

SEPRATE QUOTATIONS REQUIRED FOR ATTACHED 45 x IT SPECIFICATIONS**IT NO : IT/47/01/2024-25**

IT SPECIFICATION FOR REPAIR OF SSDG NO 1 & 2 DEIF CONTROL MODULE - PMSS BASOL		
S No.	Description	
1.	Parent Equipment	CAT C9 Marine Genset No. 1122
2.	Sub equipment	LOP control system
3.	Assembly equipment	DEIF Control module
4.	Make	DEIF
5.	Model	1024107.0008
6.	Quantity	02
7.	Justification	SSDG operational parameters and controls partially available as received configuration on DEIF.
8.	Work required/ Defect	Repair of software of DEIF control module.
9.	Scope of work	Repair of software of DEIF control module including following: a. Repair of software of DEIF control module. b. Integration of software with existing system onboard. c. Removal and installation of in way accessories, cables and connections. d. Satisfactory trials of SSDGs
10.	Technical Specifications	As per OEM/ Technical manual.
11.	Eligibility criteria	OEM authorized Rep having experience of CAT C9 DG's
12.	EDC	03 days
13.	Warranty	01 year after Satisfactory load trials of DG's
14.	Acceptance criteria	a. OEM Certified spares be used. b. Technical specifications of item along with tech manual and document to be provided by contractor. c. Satisfactory operation of SSDG's DEIF control system.

IT NO : IT/47/02/2024-25

IT SPECIFICATION FOR REPAIR/ OVERHAULING OF STBD RHIB-PMSS ZHOB		
S No.	Description	
1.	Parent equipment	STBD RHIB
2.	Sub equipment	Engine (Yanmar 4LHP-STP), Stern drive unit
3.	Assembly component	
4.	Model	4LHA-STP MerCruiser II QW900028
5.	Make	Yanmar/ Mercury
6.	Qty	01
7.	Justification	Engine not achieving desired ERPM
8.	Work required/Defect	a. Inspection/ servicing and testing of injectors. b. Chemical cleaning of intercooler. c. Inspection of turbocharger and servicing d. Replacement of shaft bearing
9.	Scope Of Work	a. All accessories to be removed by the firm. b. Removal of fuel injectors for servicing/ repairing and adjustment. c. Turbo charger to be checked for fear wear and tear. d. Intercooler to be dismantled for chemical cleaning. e. Fuel pump to be serviced. f. Inspection of stern drive unit. g. Tappet clearance to be adjusted h. Shaft bearing inside coupler to be dismantled and repaired. i. All accessories to be fitted back by the firm after repair. k. Growth work will be responsibility of firm. To avoid complications on later stage firm is to be visit before quoting for understanding removal/ installation and maintenance scope.
10.	Technical specifications	No. of cylinder 04 Bore x stroke (mm) 100 x 110 Injection system Direct injection Rotation Counter-clockwise Starting system Electric (24V DC) High idling RPM 3700 Low idling RPM 750
11.	Eligibility criteria	a. Reputable local contractor having working experience of stern drive unit related activity in PMSA b. Firm must visit site for understanding exact nature of work.
12.	EDC	14 Days
13.	Warranty	1-year
14.	Acceptance Criteria	a. Satisfactory harbor trials of boat upto maximum Engine RPMs i.e 3500 b. Satisfactory operation without increased noise, vibration & leakage.
15.	Any other information	Growth work, or damage/ defect occurred during work is responsibility of contractor

IT NO : IT/47/03/2024-25

IT SPECIFICATIONS FOR REPAIR/ REPLACEMENT OF RUBBER SEALS, HANDLES AND HINGES OF WATER TIGHT DOORS AND HATCHES - PMSS ZHOB		
S.No	Description	
1.	Parent equipment	Water Tight Doors and Hatches
2.	Sub equipment	Rubber seals, Handles and Hinges
3.	Assembly component	
4.	Model	N/A
5.	Make	N/A
6.	Qty	Rubber seals, handles and hinges of 7 x doors and 11 x hatches.
7.	Justification	Locking mechanism and cross-sectional hinges of 7 x doors and 11 x hatches have been observed deteriorated, necessitating repairs/ replacement of defective rubber seals, handles and hinges as per enclosed list.
8.	Work required/Defect	Repair/ replacement of rubber seals, handles and hinges of water tight doors and hatches
9.	Scope Of Work	a. Contractor is to visit ship and carry out detailed inspection of water tight doors and hatches. b. Repair/ replacement of rubber seals, handles and hinges of water tight doors and hatches
10.	Technical specifications	Marine standard
11.	Eligibility criteria	Reputable local contractor having experience of working on doors and hatches of ship.
12.	EDC	10 days
13.	Warranty	1-year
14.	Acceptance criteria	a. Onboard fitting of rubber seals followed by chalk test. b. Repair/ replacement of door/ hatches handles c. Repair/ replacement of cross-sectional hinges.
15.	Any other information	Growth work, damage/ defect occurred during work is responsibility of contractor

