REQUEST FOR INFORMATION (RFI) FOR ACQUISITION OF 02 OFFSHORE PATROL VESSELS (OPERATIONAL SEA TRAINING) {02 OPVs (OST}

1. The Indian Coast Guard, Ministry of Defence, Government of India, intends to procure 02 Offshore Patrol Vessels (Operational Sea Training) {02 OPV(OST)} from prospective 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 Vessel. Few important technical parameters of the proposed Vessel are also mentioned.

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

(c) **Part III.** Guidelines for Framing Criteria for Pre-Qualification in Buy Indian (IDDM), Buy (Indian) and Buy & Make (Indian) Cases.

PART-I

3. **Intended Use of Equipment (Operational Requirements)**. These 02 OPV (OST) will be used for specialised training/workup functions along with undertaking CG charter of duties as her secondary role.

Primary Roles

(a) Advanced operational sea training & realistic scenario simulations of following:

(i) Fire Fighting
(ii) Damage control/Flooding
(iii) Ship handling
(iv) MCR/MSB
(v) Helo operations
(vi) Remotely piloted aircraft (RPA)
(vii) GMDSS
(viii) Pollution control

(b) Hands on training

(i) Seamanship
(ii) Multi Ship evolutions such as RAS, FAS (Abeam/Astern), SKBDL etc
(iii) Bridge emergencies
(iv) Pollution control (FFBNW)
(v) Technical emergencies evolutions
(vi) Helo operations
(vii) Medical
(viii) Ships husbandry

Secondary Roles

(a) Search & Rescue
(b) Surveillance and Maritime law enforcement
(c) Coastal security
(d) Protection of offshore artificial islands/installations
(e) Assistance to other agencies towards operation at sea
(f) Pollution response.

4. **Important Technical Parameters**. Broadly elucidated at **Appendix 'A'**.

5. Vendors should confirm that following conditions are acceptable:-

(a) The shipyard/ vendor should have a valid Technical Capacity Assessment Certificate to build OPVs as detailed in Chapter-XII of DAP-2020 till signing of contract.

(b) 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 last date of submission of offers.

(c) The Financial Parameter of the bidders would be evaluated by a Financial Parameter Evaluation Committee.

(d) The technical offers would be evaluated by a Technical Evaluation Committee (TEC) to check its compliance with RFP.

(e) Amongst the vendors cleared by TEC evaluation, a Contract Negotiation Committee would decide the lowest cost bidder (L1) and conclude the appropriate contract.

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

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

(h) **Integrity Pact**. An integrity is a mandatory requirement in the instant case (Refer Annexure I to Appendix M of Schedule- I to chapter II of DAP 2020.

(j) **Performance-cum-Warranty Bond**. Performance-cum-Warranty Bond equal to 3% value of the contract inclusive of taxes and duties is required to be submitted after signing of contract.

PART-II

6. **Procedure for Response**

(a) The procedure for Response to this RFI is at **Appendix B**. Vendors must fill the form of response as given in **Appendix C** and the questionnaire attached at **Appendix D** to this RFI document (Reference **Annexure II, III to Appendix A, Chapter II, DAP 2020)**. 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 OPV (OST) can also be attached with the form.

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

The Principal Director (Ship Acquisition),
Coast Guard Headquarters,
National Stadium Complex, New Delhi- 110001,
E-mail- dte-sa@indiancoastguard.nic.in,
Tel: 011-23074235, 011-23074125. Fax: 011- 23072201

(c) An interaction meeting / VC will be held on **26 Apr 2024** to address the queries of vendors. Last date to receive queries is **19 Apr 2024**.

(d) Last date of acceptance of filled form is **24 May 2024**.

7. The Government of India invites responses to this request only from Original Equipment Manufacturers (OEM)/Authorised Vendors/Government Sponsored Export Agencies (applicable in the case of countries where domestic laws do not permit direct export by OEMs). The end user of 02 OPV (OST) is the Indian Armed Forces (Indian Coast Guard).

8. 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-2020.

PART – III

GUIDELINES FOR FRAMING CRIETERIA FOR SHIPBUILDING CASES

9. The guidelines prescribed for short-listing/ pre-qualification of Indian vendors in case of ship building cases are detailed in Chapter XII of DAP-2020 (Appendix C to Chapter XII of DAP 2020 is relevant).

