

**IT NO : IT/36/01/2024-25**

**IT SPECIFICATION FOR CONDUCT OF 7500 HOURS (TOH) ROUTINE OF 02 X MTU  
MAIN ENGINES NO 1 AND NO 2 – PMSS DASHT.**

S No	Description	
1.	Parent Equipment	Ship's Propulsion Plant
2.	Sub-equipment	Main Diesel Engines MTU
3.	Assembly equipment	02x Main Engines MTU 16V 4000 M73L
4.	Make	MTU 16V4000M73L 5. Model 16V4000M73L Germany
6.	Quantity	02 7. Justification 7500HOURS PMS ROUTINE (TOH) PMS No 3-1118-0001 & 2 MOP No 028 Up to 059
9.	Detailed scope of work	<ul style="list-style-type: none"> <li>a. Before starting maintenance work, carry out test run and record operating parameters. Then drain coolant</li> <li>b. Check buffer clearance of resilient mounts and check proper seating of securing screws.</li> <li>c. Replace engine coolant clean and pressure test cooler inspect it for leaks</li> <li>d. Clean air ducting, air intake and exhaust galley clean intercooler and inspect for leakage</li> <li>e. Clean engine oil cooler, pressure test and inspect it for leaks</li> <li>f. Clean engine gear box oil cooler, pressure test and inspect it for leaks</li> <li>g. Overhaul engine coolant pumps, Raw water pump, bilge pump and Turbo charger</li> <li>h. Replace Injectors with new injectors.</li> <li>i. Inspect cylinder chambers using endoscope.</li> <li>j. Inspect/servicing rocker arms, Valve Bridge for wear and valve adjustment.</li> <li>k. Check operation of diverter valve</li> <li>l. Fit new seals/sealing materials for all disassembled components</li> <li>m. Visually inspects piston crowns and wears pattern on cylinder liner running surfaces overhaul cylinder heads.</li> <li>n. Replace engine oil, cyclone-type filter element, air filter element, centrifugal, oil filter, fuel pre filter, duplex filter and candles filter</li> <li>o. Check/Repair Engine wiring</li> <li>p. Limit switch for start interlock.</li> <li>q. Checking plug connections engine control unit ECU 7.</li> <li>r. Engine monitoring unit emu 8 - plug connections check.</li> <li>s. Inspection of Iop and connectors and interface module plug connections</li> <li>t. Check all sensors, safeties, Fit new high-pressure fuel sensor check engine coolant thermostat and fit new thermostat actuator</li> <li>u. Overhaul air starter.</li> <li>v. Inspection of engine mounting and carry out vibration analyzing</li> <li>w. Firm is responsible for All parts and in way accessories removal, Re-installation shifting and safety of men and material during work</li> <li>x. Providing of all new spare parts, oil and coolant (OEM specified only) are responsibility of the firm</li> <li>y. Only OEM recommended spares/ components are to be used by the firm.</li> <li>z. Any growth work during conduct of routines will be soul responsibility of the contractor.</li> </ul>
8.	Work required/ Defect	Conduct 7500 hours (TOH) PMS Routine of 02 x Main Engines MTU.
10.	Technical specs	As per OEM Manual/ Specs
11.	Eligibility criteria	Reputable local contractor (OEM certified only) with valid certification from MTU.
12.	EDC	15 days
13.	Warranty	01 year (After Satisfactory report of VA, HATs and SATs).
14.	Acceptance criteria	<ul style="list-style-type: none"> <li>a. Conducting of complete PMS 7500 hours Routine.</li> <li>b. Satisfactory report VA, HATs &amp; SATs.</li> <li>c. Firm will be onboard during HATs and SATs.</li> <li>d. Complete report of lama profile.</li> </ul>
15.	Any other information	Coordinate with Ship staff.

