.) (g) The following additional communication facilities/equipment are to be provided:- (i) VHF Hands Free Radio - Five (with five rechargeable batte and Recharger). (ii) SDR Fixed Portable - One (iii) Portable HF set (COTS police radio) - One (iv) SART - One (v) EPIRB - One
	SECTION E – SEAMANSHIP & HULL	
1.	**Seamanship Fittings**	(a) **Anchor and Chain Cable**. Complete anchoring and berthing arrangements as per Classification Society Rules should be provided. (b) **Towing Arrangement**. Suitable towing arrangement, to tow a craft of equal size should be provided. (c) **Ropes**. Polypropylene ropes as per Class Rules should be provided for berthing and towing. Stowage arrangement of all ropes including required for towing is to be provided on upper deck. (d) **Lifting & Stowing Arrangements**. The **Remotely Manned FIC-I** should be designed for being hoisted on to the jetty with crane and stowed on cradle. Suitable lifting slings/ arrangements shall be provided to cater for lifting the craft by crane.

		(e) **Cradle**. Cradle with spreader and slings for undertaking maintenance/stowage should be provided.
2.	**Life Saving Equipment**	(a) Hazardous Duty Life Jacket for crew are to be provided iaw IHQ MoD (N)/DSR policy letter WP/0702/HDLJ dated 29 Jul 15. (b) Other lifesaving appliances are to be provided as per SOLAS. (c) Two ten men liferafts or one 20 men. Securing arrangement of life rafts are to be iaw FOST Safety Acquaint Safety/FOST/SS/2013/02 dated 20 Feb13. (d) 03 x Lifebuoys with 30 m of line is to be provided. (e) 01 x Marker Man Overboard (smoke and light) is to be provided. (f) All seats and gun mount onboard the craft are to be provided with safety harness and hand hold.
3.	**Deck**	(a) All weather deck area to be applied with non-skid paint. (b) Camber and sheer is to be provided to facilitate drainage of water on the deck. (c) Gunwale should be ruggedised for boarding at sea. (d) Bull rings, stag horns, bollards and cleats of required strength are to be provided.
4.	**Stability**	The **Remotely Manned FIC-I** should be designed to meet stability requirements as per applicable HSC/ HSLC code of *IN* approved Classification Society Regulations (Refer Section A, Para 9).
5.	**Fendering**	(a) Adequate fixed all around fendering should be provided. (b) 06 x Portable light weight fenders with stowage arrangement on upper deck should be provided.

	SECTION F – ENGINEERING	
1.	**Main Engines**	(a) The **Remotely Manned FIC-I** shall be fitted with two suitably rated inboard Diesel Engines (one per shaft) coupled to reversible gearboxes driving Articulated Surface Drive or Waterjets, meeting the speed requirement at Para 4 above. Diesel Engines are to be matched at 85% MCR for the full speed requirement. MEs/DGs restart capability to be availiable in Manual and Remote mode (MCS & SCS) (b) Machinery should be capable of operation from SCS or MCS iaw suitable fail proof change over mechanism with redundancy. (c) Complete exploitation of the engines should be possible from MCS and SCS. (d) Main Engines should be electrically started. Batteries to be maintenance free type and suitable provision for charging shall be provided. Batteries should be capable of giving at least six consecutive starts. (e) The engine (s) should be able to carry out sustained operations for about 10-12 hrs per day. (f) Main Engines, Gearbox and Propulsors shall be compliant to International Association of Classification Society (IACS) class rules. The diesel engine should meet the latest international norms on exhaust emission and personnel safety (IMO/ MARPOL regulations on exhaust emissions, SOLAS regulation on personnel safety). (g) The propulsion package should cater for shallow water operations. (h) Ballast and Sullage system should be as per Class and MARPOL compliant. (i) Level indicators for all tanks be provisioned with digital display. Tanks should be connected to both engines. (j) **Remotely Manned FIC-I** engines should be capable of running at minimum 33% load view patrolling in harbour at low speed (speed within harbour are limited to 8 kt as per extant orders). (k) **Remotely Manned FIC-I** engines should be able to operate in harbour which have incidence of water hyacinth,