IT SPECIFICATION FOR REPAIR/ REPLACEMENT OF MAIN ENGINE NO 2 RAW WATER PUMP - PMSS ZHOB		
S.No	Description	
1	Parent equipment	MTU Main Engines
2	Sub equipment	Seawater System
3	Assembly component	Raw Water Pump
4	Model	MTU
5	Make	MTU Germany
6	Qty	01
7	Justification	Upon inspection of Raw Water Pump of ME- 2 impeller and pump assembly was found in deteriorated condition
8	Work required/Defect	Repair/ Replacement of seawater pump
9	Scope Of Work	a Dismantling/ Assembling of 1 x Main Engine (ME No 2) seawater pump by contractor b All degraded/ defective components to be replaced with OEM spare parts c Replacement of old mechanical seal with high quality mechanical seal d Fabrication of brass impeller e Inspection of pump shaft
10	Technical specifications	As per OEM manual
11	Eligibility criteria	a Authorized rep of OEM/ Local contractor having working experience on pumps and impeller Contractor is to visit the ship in order to understand the scope of work b Firm must visit site for understanding exact nature of work
12	EDC	As Soon As Possible 15 days
13	Warranty	1-year warranty for satisfactory operation of seawater pump without following defects a Seawater leakage from pump b Decreased discharge pressure due to worn out impeller
14	Acceptance Criteria	a Satisfactory harbor trials followed by successful sea trials of main Engines Raw water pumps on rated parameters b Satisfactory operation without increased noise vibration & leakage
15	Any other information	Growth Work Damage/ defect occurred during work is responsibility of contractor

IT SPECIFICATION REPAIR/ REPLACEMENT OF EXHAUST ELBOWS OF MAIN ENGINES NO 1 & 2 - PMSS ZHOB		
S.No	Description	
1	Parent equipment	MTU Main Engines
2	Sub equipment	Main Engine Exhaust system
3	Assembly component	Exhaust Elbows
4	Model	16 V 4000 M73L
5	Make	MTU Germany
6	Qty	02 (Exhaust Elbows Mild Steel)
7	Justification	02 X Main Engines Exhaust Elbows Mild steel found degraded Seepage observed from Exhaust elbows due to deterioration
8	Work required/Defect	Repair/ replacement of ME 1 & 2 Exhaust Elbows
9	Scope Of Work	a Removal of cladding, lagging and heat protective sheets from both elbows by the firm b Removal of exhaust elbows by the firm c Repair/ replacement of exhaust elbows by the firm with mild steel material d The pressure test of exhaust expansion bellows be undertaken at 5 bar e Exhaust elbow be installed back with insulating gaskets on both exhaust elbows f Elbow to be welded with bulkhead from inside and outside during installation g The Mild steel studs/ Nut bolts on both elbow flanges for installation h After installation of exhaust elbow successful onboard trials on running Engine by the firm i Arrangement of all tools and test equipment required during dismantling/ assembling by the firm k Sole responsibility of firm in case of growth work to avoid complications on later stage Firm be directed to visit the ship before quoting for understanding removal/ installation and defect rectification scope
10	Technical specifications	As per OEM Manual
11	Eligibility criteria	Authorized rep of OEM/ Local contractor having relevant working experience Contractor is to visit the ship in order to understand the scope of work
12	EDC	1 Week
13	Warranty	1 year
14	Acceptance Criteria	a Pressure test of exhaust elbows at 5 bar to be conducted before installation b No seawater leakage after installation and normal operation of engines c No exhaust gas leakage from both elbows at Max power of main engines i.e 2050 RPM d Satisfactory repair/ replacement installation and operation of exhaust elbows of ME No 1 & 2
15	Any other information	a Growth Work Damage/ defect occurred during work is responsibility of contractor b Contactor may contact SS/ visit onboard ship to resolve any query

