REQUEST FOR INFORMATION FOR PROCUREMENT OF FOUR (04) TWIN ENGINE HEAVY HELICOPTERS (TEHH).

1. The Ministry of Defence, Government of India, intends to procure **Four (04) Twin Engine Heavy Helicopters (TEHH)**.

2. This Request for Information (RFI) consists of Three (03) parts as indicated below:-

(a) **Part I**. The first part of the RFI incorporates operational characteristics and features that should be met by the equipment. Few important technical parameters of the proposed equipment 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 Vendor Selection/ Pre-Qualification in Buy Indian (IDDM), Buy (Indian) and Buy & Make (Indian) Cases (Annexure IV to Appendix A of Chapter II of DAP 2020).

PART - I

3. **Intended Use of Equipment (Operational Requirements)**. ICG is responsible to provide **Search and Rescue (SAR) and ensure safety & security to mariners** in EEZ spanning **200 Nm** from coastline and Indian Maritime Search and Rescue Region (ISRR) which in some areas extends up to **1000 Nm**. The TEHH is required to execute the ICG charter viz. Medical Evacuation, Search and Rescue, Fire-Fighting on-board vessels at sea, Maritime Pollution. The TEHH, with capability to operate **upto 200 Nm** is extremely critical in such situations requiring rapid augmentation of resources.

4. **Important Technical Parameters**. The important technical parameters are placed at **Appendix C**.

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

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

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

(c) The equipment of all TEC cleared vendors would be put through a trial evaluation in India on a 'No Cost No Commitment' basis. A staff evaluation would be carried out by SHQ to analyse the result of field evaluation and shortlist the equipment for introduction into service.

(d) Amongst the vendors cleared by GS evaluation, a Contract Negotiations Committee would decide the lowest cost bidder (L1) and conclude the appropriate contract.

(e) 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.

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

(g) **Offset (if applicable)**. The vendor has to undertake offset contracts amounting to 30% of the value of commercial proposals (Refer Appendix E to Chapter II of DAP 2020).

(h) **Integrity Pact (if applicable)**. An integrity pact is a mandatory requirement in the instant case (Refer Annexure I to Appendix O of Schedule I of DAP 2020).

(j) **Performance-cum-Warranty Bond**. Performance- cum- Warranty Bond both equal to 5% value of the contract inclusive of taxes and duties is required to be submitted after signing of contract.

(k) **ToT (if applicable)**. GOI is desirous of license production of equipment after acquiring ToT in the case.

PART - II

6. **Procedure for Response (Appendix A)**.

(a) Vendors must fill the form of response as given in **Appendix B**. 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 product can also be attached with the form.

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

(i) The Principal Director (Air Acquisition), Indian Coast Guard Headquarters, National Stadium Complex, New Delhi – 110001, Telephone No. +91-11-23115354, Fax No. +91-11-23381681 and E-mail ID: dte-aa@indiancoastguard.nic.in).

(c) An interaction meeting / VC will be held on **04 Jun 25** to address the queries of vendors. Last date to receive queries is **28 May 25**.

(d) Last date of acceptance of filled form is **04 Jul 25**. The vendors short listed for issue of RFP would be intimated.

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 the equipment is the 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.

Appendix A
(Refer to Para 6 of RFI)

REQUEST FOR INFORMATION: PROCEDURE FOR RESPONSE

Request for Information for Procurement of Four (04) Twin Engine Heavy Helicopters (TEHH)

1. The Indian Coast Guard is planning to procure **Four (04) Twin Engine Heavy Helicopters (TEHH)**. With the view to identify probable vendors who can undertake the said project, OEMs/ Authorised Vendors are requested to forward information on the product which they can offer. The parameters/ broad specifications of the item are mentioned in the questionnaire attached as per **Appendix C**. In addition the vendors are required to furnish details as per Proforma at **Appendix B**.

2. Apart from the information as per the Appendices the vendors may also forward technical details/product brochures/literature etc. pertaining to the item in question.