**IT NO : IT/36/02/2024-25**

**PMSS HINGOL**

**IT SPECIFICATION FOR PURCHASE OF OPEN CIRCUIT DIVING SET WITH COMPLETE ACCESSORIES (NSN 0434-72-000-0001)**

1	Parent Equipment	The diving equipment to be utilized for safe conduct of Diving ops requirements.
2	Sub Equipment	A robust diving set with proven performance providing the diver with the confidence required to accomplish any diving operation. The equipment reliable and easy to operate/ maintain.
3	Assembly Component	a. 02 x Diving Cylinder 9-11 Ltrs, Aluminum Alloy. b. 01 x Bouncy Compensator with HP Connector Hose. c. 01 x Diving Regulators 2 Stages Octopus Type With Depth Pressure & Compass Gauges Console. d. 01 x Regulator to cylinder Attachment Valves (Twin-J Valve) with Reserve. e. 01 x Regulator to cylinder Attachment Valves (Single-J Valve) with Reserve. f. 01 x Diver harness configurable for single or double cylinder operation. g. 01 x 3mm wet suit hood and boots. h. 01 x 5mm diver boots. j. 01 x Diver face mask. k. 01 x Diving fins. l. Complete documentation to include part catalogue operation and maintenance manuals along with software.
4	Make	Draeger Safety AG & Co. Germany/ Aqua-Lung France or Equivalent
5	Qty	04 In Sets
6	Detailed scope of work	Procurement of open circuit diving set with complete accessories/ Technical details/ Literature/Brocher.
7	Technical Spec	A twin compressed air cylinder ( 02 x 10 Ltrs) with connectors and emergency air supply bailout bottle (with BC)
8	Eligibility Criteria	a. Any Local/ International registered firm with good reputation. b. Having capability w.r.t experience/ expertise etc for said work.
9	EDC	Not Known
10	Warranty	02 Years
11	Acceptance Criteria	a. Genuine OEM Certified Brand New Stores will only be acceptable. b. Inspection by end/ Specialist user and after successful trials.