Appendix A
(Refer to Para 4 of RFI)

TECHNICAL PARAMETERS : 06 OFFSHORE PATROL VESSELS (OST)

SL	Parameters /Features	Details
Principal Dimensions		
1.	Length (Overall) & Beam (mld)	Length (120 ± 5) m Beam (as per design) (excluding underwater appendages/ propulsion system protrusions)
2.	Displacement	To match endurance, loading and speed requirement. Survivability in all sea states.
3.	Max Hull Draught (full load)	Max 4m at full load displacement
4.	Max sustained speed	Max 20 Knots at 92% MCR at full load displacement
5.	Cruising speed	Not less than 14 Knots on single shaft with other shaft in trailing mode
6.	Range	Approx. 5000 Nautical miles at cruising speed with 25% Reserve fuel
7.	Endurance	Should be able to logistically sustain for 30 days
8.	Fresh water capacity	Catering for Approx 220 personnel. Should not be less than 150 tons
9.	Aviation fuel capacity	Min 10 KL of AVCAT with RU/Service tank
10.	Hull	Class approved indigenous shipbuilding steel ABS (Grade AH36 or equivalent) for Hull and Helodeck region
11.	Fuel capacity	To meet Range/ Endurance
12.	Helo Hanger & Helo Deck	Operation, embarkation including stowage of one twin engine helo of AUW 6000kg and staging through for helo of AUW 11500kg upto SS5
13.	Class notations	Dual Class with ABS or LRS or BV or DNV or GL or NK and IRS Class. Class notations is to be "+A1, HSC (E) (Special Government Service), +AMS NIBS, +ACC, FFV1-NS, CS-Ready HELIDK(SRF) by ABS or equivalent of LRS/DNV/GL/BV/IRS/NK
Role		
14.	Roles	**Primary Roles**: (a) Advanced operational sea training & realistic scenario simulations of following: (i) Fire Fighting (ii) Damage control/Flooding (iii) Ship handling (iv) MCR/MSB (v) Helo operations (vi) Remotely piloted aircraft (RPA) (vii) GMDSS (viii) Pollution control

		(b) Hands on Training (ix) Seamanship (x) Multi Ship evolutions such as RAS, FAS (Abeam/Astern), SKBDL etc (xi) Bridge emergencies (xii) Pollution control (FFBNW) (xiii) Technical emergencies evolutions (xiv) Helo operations (xv) Medical (xvi) Ships husbandry **Secondary Roles**: (a) Search & Rescue (b) Surveillance and Maritime law enforcement (c) Coastal security (d) Protection of offshore artificial islands/installations (e) Assistance to other agencies towards operation at sea (f) Pollution response
Operational Capabilities		
15.	Operational Capabilities	The ships should be capable of operating in tropical environment conditions with excellent seakeeping qualities and dynamic stability. The ship is to be sea worthy for operation up to sea state 7 (significant wave height 8.65m) and to have survivability in all sea states.
	Other Important Features	
16.	Twin Bridge facility	The ship shall have two Bridges - Primary and Slave. The Primary Bridge will have all navigation, communication and machinery controls facility. The Slave Bridge will have all navigation and machinery control equipment fitted as in Primary Bridge except master control available with Primary Bridge at all times with controls shared with Slave Bridge as per requirement. There will be Integrated Ship System Simulator (ISSS) installed in Slave Bridge for training purposes.
17.	Fin Stabilizers	Ship shall be provided with active fin stabilizers
18.	Propulsion	02 Diesel Engines, 02 shafts CPP
19.	Power Generation	04 DGs of equal rating class approved with 15% reserve capacity with each DG set capable to meet electrical load satisfactorily under cruising condition. 01 Harbor DG class approved with 15% reserve capacity to meet ships max harbour running load. The system is to be designed for paralleling of DAs and load sharing. Any 02 DGs selectively be capable of meeting ships full load requirements with load at 80-85% rating. Automatic power management system (APMS) to control, monitor and distribute power. 230V AC and 24V DC supply also to be provided.
20.	Integrated Platform Management System (IPMS)	IPMS to be provided including Integrated machinery control system (IMCS), APMS, Integrated Bridge system (IBS), Damage control system, be integrated with bilge alarm and major broadcast with sufficient feeds to be integrated with all equipment/systems with sufficient MFDs catering for not less than Bridge, Ops room, MCR,