IT NO : IT/47/06/2024-25

PMSS ZHOB

IT SPECIFICATION FOR DEFECT RECTIFICATION OF IPM 8 PATIENT MONITOR

S No	Description					
1.	Parent Equipment	IPM 8 Patient(Cardiac) monitor				
2.	Sub equipment	Main parameter board				
3.	Assembly component	Main parameter board				
4.	Model	IPM 8/IPM 10 (Current Model)				
5.	Make	Shenzhen Mindaray Bio-Medical Electronics Co. Ltd. China				
6.	Quantity/Item details	Model	OEM	NSN/Part No	Description	Qty
		IPM 8/1e	China	Nil	Patient Monitor	1
7.	Justification	Patient Monitor parameters (NIBP, SPO ² , ECG, PR) has failed to perform its functions				
8.	Work required/ Defect	As per OEM Manual/ Specs				
9.	Scope of work	Repair/ replacement of main parameter board and clear errors of all parameters (NIBP, SPO ² , ECG, PR)				
10.	Technical specifications	As per technical manual				
11.	Eligibility criteria	Reputable Contractor/ OEM having relevant working experience of patient monitor				
12.	EDD	As Soon As Possible (7 Days)				
13.	Warranty	1 Year				
14.	Acceptance criteria	Must have relevant experience in repairing and servicing of patient monitors				
15.	Any other info	Contractor may contact SS/ visit onboard ship to resolve any query				

IT NO : IT/47/07/2024-25

**IT SPECIFICATIONS OF RECEIVER PCB AND RADAR FRONT END MODULE
TRANSAS RADAR SYSTEM – PMSS REHMAT**

S No	Description	IT SPECIFICATIONS
1	Parent Equipment	TRANSAS RADAR-I
2	Sub equipment	Transceiver assembly unit
3	Assembly component	Receiver PCB, Scanner PCB and Radar front-End Module
4	Make	USA/ ITALY/ UK
5	Model	NR-4000
6	Quantity	01 each
7	Justification i.e PMS/ Failure/FWT etc	Components critically required for operation-ability of Radar and safe navigation/ Electronic Failure
8	Work Required/ Defect	Repair/ Replacement and installation of Receiver PCB, Scanner PCB and Radar front-End Module and provision of secondary safety accessories
9	Detailed scope of work	a. Repair/ Replacement and installation of Receiver PCB (p/n: EB078502301), Scanner PCB and Radar front-End Module (Mod. AGM-100 P/N EX060902) with new one. b. Any accessories/ items required during installation work will be provided by the firm. c. Any other work required to ensure the good quality and optimum performance of work. d. Ensuring satisfactory operation of complete system after installation. e. Ensuring maximum tune levels of Radar.
10	Technical Specs (If any)	220V 50 Hz 24 VDC
11	Eligibility Criteria	a. As per TSR b. The firm should visit onboard and access the extent of required work. c. The firm should be having good experience to repair/maintenance/ replacement of such system/equipment. d. The firm should be NTN/GST registered. e. Firm to provide services for Transas NR-4000 Radar for rectification of similar defects related to Transceiver unit during warranty period.
12	EDC	15 x working days after issuance of work order
13	Warranty	01 year
14	Acceptance Criteria (If any)	HATs/ SATs after completion of work

IT NO : IT/47/08/2024-25

**IT SPECIFICATIONS FOR PURCHASING OF TELEPHONE SET
FOR DG OFFICE & DDG OFFICE**

DESCRIPTION	SPECIFICATIONS
System/ Item	Unify Telephone Set Digital
Model/ Origin	Model No. 14-T & 15-T (01 x Telephone Set each)
Quantity	02
Scope of Work	Provision of 02 x Telephone Set for DG & DDG Office
EDC	10 days
Warranty/ Validity	Company warranty (1 Year)
Acceptance	Items (Telephone Sets) will be accepted upon inspection by HQ PMSA rep.
Any other relevant information	In case any query please contact 021-48508942, 0345-8101004.