**IT NO : IT/36/03/2024-25**

**IT SPECIFICATION – RESTORATION/ REPLACEMENT OF CONTROL AND MONITORING SYSTEM OF 04 X MAIN ENGINES - PMSS REHMAT**

S No	IT Specification	
1.	Parent Equipment	Main Engine MTU 16 V 396 TB 93
2.	Sub Equipment	CONTROL AND MONITORING SYSTEM
3.	Assembly Component	Throttle control, Semi control and Monitoring panel
4.	Make	MTU Germany
5.	Model	16V396TB93
6.	Quantity	04 in No in MCR & 04 in No at Bridge (each)
7.	Justification i.e. PMS/ Failure/ FWT etc	Control and Monitoring system observed malfunctioning during operation due F.W.T/ old vintage
8.	Work required/ Defect	Throttle, semi control and monitoring system are to be restored/ upgrade for satisfactory operation of main engines
9.	Technical Specification	<ul style="list-style-type: none"> <li>a. 04 X Throttle control lever at MCR</li> <li>b. 04 X Semi control panel at MCR</li> <li>c. 04 X Throttle control lever at Bridge</li> <li>d. 04 X Semi control panel at Bridge</li> <li>e. 04 X Monitoring panel at MCR</li> <li>f. 04 X Monitoring panel at Bridge</li> <li>g. Calibration/ synchronization of throttle, semi control and monitoring system with engine RPM</li> </ul>
10.	Scope of work	<p>Following work is required to be undertaken for the restoration/ replacement of control and monitoring system</p> <ul style="list-style-type: none"> <li>a. Restoration/ replacement of monitoring and control system in MCR &amp; Bridge</li> <li>b. Wiring to be checked and replaced as marine version.</li> <li>c. Lugs and breakers are to be replaced.</li> <li>d. ECM/ RCM to be restored/ replaced.</li> <li>e. 08 x RPM meter to be calibrated with control and monitoring system.</li> <li>f. All sensors and switches of main engine are to be synchronized with control module.</li> <li>g. Engine starting/ stopping engage/ disengage of clutch emergency shut down and safeties indication to be made available in MCR and Bridge.</li> <li>h. All control TBs (Terminal boxes) are to be replaced.</li> <li>i. All branded spares (marine version) are to be used having Part No/ NSN No with complete technical specifications for further availability of spares.</li> <li>k. Part Catalogue and Technical Manual of equipment be provided.</li> <li>l. Beep/ tone sound including warning and shutdown alarm/ buzzer are to be made available</li> <li>m. Firm must provide testing/ safety and calibration certificate for all panels and supply distribution boxes.</li> </ul>
		<ul style="list-style-type: none"> <li>n. All spares, tool, special equipment/ tools, accessories etc required for said restoration/ replacement are to be arranged by firm.</li> <li>p. Provision of buzzer/ indication of control at MCR/ Bridge.</li> <li>q. Any damage/ defect/ wear tear occur during the course of removal, repair and installation of system/ equipment will be repaired/ met by firm.</li> </ul>
11.	Eligibility Criteria	<ul style="list-style-type: none"> <li>a. The firm must visit onboard and carry out diagnosis/ inspections to establish the extent of required work.</li> <li>b. Firms not undertaking the visit onboardship to see extent of work will not technically qualify.</li> <li>c. The firm must have sufficient experience of same kind of work and experience of control/ monitoring system of MTU.</li> </ul>
12.	EDC	30 x Working Days after issuance of work/ confirmation order
13.	Warranty	02 Years for service and 01 year of parts after completion of work and successful trials
14.	Acceptance criteria	<ul style="list-style-type: none"> <li>a. 04 X Throttle control lever at MCR</li> <li>b. 04 X Semi control panel at MCR</li> <li>c. 04 X Throttle control lever at Bridge</li> <li>d. 04 X Semi control panel at Bridge</li> <li>e. 04 X Monitoring panel at MCR</li> <li>f. 04 X Monitoring panel at Bridge</li> <li>g. Calibration/ synchronization of throttle, semi control and monitoring system with engine RPM</li> <li>h. Satisfactory operation of equipment</li> <li>j. Acceptance by SS</li> </ul>
15.	Any other relevant information	

**IT NO : IT/36/04/2024-25**

**PMSS KASHMIR**

**IT SPECIFICATION: DEFECT RECTIFICATION OF OIL MIST DETECTION SYSTEM OF  
FWD MAIN ENGINE**

1.	System	Main Engine
2.	Sub system	Oil Mist Detection System
3.	Assembly	Mist Detector and Male/ Female Plug
4.	Make	HEINZMANN
5.	Model	TRITON – I
6.	Quantity	01 (Engine)
7.	Justification i.e PMS/ Failure/ FWT	FWT
8.	Work Required/ Defect	Defect rectification of malfunctioning of Fwd Main Engine Oil Mist Detection system
9.	Detailed scope of work	a. Dismantling of detectors and control board b. Dismantling adopters/ plug connectors (male/ female) c. Identification of defective components d. Repair & replacement (defective items only) of OMD sensor and male/ female connectors e. Recalibration/ installation of software in Control panel for satisfactory operation of the oil mist detection system f. Installation of detector and control board g. Complete work to be done while keeping Engine in operational state
10.	Technical Specs	As per relevant TPI
11.	EDC	60 Days
12.	Warranty	02 Years
13.	Eligibilities	a. Have experience to work onboard ships (preferably PMSA ships) b. Company must be certified with HQ PMSA c. Company must be Income and Sales tax registered
14.	Acceptance Criteria	a. Successful HATs and SATs on Fwd main engine. b. Satisfactory trials/ operation of Fwd main engine upto 1000 RPM with normal parameters for various durations during prolonged sea operations. c. Ship staff satisfaction on operation of oil mist detection system. d. Firm must provide following documents: 1). Certificate of Conformity by OEM (CoC). 2). Bills of Landing from abroad (if applicable).
15.	Any other relevant information	Contact Ship Staff (Cell 0321-3000503)