		DCHQ, Bridge top, Bridge wings and Training Hall. All equipment/systems that are integrated with IPMS should have capability to operate in standalone mode.
21.	Artificial Intelligence (AI)	Smart technology software and hardware to be provided with suitable self-learning algorithm for analysing propulsion and power generation machinery parameters inputs for anomaly detection, failure prediction and maintenance scheduling with provision to integrate/ provide signal feed to IPMS.
22.	Navigation Equipment	Integrated Bridge system (IBS), 03 nos Navigation Radars (encompassing S and X Band) with ARPAs, Electronic Chart Display and Information System (ECDIS), Gyro, Electro Magnetic(EM) Log, Echo Sounder, Magnetic Compass, Differential Global Positioning System(DGPS), Universal Automatic Identification System(UAIS), Anemometer, Electric Whistle, Air Horn, Long Range Acoustic Hailing Device, Hand Held Navigation aids, Meteorological Instrument/ Arrangement/ Aids, Night Navigation Aids, Search Light , voice data recorder etc.
23.	Communication Equipment	SDR-TAC (ICG), Portable V/UHF SDR, Portable HF SDR (BFE), Ku band satellite communication terminal, Compact GMDSS console, Class approved Voice data recorder (VDR), Satellite Communication Equipment including Inmarsat FBB Terminal & MSS Mk II (BNE), walkie-talkies, survival craft equipment and visual signaling aids, INMARSAT Fleet Broadband FBB terminal, Cryptographic equipment, SVIP (BFE) and Secure LTE Network (BFE).
24.	Internal Communications	Ship to be provided with latest technology wireless based internal communication besides Main Broadcast with Amplifier, Intercom, sound power telephone, Auto telephone exchange etc
25.	Weapon	Provisions for Main weapon with FCS and secondary weapon on bridge wings or at any other suitable location. Arms and ammunition CG supply. Stowing arrangements for all small arms and ammunition to be catered as per NMER. Provision for separate stowage of Armours and magazine. 1 x 30mm Main Gun with FCS, 2 x 12.7mm SRCG guns with FCS
26.	Boats/Davits	Indigenous Boat and Davit (i) 2 Rigid Hull Inflatable Boats ,RHIBs (Max speed not less than 40 knots at full load with self righting capability and integrated with davit system, payload capacity – Approx 1100-1200 kg including men & material. Portable GPS, VHF, Nav lights and Class B AIS is to be provided for each RHIB, RHIBs are to be capable of being launched and recovered whilst the ship is making way up to 6 knots of ship's speed. (ii) 2 Rigid Inflatable Boats (10 men capacity, 40 HP OBM) & all standard accessories, SOLAS compliant with hoisting and lowering arrangement in underway condition up to 6 knots of ships speed.
27.	Crane	Two self contained articulated cranes of 05 tons lifting capacity at 15m radius to be installed on quarterdeck for handling of PR equipment. Hoisting, slewing, lifting and telescoping shall be hydraulically controlled. The position of crane will be limited below helideck level for safe operation of helicopter.
28.	Bow Thruster	Tunnel Thruster shall be provided

29.	Fire Fighting System	A fixed fully flooding Eco friendly Class Approved Fire Fighting System for Main Machinery Spaces to be provided by shipbuilder as per availability of latest model / make. It should be having audio/visual alarms with dual shot capability with provision of reserve cylinders (If required). Suitable class approved fire-fighting system with ecofriendly agent to be provided for galley, laundry fire-fighting etc.
30.	External Fire Fighting System	02 EFF Main Engine/Gearbox driven PTO pumps with 2 x 1200 TPH capacity@120 Mtrs as specified in class rules to be provided.
31.	PR Capability	(i)Provision to fit swinging/retractable spraying booms/arms of oil spill spray system on either port & starboard side on foxle. (ii)Provision for stowage/fitment and operation of Pollution response (PR) equipment to be catered by shipbuilder.
32.	Helo visual aid landing system (HVALS) and helo emergency facilities	For day/night ops including NVG facilities
33.	Helo Traversing System	Ship shall be fitted with class approved Rail Less Helo Traversing System inclusive of provision of harpoon grid and Ground support equipment (GHE). The system shall be able to traverse Helo in up to Sea State 5 condition in multi cable, single cable and pneumatic mode. The mock-up shall be provisioned as a handover item by shipbuilder.
34.	Helicopter fuelling	A helicopter gravity, pressure & in-flight Re fuelling (HIFR) system shall be provided
35.	Unmanned aviation system (UAV)/ Drone	The ship shall be equipped with latest specifications Marine Indigenised UAV with Vertical Take Off (VTOL) provision. Shipbuilder to provide dedicated drone deck other than Helo deck. Also to be installed with Anti Drone system
Miscellaneous		
36.	CCTV System	Marine version CCTV system should be provided in entire ship excluding accommodation cabins, washroom, spaces considered confidential.
37.	ICCP and ICAF	ICCP and ICAF system should be fitted
38.	Ventilation and Air-conditioning	To be fully air-conditioned for tropical condition as per class requirement
39.	Lifesaving Equipment/Appliances	All lifesaving equipment such as General service life jacket (GSLJ), lifebuoys, liferaft, 02 Remote operated lifebuoys, 02 pneumatic lifebuoy / life jacket throwing devices, body recovery stretcher, parachute signal, scramble net, smoke signal, rescue sling, self igniting light etc as per SOLAS requirement to be provided.
40.	Environmental/Ecological requirements	02 Sewage Treatment Plants, garbage disposal plant, marine incinerator as per MARPOL requirements. Separate system for Black and Grey Water, Marine Toilets Systems/ Sanitation Devices.
41.	Integrated Ship System Simulator (ISSS)	Shipbuilder to provide Integrated, Modular, Multifunctional VR Simulator system that would provide realistic and immersive training experience onboard. A separate additional Bridge giving minimum 270 degrees view and slave controls with display integrated into ISSS for simulation. The ISSS would have following features: a) Network classroom with seating capacity of 50 trainees. This classroom may be at an adjoining compartment to the bridge on the same deck.