3. The required information/ details may please be forwarded at the following address by **04 Jul 25**:-

(a) User Directorate: The Principal Director (Air Acquisition), Indian Coast Guard Headquarters, National Stadium Complex, New Delhi – 110 001, Telephone No. + 91-11-23115354, Fax No. +91-11-23381681 and E-mail ID: dte-aa@indiancoastguard.nic.in)

Appendix B

VENDOR INFORMATION PROFORMA

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

_____
_____

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

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 / 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 (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:

(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 subsystems, 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 replacement by indigenous equivalents or interfacing with equipment of own choice:_____
_____

(n) Capability for carrying out comprehensive Maintenance, Repair & Overhaul, Calibration and obsolescence management of the equipment / platform / system along with associated jigs, fixtures & test setups during the designed service life of 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 C

REQUEST FOR INFORMATION: TWIN ENGINE HEAVY HELICOPTER

Instructions for furnishing information: -

(a) The vendor response should be filled in English only.

(b) The following units should be used- Weight (kilogram), Altitude (feet), Temperature (^{o}C), Distance (nautical miles), Pressure (hPa), Length (meters)

(c) Make and model of all equipment to be fitted for the project in the helicopter should be furnished in response column along with the information.

(d) There are Seven sections viz. General requirements, Performance Analysis, Avionics, Mission Sensors and DF Equipment, Communication Equipment, Lifesaving Equipment and Mission Profile. Please provide specific response/ compliance details.

SECTION I
GENERAL REQUIREMENTS

Definitions

1. **Green Helicopter**. - Helicopter without any mission equipment, sensors and operator stations.

2. **Basic Helicopter**. - Green helicopter equipped with mission sensors and equipment [Weather cum Surveillance Radar, Electro-Optical/Infra-Red Device, Search Light, Rescue Hoist, Automatic Identification System (AIS), air conditioning equipment, speech secrecy equipment, IFF transponder, emergency floatation gear and crew life rafts].

3. **Role**. The envisaged roles for the helicopter are as follows: -

   (a) **Primary**. The primary roles of the helicopter would be as follows:-

      (i) Maritime Surveillance and Interdiction

      (ii) Search and Rescue

      (iii) Rappelling Operations

   (b) **Secondary**.

      (i) Cargo and Personnel Transportation

      (ii) Pollution Response using external cargo carrying capability

      (iii) Casualty Evacuation

4. **Commercial Information**.

Sl No	Information Required	Response
(a)	Time required for submission of RFP	
(b)	Feasible Delivery Schedule after signing of contract	

5. **Helicopter Information & Characteristics**.

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Manufacturer, Mark and Model of helicopter	
(b)	Is the helicopter (Green or Basic) or variant thereof in operation with Armed Forces of any country? If yes, give details	
(c)	Does the helicopter comply with FAR Part 29	

Sl No	Information Required/Remarks	Response/ Compliance
	(Transport Category Helicopters) of the FAA, USA or JAR 29 of the EASA or military specifications of the country of manufacture?	
(d)	Is the helicopter Certified to operate by day and night for the entire capability requirement?	
(e)	Is the helicopter Certified to operate in Visual and Instrument Flight Conditions?	
(f)	Does the helicopter have corrosion resistant airframe design ideally suited for operation in humid and highly corrosive sea environmental conditions?	
(g)	Is the helicopter equipped with communication, navigation and mission systems for operations in domestic, international, civilian and military airspace?	
(h)	Is the helicopter equipped with Full Glass cockpit?	
(j)	Is the helicopter fitted with Health Usage and Monitoring Systems?	
(k)	Are suitable means provided to ensure safe exit of all aircrew in case of ditching?	
(l)	Endurance and range of the helicopter	

6. **Condition for Use**. The various conditions for the use of this helicopter are as follows: -

(a) **Performance Requirements**. Performance requirements must be met in Indian Reference Atmosphere (IRA) conditions. The relevant parameters of IRA are as below: -

(i)	Sea Level Mean Temperature	:ISA+15°C
(ii)	Reference temperature for take-off, hover & Landing	:ISA+20°C
(iii)	Upper Air Temperature for cruise and climb	:ISA + 15°C
(iv)	Lapse Rate from sea level to 16 km	: -6.5°C/km
(v)	Mean Sea Level pressure	:1005 hPa
(vi)	Relative Humidity	:95%