**IT NO : IT/36/05/2024-25**

**EASTERN WING**

**IT SPECIFICATIONS - REPAIR/ REPLACEMENT OF ACCESSORIES/ SPARES FOR  
CATERPILLAR C-9 MAIN ENGINES INSTALLED ONBOARD FRB-151**

1.	Ship's Name	FRB-151				
2.	Parent Equipment	Caterpillar C-9 Main Engines (S No Stbd X9Y00358 & Port X9Y00351)				
3.	Sub Equipment	Intake/ exhaust and cooling system				
4.	Assembly Component	As mentioned below (S No 11)				
5.	Make	Caterpillar, USA				
6.	Model	C-9, USA				
7.	Quantity	As mentioned below (S No 11)				
8.	Justification i.e PMS/ Failure/ FWT etc	Performance of installed C-9 main engines degraded due old vintage/ FWT of associated accessories/ spares. Repair/ replacement considered essential for optimum performance of main engines.				
9.	Work Required/ Defect	Repair/ replacement of accessories/ spares for C-9 main engines as per attach list				
10.	Detail Scope of Work	Repair/ replacement of accessories/ spares for C-9 main engines as per attach list				
11.	Technical Spec	<b>S No</b>	<b>Part Number</b>	<b>Description</b>	<b>Make/ Origin</b>	<b>Qty Recommended for Repair/ replacement</b>
		a.	353-7979	AUXILIARY WATER PUMP	Caterpillar, USA	02
		b.	308-9314	AIR CLEANER ELEMENT	----//----	02
		c.	331-8905	ENGINE OIL PUMP	----//----	02
		d.	262-7609	TURBO CHARGER	----//----	02
		e.	192-3534	COOLER AS OIL	----//----	02
12.	Eligibility Criteria	Any local/ international firm having experience of supplying caterpillar (C-9) engines original accessories/ spares.				
13.	EDC	30 days				
14.	Warranty	01 x year after installation onboard.				
15.	Acceptance Criteria	Inspection by end user & successful onboard trials after installation				
16.	Any other relevant information	➤ Repair/ replacement of standard/ USA origin parts for C-9 engines may be ensured by contracted firm. ➤ Provision of shipment documents or COC by contracted firm.				

**Note: 100% Payment after completion by CNA**

**Director General**

Pakistan Maritime Security Agency

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E-Mail [dpcc@pmsa.gov.pk](mailto:dpcc@pmsa.gov.pk)**INVITATION TO TENDER GENERAL INSTRUCTIONS****1. CONDITIONS GOVERNING CONTRACT:**

All Procurement / Repairs / Maintenance Contract, Local Purchase Order (LPO) and work ordered made as a result of this IT shall mean the agreement entered into between the parties that is buyer and the supplier will be in accordance with the PPRA rules 2004 or any amendment issued from time to time. Therefore all open tender inquiry will be uploaded on PPRA Website and publish on print media as the case may be.

**2. SUBMISSION OF TENDER:**

Firms shall submit their offers in two separate envelopes clearly marked as "**Commercial Offer**" and "**Technical Offer**" for open tender. Both envelopes shall be properly sealed bearing the signature of the bidder. Thereafter both these envelopes shall be placed in one bigger envelope. This envelope should bear the address of the D (P&CC).

a. **TECHNICAL OFFER:** Should contain all relevant details and specifications as per the IT specifications. Literature / Brochure or any other relevant technical details may also be included in it. Technical offer should not contain the price. Indication of price in technical offer may render it null and void. The word "Technical Offer" should be clearly mentioned along with the tender No and date on the envelope containing the technical offer.