		b) Master touch screen display with end resolution graphics (Min 4K) in the bridge. c) Trainer Master PC with administrative right abilities to simulate different situations for different simulator module in classroom. d) Touch screen slave PCs for each trainee with ability to respond to the emergencies or event injected in the class room. Advanced simulation software with scenario customisation capabilities. 3D Modelling and depiction of all systems specific to OPV (OST) which will be incorporated as modules in ISSS. The ISSS should have following primary and sub-modules: a) Engine System Simulator i) Main Engine and Gearbox system ii) DA system iii) CPP system iv) Vent supply and Exhaust fan v) Air Conditioning and Ref system vi) Fuel system vii) AVCAT system viii) External Fire Fighting system b) Electrical System Simulator i) Electrical distribution system ii) Automatic Power Management system iii) Bridge Management system iv) Bridge Power distribution system v) Fire detection system c) Fire Fighting Simulator i) Major Fire Fighting system ii) Firemain system iii) Portable extinguisher operations d) Damage Control System i) Fixed Deflooding system and Portable Deflooding system e) Remotely Piloted Aircraft System f) GMDSS Simulator g) Ship Handling Simulator (SHS) i) ROR Day and Night Training Module ii) Station Keeping, SKBDL, PPF, RAS manoeuvres h) Pollution Control Simulator j) Gunnery Simulator

		The ISSS should be flexible to incorporate additional features as per End User requirements.
42.	Classroom training facility and halls	A Network classroom with seating capacity of 50 trainees as per the requirements of simulation based training as per the details of Integrated Ship System Simulator (ISSS).
43.	Training Bay	A designated compt. or bay be provided for NBCD training, real time fire fighting, DC tools, on-job hands-on training. Standby equipment and Cut-Section models of important machinery be also provided for on-job hands-on training.
44.	RO Plant	02 RO Plants of 20 TPH capacity each, 01 RO Plant of 10 TPH capacity (Indian Make)
Service Life		
45.	Service Life	30 years with Annual exploitation upto 2500 hrs.
46.	Classification	The vessel shall be built as dual class with ABS, LRS, DNV, BV or NK and IRS as other class
Accommodation for Complement		
47.	Accommodation for proposed complement	Ship complement = 121 Training crew = 50 Trainees embarked at any given time = 50 Total accommodation required = 221 20-40% of the accommodation has to be catered for female crew and necessary details may be shared in the RFI response

Appendix B
(Refer to Para 6 of RFI)

REQUEST FOR INFORMATION: PROCEDURE FOR RESPONSE

Request for Information for Acquisition of 02 Offshore Patrol Vessels (Operational Sea Training) for Indian Coast Guard

1. The Indian Coast Guard is planning to procure 02 Offshore Patrol Vessels (Operational Sea Training) with the view to identify Capacity Cleared Shipyards who can undertake the said project. Capacity Cleared Shipyards are requested to forward information on the 02 OPV(OST) which they can offer. The vendors are required to confirm para wise acceptance/ comments on the parameters/ broad specifications of the OPV(OST) as mentioned at **Appendix A** of this RFI. In addition, the vendors are required to furnish details as per Proforma at **Appendix C** and the questionnaire attached at **Appendix D** of this RFI.