IT NO : IT/47/09/2024-25

**IT SPECIFICATIONS FOR REPAIR/ REPLACEMENT OF PORT & STBD FIN
STABILIZER CYLINDER SEALS - PMSS KOLACHI**

S No	Description							
1.	Parent Equipment	Fin Stabilizer						
2.	Sub Equipment	Hydraulic system						
3.	Assembly Equipment	Hydraulic Cylinders						
4.	Make	SHANGHAI marine equipment research institute						
5.	Model	JOB-4-240						
6.	Required Quantity	<table border="1"> <tr> <th>Part Number</th><th>Description</th><th>Quantity</th></tr> <tr> <td></td><td>Cylinder Seals</td><td>04</td></tr> </table>	Part Number	Description	Quantity		Cylinder Seals	04
Part Number	Description	Quantity						
	Cylinder Seals	04						
7.	Justification	Repair/ replacement of seals of both Fin Stabilizer cylinders.						
8.	Work required/ defect	Repair/ replacement of seals of both Fin Stabilizer cylinders.						
9.	Detailed scope of work	a. Repair/ replacement of defective seals of both Fin Stabilizer cylinders b. Remove rust from mechanical parts of Fin stabilizer and renew paint work c. Adjust Fin Angle as per tech manual after repair work						
10.	Technical specifications	As per OEM specifications/ Manual						
11.	Eligibility Criteria	Reputable local/ international contractor having working experience with PMSA.						
12.	EDD/EDC	30 Days after award of contract						
13.	Warranty	01 Year						
14.	Acceptance Criteria (if any)	a. OEM Certified item b. Zero leakage of hydraulic oil c. Successful SATs in rough weather d. Zero angle adjustment after repair work e. Upon scrutiny of items and provided documents along with production certificate by OEM						
15.	Any other relevant information	Contractor/ Rep of firm should visit ship prior quoting to inspect exact scope of work. Contact MEO (0333-8948563)						

IT SPECS FOR REPAIR/ REPLACEMENT OF MAIN AND AUXILIARY MACHINERY SYSTEMS ASSOCIATED VALVES : PMSS BARKAT																																												
1.	Ship's Name	PMSS BARKAT																																										
2.	Parent equipment/system	Main and Aux Machinery Valves																																										
3.	Sub equipment	Fresh water, Fire main, Sea water cooling system (Main & Aux machinery) and fuel system.																																										
4.	Assembly/ equipment	Various dia valves																																										
5.	Make	China																																										
6.	Model	N/A																																										
7.	Qty	67																																										
8.	Justification	Due to F.W.T. and over the period of time																																										
9.	Work required	Repair/Replacement/Overhauling of valves																																										
10.	Detailed scope of work	<p>Scope of work is as follows:</p> <p>a. Repair/ replacement of valves appended below:</p> <table><tr><th>S No</th><th>System</th><th>Type</th><th>Dia</th><th>No of valves</th></tr><tr><td>1.</td><td>Fire main system</td><td>Gate valve</td><td>3"</td><td>20</td></tr><tr><td>2.</td><td>Fire main system</td><td>Relief valve</td><td>5 ½"</td><td>02</td></tr><tr><td>3.</td><td>Fire main system/ hydrants</td><td>Gate valve</td><td>3"</td><td>08</td></tr><tr><td>4.</td><td>Fresh water system</td><td>Gate valve</td><td>2"</td><td>12</td></tr><tr><td>5.</td><td>Fuel system</td><td>Gate valve</td><td>2"</td><td>15</td></tr><tr><td>6.</td><td>G/box sea water cooling system</td><td>Gate valve</td><td>1.5"</td><td>08</td></tr><tr><td>7.</td><td>S/W drain valves</td><td>Butterfly valve</td><td>1.5"</td><td>02</td></tr></table> <p>b. All nuts and bolts are to be used should be stainless steel for repair/ replacement of valves and pipes.</p> <p>c. Requirement of external services, if required will be responsibility of firm.</p> <p>d. Repair/Replacement of valves dismantling/ removal & transportation is responsibility of Firm.</p> <p>e. All spares (must be genuine) tools special equipment /accessories required for said repair/ replacement are to be arranged by the firm.</p> <p>f. Any damage/ defect/wear tear occurred during course of repair and replacement of system/equipment will be repaired /met by firm.</p> <p>g. The firm will be responsible for all repair/ replacement and transportation work during warranty/ grantee periods claims in case of any rework.</p>			S No	System	Type	Dia	No of valves	1.	Fire main system	Gate valve	3"	20	2.	Fire main system	Relief valve	5 ½"	02	3.	Fire main system/ hydrants	Gate valve	3"	08	4.	Fresh water system	Gate valve	2"	12	5.	Fuel system	Gate valve	2"	15	6.	G/box sea water cooling system	Gate valve	1.5"	08	7.	S/W drain valves	Butterfly valve	1.5"	02
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11.	Technical spec	As per scope of work																																										
12.	Eligibilities	<p>a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work.</p> <p>b. The firm must have sufficient experience of same kind of work and experienced.</p> <p>c. The firm should be NTN /GST registered.</p>																																										
13.	EDC	14 x days after issuance of work/confirmation order.																																										
14.	Warranty	01 Year																																										
15.	Acceptance criteria	<p>a. Satisfactory work done by the firm.</p> <p>b. Successful completion and acceptance by the end user.</p> <p>c. Satisfactory trials (HATs/ SATs).</p>																																										