b. **COMMERCIAL OFFER:** The price be quoted in figures as well as in words along with essential Literature / Brochures. The word "Commercial Offer", tender number should be clearly mentioned on the envelope. Taxes, duties, freight / transportation, insurance charges etc if any are to be indicated separately. Total price of the items quoted against the tender is to be clearly mentioned. It should also contain a **pay order 2% in the shape of pay order of the offered value** as earnest money. Cross cheque or cash is not acceptable in this case. The offer received without earnest money will be rejected.

c. **SPECIAL INSTRUCTIONS:** Tender documents and its conditions may please be read point to point and understood properly before quoting. All tender conditions should be responded properly. In case of any deviation due to non-acceptance of tender conditions, the same should be highlighted along with changed offer / conditions. Tender may however be liable to be rejected.

**PREPARATION OF QUOTATION**

Please prepare quotation in this format In case of GST @ 18% or SST @ 15%:

<u>S.NO</u>	<u>Description</u>	<u>Unit Price</u>	<u>Qty</u>	<u>Total</u>	<u>GST @ 18% or SST @ 15%.</u>	<u>T/Price</u>

Please prepare quotation in this format In case of without GST or SST:

<u>S.NO</u>	<u>Description</u>	<u>Unit Price</u>	<u>Qty</u>	<u>Total</u>	<u>T/Price</u>

**Without this format quotation will not be accepted.**

**3. DATE AND TIME FOR RECEIPT OF TENDER:**

Tender must be dropped in tender Box placed at main gate. HQ PMSA will not accept any excuse of delay occurring due to whatsoever reason. Tender received after the time indicated in IT will not be entertained. The tender opening time, however, fall on next working day in case of closed / forced holiday or any other unforeseen event. Only authorized representatives of firm will be allowed to

attend tender opening. **The tender received through Fax, E-Mail will not be acceptable.**

**4. TENDER OPENING:**

Technical offer will be opened as per scope of work on the date and time mentioned in the tender. Commercial offer shall be retained with technical officer. It will be opened at a later stage. All technical offers will be scrutinized by a Technical Scrutiny Report (TSR) committee nominated by HQ PMSA. The offers which are not as per the IT specification will be rejected. The firms recommended by TSR Committee will be allowed to attend the commercial opening for which date and time will be intimated separately.

**5. VALIDITY OFFER:**

The validity period of quotations must be indicated and should invariably be for 90 days extendable to 30 days from the date of opening of Technical offer.

**6. QUOTING OF RATES:**

Unit price of the item, GST/ SST or any other Govt tax and Total price all these should be indicated separately in Pak Rupees in a very clear manner as follows:

<b>S No</b>	<b>Description</b>	<b>Qty</b>	<b>U/Price</b>	<b>GST/SST/Taxes</b>	<b>Total Price</b>
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**7. ATL / GST / SST / INCOME TAX NUMBER:**

Only registered suppliers, who are on Active Taxpayers List (ATL) of FBR, are eligible to supply goods/ services to Government department. GST/SST and income tax number be clearly indicated on the quotations and all other relevant documents.

**8. RETURN OF EARNEST MONEY:**

- a. Earnest money to the unsuccessful bidders will be returned **one week** after commercial opening date.
- b. Earnest money to the firm who has won the purchase order/ work order & contract will be returned on submission of Bank Guarantee as per the contract.

**9. TENDER FEE:**

Each technical offer must be accompanied with Cash of **Rs.5,000/-** nonrefundable as tender fee (In favour of IT Sale Account DG PMSA).

**10. INSPECTION AUTHORITY:**

Joint inspection of stores provided and work done will be carried out by committee appointed by HQ PMSA or as per the contract.

**11. CONDITION OF STORES:**

Spares, Stores, items and work done will be accepted on Warranty / Guarantee of the firm on Form DPL-15.