(b) **Tropicalisation**. Is the helicopter and its systems tropicalised to operate in following conditions:-

Sl No	Information Required	Response/ Compliance
(i)	Temperature range of -5°C to +45°C	
(ii)	Relative Humidity of 95%	

(c) **Storage Conditions**. Is the helicopter and its systems tropicalised for storage in following conditions:-

Sl No	Information Required	Response/ Compliance
(i)	Temperature conditions : -15°C to + 50°C.	
(ii)	Relative Humidity : Maximum 90% RH non-condensing	

7. **Ship Borne Operations**.

Sl No	Information Required	Response/ Compliance
(a)	Can the helicopter operate from ships with helideck measuring 22 m(L) x 10 m(B).	
(b)	Are adequate tie down / lashing points provided on the helicopter for lashed stability when tethered to the deck.	

8. **Power Plant**. The following helicopter power plant details may be furnished:-

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Is the helicopter powered by at least two engines?	
(b)	Does the engine incorporate a 'Digital Electronic Control system'?	
(c)	Does the helicopter have self-contained starter system without usage of external battery for purging, priming and starting the engines after a gap of up to 03 days?	
(d)	Is there capability to fit engines with sand filters/ particle separators for operations from unprepared sites.	
(e)	Is Take off power (TOP) specified in Kw and Shp.	
(f)	Is Maximum continuous power (MCP) specified in Kw @ Shp.	
(g)	Is Specific fuel consumption of Helicopter specified for the max AUW.	

9. **Fuel System**.

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Can all the fuel system tanks be replenished from pressure and gravity refueling point?	
(b)	Does the helicopter operate on Jet A, Jet A1, JP4, JP5, JP8, ATFK-50 and equivalent grades of fuel? Is the helicopter capable to operate on AVCAT fuel available onboard ICG ships?	
(c)	Is the helicopter capable of jettisoning fuel from Main tanks to reduce AUW for operational considerations?	
(d)	Is the helicopter capable of pressure/suction de-fueling on ground?	
(e)	Is there a provision for fitment of additional internal/ external fuel tanks?	
(f)	Is the helicopter equipped with pressure refueling system capable of Helicopter In Flight Refueling (HIFR)?	

10. **Flight Controls**.

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Is the helicopter provided with fully duplicated flying controls?	
(b)	Does the helicopter have four axis Automatic Flight Control System (AFCS) with stability and control augmentation?	
(c)	Is the helicopter capable of transiting to and from a hover height, which is pre-selectable through AFCS?	
(d)	Is the helicopter capable of Barometric and Radio Altimeter Height Holds (BARALT and RADALT)	

11. **Transmission System**.

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Is the MGB capable of a minimum flight time of at least 20 minutes after the annunciation of a warning caption/light.	

12. **Undercarriage**. Helicopter shall have wheeled undercarriage landing gear for ship borne operations

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Is the helicopter fitted with a wheeled undercarriage landing gear?	
(b)	If the undercarriage is retractable, is there a provision for lowering by emergency means if the primary means fail.	
(c)	Have Parking brakes been provided?	

13. **Rotor Blades**.

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Is there a provision of automatic and/ or manual folding and spreading of MRB?	
(b)	Have the Rotor brakes been provided?	

14. **Cockpit and Cabin**.

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Is the Flight deck and Cabin of the helicopter air-conditioned in air and on ground?	
(b)	Is NVG compatible cockpit instrumentation provided in the helicopter? Are the NVG Compatible Displays and controls readable in the full range of anticipated light conditions during day, night, VMC and IMC?	
(c)	Is at least one portable fire extinguisher provided in the cabin and flight-deck?	

15. **Crew Station**. Does the helicopter have provision for the following crew stations?

S.No	Crew	No.	Response/ Compliance
(a)	Pilot	02	
(b)	Crew/winch operator	01	
(c)	Crew	01	

16. **Electrical Power Supply**.