2. Apart from the information as per the **Appendix A,** the vendors may also forward technical details/product brochures/literature etc. pertaining to the proposed OPV(OST).

3. The required information/ details may please be forwarded at the following address by **24 May 2024** :-

The Principal Director (Ship Acquisition),
Coast Guard Headquarters,
National Stadium Complex, New Delhi- 110001,
E-mail- dte-sa@indiancoastguard.nic.in
Tel: 011-23074235, 011-23074125. Fax: 011- 23072201

Appendix C
(Refer to Para 6 of RFI)

VENDOR INFORMATION PROFORMA

1. **Name of the Vendor/Company/Firm**.

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

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

Original Equipment Manufacturer (OEM) Yes/No
Authorised Vendor of foreign Firms 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/Agent (if any)**.

Name & Address: _____
Pin code: _____ Tel: _____ Fax: _____
Email: _____

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
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**

(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 Licence Number: _____

(f) Indigenous component of the product

(i) Overall IC (in percentage)

(ii) IC for material/ components/ software manufactured in India (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 _____

(l) Indigenously produced sub-systems, Line Repair Units, Software and critical spares of the product :

(m) Devices/ Line Repair Units for which Input/ Output Protocols are indigenously available for enabling replacements by Indigenous equivalents or interfacing with equipment of own choice :

(n) Capability for carrying out Comprehensive Maintenance, Repair and Overhaul, Calibration and Obsolescence management of the equipment/ platform/ system along with associated jigs, fixtures and test setups during the designed service life of the equipment within India.

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

11. Any other relevant information: _____ .

12. **Declaration**. It is certified that the above information is true and any changes will be intimated at the earliest.

(Authorised Signatory)

Appendix D
(Refer to Para 6 of RFI)

REQUEST FOR INFORMATION : QUESTIONNAIRE

1. **Infrastructure Profile**

(a) Year established _____

(b) Annual build capacity (in tonnage) _____

(c) Details of future expansion and business development planned:

(d) Name and address of foreign collaborator, if any

(i) Date of Agreement :_____

(ii) Validity of Agreement:_____

(iii) Scope of Agreement :_____

(e) Capacity of Shipyard :

(f) Capacity utilization chart:

2. **Shipbuilding Profile**

SI	YARD NO	CUSTOMER	TYPE OF Vessel	DWT, GRT	ORDER DATE	START PRODUCTION	CONTRACTUAL DELIVERY	ACTUAL DELIVERY

3. **Orders in Hand (Attach Order Copies for Similar Vessels only)**

SI	YARD NO	CUSTOMER	TYPE OF Vessel	DWT, GRT	ORDER DATE	START PRODUCTION	% COMPLETED	EXPECTED DELIVERY

4. Details of any Offshore Patrol Vessel (OPVs)/ OPV(OST) in service/design or development stage_____

5. Countries/Agencies where OPVs/ OPV(OST) supplied earlier, provide details

6. Estimated price of the OPV (OST) _____ .

7. Indigenous component of the OPV(OST)

(i) Overall IC (in percentage) :

(ii) IC for Material/ Components/ Software manufactured in India (In percentage)

8. Capability of Indian vendors to indigenously design and develop the OPV(OST) under Buy(Indian-IDDM) category _____ .

9. 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 _____ .

10. Availability of the equipment/system/platform in the Indian market, level of indigenisation, delivery capability, maintenance support, life time support etc_____ .

11. Approximate cost estimation and suggestions for alternatives to meet the same objective as mentioned in RFI _____ .

12. Any alternatives for meeting the objectives set forth in the RFI

13. Confirmation from OEMs of major & auxiliary machinery to provide spares requirement for maintenance and overhaul through indigenous sources include in RFI.

14. List of probable indigenous equipment be appended

15. Proposed Delivery Schedule for 02 OPV-OST.

16. Comments of Shipyards on following points is solicited:-

(a) Yard to indicate the location of various simulators in their proposed design .

(b) Yard to indicate major design aspects/ limitations w.r.t. any of the requirements.

17. Any other relevant information _____ .

18. **Financial Information (in INR for Indian Shipyards)**

(a) Balance sheet last three financial years (year wise) _____

(b) Profits made _____

(c) Net worth _____

(d) Debt/Equity ratio _____

(e) Quick ratio _____

(f) Attach copies of certified published annual report showing turnover and financial status in support of above information _____

19. **Declaration**. It is certified that the above information is true and any changes will be intimated at the earliest.

(Authorised Signatory)

Date: _____

Place: _____