**12. DOCUMENTS REQUIRED:**

Following documents are required to be submitted alongwith the quotes where applicable:

- a. OEM / Authorized Dealer/Agent Certificate alongwith OEM Dealership Evidence as applicable.
- b. The Supplier is to provide OEM conformance certificate. In case of Fax or e-mail hard copy of conformance certificate must follow. On receipt of this PMSA HQ may approach the OEM to confirm the veracity of the documents submitted. Companies / firms rendering false OEM conformance certificate will be penalized as per rules in vogue.

**13. SECURITY DEPOSIT / BANK GUARANTEE:**

To ensure timely and correct supply of stores the firm will furnish an unconditional Bank Guarantee (BG) from a schedule bank for an amount of **10%** of the contract value (excluding taxes, duties / freight handling charges on a stamp paper of the value of (Rs.100/00) as per prescribed format in the shape of Bank Guarantee. Format of Bank Guarantee is at Annex „B“.

**14. CURRENT BANK STATEMENT:**

For all contracts of Rs 1,000,000/- or more the firm is required to submit current bank statement of the firm.

**15. INTEGRITY PACT:**

Procurement exceeding Rs 1.00 M shall be subject to an integrity pact, between the Buyer and the Suppliers or Contractors.

**16. CORRESPONDENCE:**

All correspondence will be addressed to the Buyer. Correspondence with regard to payment or issue of delivery receipt may be addressed to D (P & CC) PMSA Karachi.

**17. PRE SHIPMENT INSPECTION:**

PMSA may send a team of Officers for the inspection of Major Equipment and Machinery items at OEM premises for inspection before dispatch if required at the Supplier's cost and arrangement.

**18. AMENDMENT IN CONTRACT:**

Contract may be amended / modified to include fresh clause modify the existing clauses with the mutual agreements by the Supplier and the Buyer such modifications shall form an integral part of the contract.

**19. DISCREPANCY:**

The Buyer will render a discrepancy report to all concerned within 45 days after receipt of stores for discrepancies found in the consignment. The quantities found short are to be made good by the Supplier free of cost.

**20. PRICE VARIATION:**

Price offered against IT are to be firm and final.

**21. LIQUIDATED DAMAGES (LD):**

Liquidated Damages upto 2% per month are liable to be imposed on the Suppliers by the Buyer in accordance with PPRA rules, if the stores supplied after the expiry of the delivery date without any valid reason. Total value of the LD shall not exceed 10% of the contract value.

**22. RISK PURCHASE:**

In the event of failure on the part of Supplier to comply with the contractual obligations the contract will be cancelled at the Risk and Expense of the Supplier in accordance with PPRA rules.

**23. PENALTY:**

In case of wrong supply of the item by the Supplier, a penalty of 10% of the contract value may be imposed by this HQ PMSA apart from any other penalties.

**24. ALL RIGHTS RESERVED:**

HQ PMSA may reject all bids or proposals at any time prior to the acceptance of a bid or proposal as per PPRA Rule 33(I).

**25. PAYMENT:**

The payment will be released through Controller of Naval Accounts (CNA) Karachi in Pak Rupees after completion of delivery / work.

26. **PARTIAL ORDER.** All participating firms are to comply acceptance of partial order.

27. **DISQUALIFICATION:** Offers are liable to be rejected if:-

- a. Received after time and date specified in the IT.
- b. Offers are found conditional or incomplete in any respect.
- c. There is any deviation from the General / Special / Technical Instructions contained in this tender.



- d. Taxes and duties, Freight / Transportation and Insurance charges not indicated separately as per required price breakdown mentioned above.
- e. Pay Order with Commercial Offer and Cash with Technical Offer is not received.
- f. Multiple rates quoted against one item.
- g. Manufacturer's relevant Brochures and technical details on major equipment, assemblies are not attached in support of specification.
- h. Offers (Technical / Commercial) are containing amendments / corrections / overwriting etc.
- j. National Tax No (NTN) and GST/SST No are not indicated on technical and commercial offer.
- k. If validity of offer is not quoted as required in IT or made subject to confirmation later.