Sl No	Information Required	Response/ Compliance
(a)	If the helicopter uses electrical power for starting, is it capable to accept 28 Volt DC/ 115 Volt 400 Hz three phase AC from external power source using standard NATO adapters?	

17. **Ceiling**.

Sl No	Information Required	Response/ Compliance
(a)	The service ceiling of the helicopter should not be less than 10000 feet?	

18. **Environment Protection**.

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Is the helicopter and the complete installed or portable role equipment, whether sheltered or unsheltered, suitably protected against Solar Radiation, Fungus, Rain, Salt Spray, Sand and Dust, Wind Velocity, Shock, Degree of Exposure, EMI/EMC/RFI and Safety Distance for active emitters?	
(b)	Does the helicopter design ensure that the EMI does not cause safety of flight issues, faults that are not recoverable while in flight or system degradation that effect mission performance?	

19. **Navigational Lights**.

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Are the Navigational lights provided in the helicopter NVG compatible?	
(b)	Are the quantities and specifications of the Navigation lights as per ICAO regulations?	

20. **Miscellaneous Issues**.

Sl No	Information Required	Response/ Compliance
(a)	Is the Tele brief system capable of providing voice information to crew from outside the helicopter on deck been provided?	
(b)	Is the wheel brake system provided capable of being used during cold and hot move of the helicopter?	
(c)	Is there a Sonar Locating Beacon/Underwater Locating Beacon fitted on the helicopter?	
(d)	Is the helicopter equipped with an Emergency Floatation Gear?	
(e)	Is the helicopter equipped with a Digital Video Recording System with atleast 05 hours recording time for recording video from radar and EO/IR device?	

21. **All Up Weight (AUW) Considerations**.

Sl No	Information Required	Response/ Compliance
(a)	**Max AUW**. The maximum all up weight of helicopter for the heaviest configuration including maximum permissible fuel and stores for that particular configuration and complete complement of crew and weight growth margin **should not exceed 12000 kg**.	
(b)	**Reduced All Up Weight**. For the purpose of stage through from ICG ships, the helicopter should be capable of operating at a reduced all up weight **not exceeding 10000 kg**.	
(c)	Helicopter Max AUW with external load (under slung) **should not be less than 11000 Kg**.	
(d)	Max Cargo sling capacity **should not be less than 3500 Kg**.	
(e)	Payload capacity in terms of weight and volume or cargo be elucidated.	

22. **Inspections**. The **flight hourly based** and **calendar based inspections** for the airframe should be clearly specified. However, the total technical life of the helicopter **should not be less than 20,000 Hrs life cycle**. In the addition **Total Technical Life** and **Time between Overhaul** for the following critical equipment should also be specified:-

Sl No	List of Equipment
(a)	Main Rotor Hub.
(b)	Tail Rotor Hub.
(c)	Engine.
(d)	Main Gear Box.
(e)	Tail Gear Box.
(f)	Power Turbine.
(g)	Engine/MGB liaison shaft.
(h)	Intermediate Gear Box.
(j)	Alternator.
(k)	Main Servo Control.
(l)	Tail Servo control.
(m)	HP Gas Generator.
(n)	Main Rotor Blade.
(p)	Tail Rotor Blade.
(q)	Air Intake casing
(r)	Axle compressor
(s)	Main Rotor sleeve
(t)	Rotating and non-rotating swash plate

23. **Flight Servicing**.

(a) **Before Flight Servicing (BFS)**.

(i) BFS is the servicing required to confirm that an aircraft is fit to fly for one flight or for the first flight of a period of planned flying.

(ii) A BFS schedule comprises operations to check aircraft systems/structure for potential flight safety hazards which may have arisen since the AFS, or as a result of other maintenance activities.

(iii) A BFS is valid until the next AFS is called up if the aircraft flies or for a period of 24 hours from its commencement when the aircraft is not flown.

(b) **Turn Round Servicing (TRS)**.

(i) A TRS is variable content servicing required to prepare aircraft for flight between all flights in a period of planned flying.