PMSS KASHMIR

IT SPECIFICATION - UNINTERRUPTIBLE POWER SUPPLY (UPS) OF NS 4000 (TRANSAS RADAR & ECDIS)		
S No.	Description	
1.	Parent Equipment	NS-4000 (TRANSAS RADAR & ECDIS) Multifunction Display
2.	Sub Equipment	NS-4000(TRANSAS RADAR & ECDIS)) UPS Unit
3.	Make	CHINA
4.	Model	QUINT-PS/1AC/24VDC/20
5.	Qty	02
6.	Justification PMS/Failure/FWT	Failure: Existing Uninterruptable Power Supply (UPS) Units are defective and same are required to be repair/ replace
7.	Work required/ Defect	Repair/ replacement of defective uninterruptable power supply (UPS) Units is required.
8.	Detailed Scope of Work	Presently, NS-4000 TRANSAS RADAR & ECDIS UPS units are defective and not providing requisite 24 VDC power supply during TLF/ any other supply shift or failure and same has been verified defective by SS and same are required to Repair/Replace to restore its Backup supply.
9.	Technical specs	<p>a. Input Data:</p> <p>Voltage Range 220 VAC</p> <p>Current Consumption (No load/Charging/Max):0.1 A/2.0 A/22.0 A</p> <p>Input Fuse :internal 25 A</p> <p>Max Power Dissipation (Ready/Buffer mode):15 W</p> <p>20 W.</p> <p>b. Output Data:</p> <p>Normal Output Voltage 24 VDC & 27.9 max in buffer mood</p> <p>Output Current 20 A</p> <p>Current Limit: None in normal mood, 27A in buffer mood</p> <p>Remote Shutdown: yes</p> <p>c. Charging:</p> <p>Charge Characteristics curve: I/U Characteristics curve</p> <p>Charge Limit 2.5 amp</p> <p>Battery Presence check/Time interval 60 sec:</p> <p>Battery Quality test/Time interval 180 hours</p> <p>d. Memory Medium :</p> <p>Nominal</p> <p>Nominal Capacity: 3.4 ,7.2 Ah,12 Ah</p> <p>e. Signaling:</p> <p>Power in OK: Green LED, battery charge yellow LED,</p> <p>Alarm: Red LED, Floating PDT,30 VAC/DC, MAX 1 A</p> <p>f. Parallel connection to increase buffer time: yes</p> <p>g. Weight: 6 kg</p> <p>h. Rechargeable battery type: Panasonic LC-R127R2PG</p> <p>i. Degree of protection: IP20/III</p> <p>j. Service life:6 Yrs(20 c)</p> <p>k. Dimension: 164*156*123</p>
10.	Eligibility Criteria	Reputable local contractor having working experience with PMSA/ OEM authorized reps will be given preference

11.	EDC/ EDD	10 days
12.	Warranty	12 x Months
13.	Acceptance Criteria	a. OEM Certified items. b. Item will be accepted after satisfactory test/ trials onboard. c. OEM Technical documents/ warranty certificate of items required. d. Upon scrutiny of items and provided documents i.e technical specifications along with production certificate and batch No by OEM.
14.	Any other relevant Information	Firm must visit onboard for clarification of any query and understanding of requirement before quoting.