		contaminants like polyethylene bags of varying size and mud sediments.
2.	**Fuel, Lubricants and Tank Capacities**	(a) Fuel capacity should cater for endurance requirement of the vessel. (b) 'Lubricant storage should be provided to cater for at least one change of POLs for all equipment. (c) Fuel used should be HFHSD iaw IHQ MoD(N)/DME policy letter EG/6321/POL dated 05 Feb 20. (d) Fresh water tank capacity is to be approximately 250 Lt ± 5%. (e) 25% surplus fuel over endurance limit should be provided. (f) Transfer of fuel from storage to service tanks and vice versa is to be automated. Further, to achieve zero list, equilibrium of fluids is to be achieved through MCS.
3.	**Waste Disposal System**	As per Class norms.
4.	**Fire Fighting and Damage Control**	The following firefighting arrangement should be provided:- (a) Portable fire extinguishers and fixed firefighting arrangement to meet the requirement of Classification. (b) The machinery space should be provisioned with environmentally benign NOVEC-1230 FF System as major firefighting system. The system should have capacity for two shot operation. (c) The control of NOVEC-1230 FF system is to be located in the Coxswain's Post preferably on the Coxswain's panel. (d) Fire detection sensors are to be provided in vulnerable compartments Iaw IHQ MoD(N)/DNBCD policy letter 19 Jan 18. (e) Flood alarm sensors are to be provided in Red Risk Zone (below water line) iaw IHQ MoD(N)/DSR policy letter NB/0695/AFAS dated 24 Aug 21. (f) Two fire pumps. (g) One portable eductor.

		(j) One fixed dewatering pump. (k) Diesel driven pump of capacity 20 TPH. (l) GRP specific DC items are to be provided. (m) All materials fitted/used (curtains/lining/ covers/bunks) are to be SOLAS/HSC/IRS code compliant.
5.	**NBCD**	NBCD allowance list is to be as per IHQ MOD (N) /NBCD letter NB/0695/CNAL/FIC dated 22 Mar 17 regarding promulgation of Comprehensive NBCD allowance list and spares for FIC.
6.	**AC & Ventilation**	AC & Ventilation should be provided as per Class rules.
7.	**Hydraulic Pipelines**	Robust hydraulic pipelines are to be provided for steering/reversing deflector.

	SECTION G – ELECTRICAL	
1.	**Batteries**	(a) Batteries will be maintenance free, fire retardant with high Cold Cranking Ampere (CCA) value as per the DA/ Engine capacities and approved for marine service. (b) Transformer rectifiers cum battery charger of adequate capacity shall be fitted to boost/ trickle charge the battery. (c) 24V DC supply is to meet the requirement of the emergency lighting, navigation, communication systems and steering system etc.
2.	**Equipment/Lighting**	(a) **Equipment/Lightings**: - All Electrical Equipment, Cables and Fittings, Machinery and Associated Systems shall be of proven design and conforming to Class. (b) **Power Generation**:- The craft is to be provided with suitable number of generators of reputed make and of adequate capacity with 100% reserve power and redundancy conforming to Classification Specification regulations." The DGs should be electrically started. Batteries should be capable of given six consecutive starts. Batteries to be of maintenance free type. (c) **Emergency DA**:- One fixed air cooled emergency diesel generator of reputed make and of suitable capacity conforming to Class specifications to be provided to cater for emergency supplies to the essential equipment including electric lighting, Navaids and Communication i.a.w SOLAS requirements. Changeover from Main DA to Emergency & vice versa to be seamless without human intervention. (d) Suitable provision for charging of batteries to be provided. Battery backup for governor/control panel of DGs is to be provided for 30 mins duration with trickle charge facility. (e) **Power Supply Requirements**. Power supplies with quality as per Class Specifications are to be provided as follows (not limited to):- (i) 230V AC, 50Hz, 1 Phase (ii) 24V DC. (f) **Main Switch Board**. As per the Class requirements. (g) **Shore Supply Arrangements**. (i) A watertight Shore Supply Connection box of suitable rating to cater for the harbour load shall be fitted on

		weather deck at appropriate positions on both port and Stbd side, conforming to Class Specifications (ii) Stowing arrangement for flexible cable, suitably located at below deck is to be provided. (h) **Transformer/ Rectifiers/ Inverters**. Required number of Transformer/ Rectifiers/ inverters conforming to classification society's rules are to be provided if required. (j) **Motors, Starters and Controllers**. The motors shall be selected so as to meet latest available marine grade specifications. The starters & controllers shall be enclosed type and suitable for marine use. Siting of motors should be as per Class regulations. (j) **Electric Cables/Runs**. (k) Marine quality EBXL cables conforming to Class requirements shall be used. (ii) Cables which are specially specified by system suppliers for their system installation shall also conform to class society rules. (iii) Cable glands are to be conforming to Class requirements. (iv) Cables under floor in Engine Rooms will be run through metallic rigid/ flexible conduits. (k) **Insulated Synthetic Mats**. The Insulated Synthetic mats for all electrical applications are to be procured for the **Remotely Manned FIC-I** as per specifications mentioned vide IHQ MoD (Navy)/DEE letter EE/03/9711 dated 27 Dec19. (l) **General Lighting**. General illumination shall be achieved with marine type LED light fittings as per Class specifications. (m) **Window Wiper**. Window wipers conforming to Class requirements are to be provisioned. (n) **Internal Communication**. Hands free two way internal communication system/broadcast including check fire bell and visual alarm. (p) Check fire bells/for all weapons posts with visual alarm.