(ii) A TRS schedule comprises operations covering mandatory Servicing and external checking of the aircraft for potential flight safety hazards. Periodic Servicing Consumable replenishments and other operations having a specific periodicity. As Required Servicing. of specified consumables and other systems.

(iii) A TRS is valid for the sortie immediately following its completion or for a period of 6 hours from completion of the last flight when the aircraft is not flown.

(c) **AFTER FLIGHT SERVICING (AFS)**.

(i) An AFS is the servicing required to determine the serviceability of an aircraft after a period of planned flying. Carry out early preparation of an aircraft for its next flight or period of planned flying.

(ii) An AFS schedule comprises operations covering replenishment of all consumables and examination of the aircraft for defects which are not evident to the aircrew during flight.

(iii) An AFS is valid for a maximum period of 36 hours from commencement of the first flight after completion of a BFS or 72 hours from commencement of an AFS where the aircraft is not flown.

24. **Paint Scheme**. All helicopters are to be delivered in Indian Coast Guard paint scheme.

SECTION II

PERFORMANCE ANALYSIS

1. The performance analysis of the helicopter shall be based on the basic helicopter configuration and impact of **all modifications** shall be demonstrated if the evaluation is conducted on a **Green** helicopter.

Indian Reference Atmosphere/Helicopter Operating Environment

2. The details of Indian reference atmosphere and helicopter operating environment for performance analysis are mentioned below: -

(a)	Sea Level Mean Temperature	ISA+15°C
(b)	Reference temperature for take-off, hover and Landing	ISA+20°C
(c)	Sea Level Mean Pressure	1005 Hpa
(d)	Reference temperature for performance	ISA+20°C
(e)	Lapse Rate from sea level to 16 km	-6.5°C/km
(f)	Relative Humidity	95%

Helicopter Configuration

3. The performance analysis of the helicopter shall be demonstrated as per role configurations specified at **Section VII** of this document.

SECTION III

AVIONICS

1. **Avionics Suite**.

Sl No	Information Required	Response/ Compliance
(a)	**Glass Cockpit**. Is the helicopter equipped with a certified full glass cockpit containing the following minimum equipment/system? Give details. (i) Flight Management System (ii) SAR Search Mode (iii) Tactical/ Mission display system for radar, Electro Optical/Infra-Red Device and AIS with AIS return overlaid on radar display	
(b)	**Navigation and Landing System**. Is the helicopter equipped with the following certified navigation and landing equipment? Give details (i) VHF Omni Range (VOR) (ii) Instrument Landing System (ILS) (iii) Distance Measuring Equipment (DME) (iv) Integrated Global Positioning System/ Inertial Navigation System (INS) or Dual GPS system	
(c)	**Safety and Emergency Equipment**. Is the helicopter equipped with the following certified safety and emergency equipment? Give details (i) Enhanced Ground Proximity Warning System (EGPWS) (ii) Traffic Alert and Collision Avoidance System II (TCAS II) (iii) ATC Transponder with Altitude Reporting System / Mode C and S Transponder Systems. (iv) Solid State CVR/DFDR with CVR capacity of 03 channels with 120 minutes recording time and DFDR data capacity of 06 hrs (v) Deployable Emergency Locator Transmitter (ELT) transmitting on 406 Mhz, 243 Mhz and 121.5 Mhz (last two frequencies are optional) with CVR/FDR memory module.	
(d)	**Standby Instrument System**. Is the helicopter fitted with a standby instrument panel with independent power supply with atleast the following instruments? (i) Attitude Indicator (ii) Magnetic Heading Indicator (iii) Airspeed Indicator	

Sl No	**Information Required**	**Response/ Compliance**
	(iv) Altimeter	
(e)	**Tactical Equipment**. Is the helicopter able to be fitted with IFF Mk XII (S) as Buyer Nominated Equipment	

SECTION IV

MISSION SENSORS AND DF EQUIPMENT

1. **Sensor Information**.

<table>
<tr><th>Sl No</th><th>Information Required/Remarks</th><th>Response/ Compliance</th></tr>
<tr><td colspan="3">Weather cum Surveillance Radar Is the helicopter equipped with a new generation digital Surveillance cum weather radar fully compatible with the glass cockpit provided and has the following capabilities? Give details</td></tr>
<tr><td>(a)</td><td>Digital colour radar system. Make and Model of radar fitted/ can be fitted</td><td></td></tr>
<tr><td>(b)</td><td>A useful angle of + or 90^0in the forward sector, with max range in excess of 100 nm.</td><td></td></tr>
<tr><td>(c)</td><td>Capable of detection, classification, tracking and recording of marine targets.</td><td></td></tr>
<tr><td>(d)</td><td>Auto tracking features (TWS) for atleast 100 detected targets.</td><td></td></tr>
<tr><td>(e)</td><td>Small target detection mode (for search & rescue missions, life rafts.</td><td></td></tr>
<tr><td>(f)</td><td>SAR, ISAR and MTI classification modes.</td><td></td></tr>
<tr><td>(g)</td><td>Beacon or SART mode.</td><td></td></tr>
<tr><td>(h)</td><td>Secondary back up weather avoidance and navigation mode with real beam mapping.</td><td></td></tr>
<tr><td>(j)</td><td>Detection Range at ISA + 25^{o}C and relative humidity 80 % the ranges shall be more than:-
<table>
<tr><td>Height Band (ft AMSL)</td><td colspan="3">Range in Nm (+ or - 15%)</td></tr>
<tr><td>Target Type</td><td>Life raft</td><td>Fast Patrol Boat</td><td>Frigate</td></tr>
<tr><td>1000</td><td>10 nm</td><td>15 nm</td><td>30 nm</td></tr>
<tr><td>3000</td><td>15 nm</td><td>20 nm</td><td>40 nm</td></tr>
<tr><td>5000</td><td>20 nm</td><td>30 nm</td><td>70 nm</td></tr>
</table></td><td></td></tr>
<tr><td colspan="3">Electro Optic/ Infra Red Device</td></tr>
<tr><td>(a)</td><td>Is the helicopter able to be fitted with an Electro/optical payload as Buyer Nominated Equipment</td><td></td></tr>
<tr><td colspan="3">Automatic Identification System</td></tr>
<tr><td>(a)</td><td>Is the helicopter equipped with latest generation AIS Integrated with radar or through moving map display?</td><td></td></tr>
</table>

SAR Direction Finding(DF) Homer		
(a)	Is VHF/UHF omni-directional DF homing system provided with DF and Homing capability on 406 Mhz, 243 Mhz and 121.5 Mhz.	

2. **Operational Role Equipment**.

Sl No	Information Required/Remarks	Response/ Compliance
(a)	**Weapon**. A 12.7 mm Heavy Machine Gun will be Buyer Nominated Equipment. Weapon to be integrated as a cabin mount in the helicopter.	
(b)	**Cargo Hook**. Is the helicopter provided with an external cargo hook/device with a SWL of at least 2500 kilograms? Is there a jettisoning arrangement provided for stores carried on cargo hook?	
(c)	**Rescue Hoist**. Is the helicopter equipped with a rescue hoist of lifting capacity 270 kg with spotlight and provision of emergency cable cutting by explosive and manual devices?	
(d)	**Searchlight**. Is the helicopter provided with a pilot controlled searchlight with following features? (i) Xenon lamp with wattage of up to 1600W. (ii) Peak Luminance – 30 million Candle power	

SECTION V

COMMUNICATION EQUIPMENT

1. **Communication Equipment**. Is the helicopter equipped with following communication equipment?

S.No	Equipment	Qty	Remarks	Response/ Compliance
(a)	VHF / UHF (30 to 400 MHz) AM – FM Trans-receiver Communication Set	2	(i) Tactical VHF / FM 30 to 88 MHZ (ii) Air Traffic Control 118 to 136.975 MHz (iii) Land Mobile AM 136 to 156 MHz (iv) Maritime 156 to 173.975 MHz (v) Military UHF/FM/AM 225 to 399.975 MHZ (vi) Guard receivers for monitoring and transmission on 121.5, 243 MHz and 406 Mhz. If not provided on the main set, capability should exist as a stand-alone on SAR DF.	
(b)	HF Trans-receiver Communication Set	1	(i) Frequency 2 – 29.9999 (ii) Transmitter 150 watt or more (iii) Voice and HF Data link capability	
(c)	Audio Intercommunication System	1	(i) Facility for all crew members to communicate with one another from their assigned stations (ii) One Communication port outside the helicopter for communicating with ground crew	
(d)	**Speech Secrecy equipment**	**1**	Is the helicopter able to be fitted with Speech Secrecy Equipment as Buyer Nominated Equipment?	