	SECTION H – MISCELLANEOUS	
1.	**First Aid Boxes**	(a) One first aid box should be installed. (b) One NR Stretcher with stowing arrangement should be installed.
2.	**Electric Fans**	Separate electric fans are to be fitted in coxswain post for redundancy in the event of AC failure.

Appendix B
{Refers to Para 8(c)}

QUESTIONNAIRE FOR REMOTELY MANNED FAST INTERCEPTOR CRAFTs

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. What would be the approximate cost of the vessel (material cost, labor cost, training cost, product support cost (if applicable) and taxes) and shipyards financial capability to undertake the project?

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

6. What are your order book status?

7. Details to be submitted for generating/ refining/ rationalizing the SQRs along with justification prior issuance of RFP.

8. 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.,

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

10. 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?

11. What is the approximate cost estimation (Al/ GRP/ / FRP and Carbon Fibre) and suggestions for alternatives to meet the same objective as mentioned in RFI?

12. What are the capabilities of Indian Shipyards to Indigenously Design, Develop and Manufacture (IDDM) the required equipment?

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

14. Will there be a collaboration with experienced foreign shipyard for design of the envisaged RMFIC? If so, forward information of shipyard collaboration with foreign shipyards.

Appendix C
{Refers to Para 8(c)}

SHIPYARD INFORMATION PROFORMA

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

_____

_____

(Company profile including Share Holding pattern, in brief, to be attached)

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

Original Equipment Manufacturer (OEM) Yes/ No

Authorized Shipyard 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) :_____

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
GeM			
DGQA/DGAQA/ DGNAI			
OFB			
DRDO			
Any other Government Agency			

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

Name of Organisation : _____

Membership Number : _____

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

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

(b) Description (attach technical literature): _____

(c) Whether OEM or Integrator : _____

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

(e) Industrial License Number : _____

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

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

(h) Production capacity per annum:_____

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

(k) Estimated price of the equipment _____

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

11. Any other relevant information: _____.

13. **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 Organisation and that there is no inquiry going on by CBI/ ED/ any other Government agency against the firm.

(Authorised Signatory)

Appendix D
{Refers to Para 8(c)}

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 FIC/similar vessels 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/ crafts only)							
	Yard	Customer	Type of vessel	Dwt, grt	Order date	Start production	% completed	Expected delivery
9	Financial information (in INR for Indian Shipyards and in US dollars for foreign Shipyards)							
	(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 RMFIC offered to meet the specified requirements and build period from date of order		
11	Detailed specifications of commercially off the shelf (COTs) RMFIC if available for outright purchase, if any		

(Authorised Signatory)

Appendix E
{Refers to Para 12}

GUIDELINES FOR FRAMING CRITERIA FOR SHIPYARD SELECTION/ PREQUALIFICATION IN 'BUY (INDIAN-IDDM)

1. The guidelines prescribed for short-listing/ pre-qualification of Indian Shipyards in Buy (Indian-IDDM) cases are enumerated in the succeeding paragraphs. Paragraph 2 deals with the parameters that may be considered for short-listing of Shipyards, whereas Paragraph 3 amplifies the process for applying selected parameters to the process of Shipyard Short listing.

2. **Parameters**.

(a) **General Parameters.**

(i) Applicant Entity should be an Indian shipyard 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) Shipyards 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 authorised Shipyards.

(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.

(iv) For RFI of Shipbuilding cases (acquisition of Ships, Yard crafts & Submarines), **technical capacity assessment parameters stipulated at Annexure I to Appendix C, chapter XII, DAP-20** shall be followed.

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

(d) **Other Parameters**.

(i) **Industrial License (IL)**. Shipyards should be either holding a valid defence industrial license or should have applied for the same before responding to RFP. In any case the shipyard 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) Shipyard 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 shipyard is already a supplier to MoD and/ or has already provided the above documents in such cases, it should be necessary for the shipyard to resubmit only such documentations as is necessary to update the above).

(f) Any shipyard 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 Shipyard 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 shipyard 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.