SECTION VI

LIFE SAVING EQUIPMENT

1. **Life Saving Equipment**. The aircraft will be operating in coastal areas and over sea for operations. Are these helicopters provided with/ designed for embodiment of following life safety equipment:-

(a) **SAR Equipment**.

Sl	Equipment	Qty	Remarks
(i)	Rescue Basket	1	
(ii)	Loud Hailer	1	

(b) **Crew Safety Equipment**. The following equipment should be able to be supplied with the helicopter:-

Sl	Equipment	Remarks
(i)	Flying Helmets	Flying helmets. For two sets of crew. Light weight, ergonomically designed for tropical climates. With noise cancelling microphones
(ii)	Crew Life Raft	With emergency supplies and portable Emergency Location Transmitter.
(iii)	Crew Mae Wests	For two sets of crew
(iv)	Passenger life jacket	As per seating capacity plus 02 spare. Manually operated CO_2 cylinder type
(v)	Passenger Life Rafts	As per seating capacity

SECTION VII

MISSION PROFILE

PLEASE GIVE THE PERFORMANCE PARAMETERS OF THE HELICOPTER FOR THE MISSION PROFILES INDICATED

1. Performance figures are to be referenced to ISA + 20^{o}C and the aircraft is to be considered at basic operating weight consisting of helicopter equipped with mission sensors, and equipment [Weather cum Surveillance Radar, Electro Optical/Infra-Red Device, Search Light, Rescue Hoist, Automatic Identification System (AIS), air conditioning equipment, speech secrecy equipment, IFF transponder, emergency floatation gear and crew life rafts].

Sl No	**Mission.**	**Maritime Surveillance**	**Maritime Surveillance + Interdiction**	**Maritime Surveillance + SAR**	**Rappelling/ Slithering**
		(i)	(ii)	(iii)	(iv)
(a)	Crew (@ 85 kg each)	02	03	04	03
(b)	Mission Specific load		**BFE** payload of 200 kg	SAR air droppable Life rafts Smoke markers, dye, flares etc. payload of 100 kg	**10 Personnel** @ **90 kg (with equipment)**
(c)	Distance of Patrol Area from base /	**200 nm**	**200 nm**	**200 nm**	**100 nm**
(d)	Cruise altitude	≤ 5000 feet AMSL	≤ 5000 feet AMSL	≤ 5000 feet	≤ 5000 feet AMSL
(e)	Mean Cruise Speed (TAS)	≥ 125 knots	≥125 knots	≥125 knots	≥125 knots
(f)	Patrol Height	1000 feet	1000 feet	1000 feet	Not Applicable
(g)	Patrol Speed	≥ 70 Knots	≥70 knots	≥ 70 knots	Not Applicable

Sl No	Mission.	Maritime Surveillance	Maritime Surveillance + Interdiction	Maritime Surveillance + SAR	Rappelling/ Slithering
		(i)	(ii)	(iii)	(iv)
	(IAS)				
(h)	Time at Patrol Station(in minutes)	**75**	**60**	**60**	**30**
(j)	Return to base	**200 nm**	**200 nm**	**200 nm**	**100 nm**
(k)	Hold at 1000 feet over destination	15 minutes	15 minutes	15 minutes	15 minutes
(l)	Usable Fuel reserve on landing	20 min	20 min	20 min	20 min

2. In addition to the above, is the helicopter capable to perform the secondary missions **with or without auxiliary fuel tanks**, details of which are elaborated in the following paragraphs. Performance figures are to be referenced to ISA+20^{o}C and the aircraft is to be considered at basic operating weight consisting of helicopter equipped with mission sensors and equipment [Weather cum Surveillance Radar, Electro-Optical/Infra-Red Device, Search Light, Rescue Hoist, Automatic Identification System (AIS), air conditioning equipment, speech secrecy equipment, IFF transponder, emergency floatation gear and crew life rafts]

3. **Cargo Transportation**. Is the helicopter capable of the following:-

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Minimum cargo load of **1250 Kg**, for a ferry at least up to **300 nm** with 15 minutes of fuel for holding over destination and 20 minutes of usable fuel reserves on landing.	
(b)	Of transporting its own common support equipment and fly away spare kits to forward operating base for detached operations.	
(c)	Having stowage space for carriage of essential ground support equipment within the aircraft when deployed at forward operating bases for a period of one month and sustain a flying effort of up to 80 hours	

4. **Personnel Transportation**. Is the helicopter capable of the following:-

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Ferry at least **12** passengers (80 kg each) to a distance of **300** nm without removing the equipment specified at Para 2 above.	
(b)	Being re-configured from maritime surveillance and interdiction role to transportation role by a team of not more than five qualified persons within **120** minutes and vice versa.	

5. **Casualty Evacuation**. Is the helicopter capable of the following:-

Sl No	Information Required/Remarks	Response/ Compliance
(a)	Provision for fitment of at least **10** standard stretchers to carry **10** casualties and **01** attendant seats without removing the equipment specified at Para 2 above.	
(b)	Provision of fitment of **02** MICU stretchers in lieu of 10 normal stretchers for functioning as an air ambulance	
(c)	Being re-configured from maritime surveillance and interdiction role to casualty evacuation role by a team of not more than five qualified persons within **120** minutes and vice versa.	
(d)	Being re-configured from Personnel Transportation role to casualty evacuation role by a team of not more than five qualified persons within **120** minutes and vice versa.	

6. **Mission Profile at Reduced All Up Weight of 10000 Kg**. Is the helicopter capable to meet the mission profiles at a reduced All Up Weight of 10000 kg **with or without auxiliary fuel tanks**, details of which are elaborated in the table below. Performance figures are to be referenced to ISA+20^{o}C and the aircraft is to be considered at basic operating weight consisting of helicopter equipped with mission sensors and equipment [Weather cum Surveillance Radar, Electro-Optical/Infra-Red Device, Search Light, Rescue Hoist, Automatic Identification System (AIS), air conditioning equipment, speech secrecy equipment, IFF transponder, emergency floatation gear and crew life rafts].

Sl No	Mission.	Maritime Surveillance	Maritime Surveillance+ Interdiction	Maritime Surveillance +SAR	Rapelling
		(i)	(ii)	(iii)	(iv)
(a)	Crew (@ 85 kg each)	02	03	04	03

Sl No	**Mission**.	**Maritime Surveillance**	**Maritime Surveillance+ Interdiction**	**Maritime Surveillance +SAR**	**Rapelling**
		(i)	(ii)	(iii)	(iv)
(b)	Mission Specific load		BFE payload of 200 kg	SAR air droppable Life rafts Smoke markers, dye, flares etc. payload of 100 kg	**07 Personnel @ 90 kg (with equipment)**
(c)	Distance of Patrol Area from base/	**50 nm**	**50 nm**	**50 nm**	**50 nm**
(d)	Cruise altitude	≤ 5000 feet AMSL	≤ 5000 feet AMSL	≤ 5000 feet	≤ 5000 feet AMSL
(e)	Mean Cruise Speed (TAS)	≥ 125 knots	≥125 knots	≥125 knots	≥125 knots
(f)	Patrol Height	1000 feet	1000 feet	1000 feet	Not Applicable
(g)	Patrol Speed (TAS)	≥ 70 Knots	≥70 knots	≥ 70 knots	Not Applicable
(h)	Time at Patrol Station (in minutes)	**75**	**50**	**60**	**10**
(j)	Return to base	50 nm	50 nm	50 nm	50 nm
(k)	Usable Fuel reserve on landing	20 minutes	20 minutes	20 minutes	20 minutes