IT NO : IT/47/12/2024-25
PMSS INDUS

IT SPECIFICATIN UPGRADATION CASE OF 02X TOYOTA REVO (250330 MS, 250331 MS)

1	SYSTEM	Renovation/Upgradation																																				
2	MAKE	TOYOTA																																				
3	MODEL	2025																																				
4	VEHICLE NO	250330 MS, 250331 MS																																				
5	ITEM DESCRIPTION	Work Description Following items will be upgraded: <table><tr><th>S No</th><th>Work Description</th></tr><tr><td>a</td><td>Roll Bar Rocco Heavy</td></tr><tr><td>b</td><td>Utility Luggage Box</td></tr><tr><td>c</td><td>Roof bar light 6led +brackets (4800)</td></tr><tr><td>d</td><td>Roof bar light 8led +brackets</td></tr><tr><td>e</td><td>Grill 84 V lights</td></tr><tr><td>f</td><td>Rear seats 4pcs fiber cap</td></tr><tr><td>g</td><td>Speaker (siren)</td></tr><tr><td>h</td><td>Front Guard</td></tr><tr><td>i</td><td>Seats cover leather</td></tr><tr><td>j</td><td>Rear bull bar (back bumper)</td></tr><tr><td>k</td><td>Floor mats</td></tr><tr><td>l</td><td>Tinted glasses</td></tr><tr><td>m</td><td>Number plates</td></tr><tr><td>n</td><td>Steering cover</td></tr><tr><td>o</td><td>Aer tire rocco fenders</td></tr><tr><td>p</td><td>Service</td></tr><tr><td>q</td><td>Fitting, wiring connections</td></tr></table>	S No	Work Description	a	Roll Bar Rocco Heavy	b	Utility Luggage Box	c	Roof bar light 6led +brackets (4800)	d	Roof bar light 8led +brackets	e	Grill 84 V lights	f	Rear seats 4pcs fiber cap	g	Speaker (siren)	h	Front Guard	i	Seats cover leather	j	Rear bull bar (back bumper)	k	Floor mats	l	Tinted glasses	m	Number plates	n	Steering cover	o	Aer tire rocco fenders	p	Service	q	Fitting, wiring connections
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q	Fitting, wiring connections																																					
6	TECHNICAL SPESIFICATINOS	MATERIAL AS PER EXISTING																																				
7	PRELIMINARY INVESTIGATION BY SHIPS STAFF	D(MT) / MTO STAFF																																				
8	ELIGIBILITY	REGISTERED CONTRACTOR																																				
9	EDD	30 DAYS																																				
10	WARRANTY	WARRANTY 12 MONTHS																																				
11	ACCEPTANCE CRITERIA	STAGE INSPECTION BY END USER																																				

IT NO : IT/47/13/2024-25
D(MT)

1	SYSTEM	COMERICAL REPAIR
2	MAKE	ISUZU TRUCK
3	MODEL	2008
4	VEHICLE NO	080317 MS
5	ITEM DESCRIPTION	Work Description a. Complete vehicle dent paint required Complete vehicle dent paint required b. Silencer Replaced with new c. Ignition Switch d. Break pressure system repair work e. Hydraulic system repair work
6	TECHNICAL SPESIFICATINOS	MATERIAL AS PER EXISTING
7	PRELIMINARY INVESTIGATION BY SHIP'S STAFF	D(MT) / MTO STAFF
8	ELIGIBILITY	REGISTERED CONTRACTOR
9	EDD	30 DAYS
10	WARRANTY	WARRANTY 12 MONTHS
11	ACCEPTANCE CRITERIA	STAGE INSPECTION BY END USER

IT SPECIFICATION FOR REPAIR/ REPLACEMENT OF SYNCHRONIZING UNIT OF SSDGs – PMSS REHMAI

S No	Specification	Remarks
1.	Parent Equipment	Power Generation and Distribution
2.	Sub Equipment	Switchboard
3.	Assembly Components	Synchro scope unit and load shedding module in parallel
4.	Make	N/A
5.	Model	N/A
6.	Quantity	01
7.	Justification i.e PMS/ Failure/ FWT etc	Synchro scope unit in parallel is observed defective due to FWT/ old vintage
8.	Work required/ Defect	Synchro scope unit in parallel is required to be repaired/ replaced for SAT ops
9.	Technical Specification	a. 380VAC Main supply b. 50Hz c. 3 Phase d. 220V-240VAC e. 24VDC control supply
10.	Detailed scope of work	Following work is required to be undertaken for repair/ replacement of synchro scope unit for operating SSDGs in parallel: a. Synchro scope unit/ method is to be repaired/ replaced for SAT ops. b. 03 x mechanical governors of SSDGs to be replaced with electronic control governors for operation in synchronizing method. c. Parallel system for frequency and voltage meters to be ensured. d. Synchronizing AVR card to be replaced. e. Load shedding module and auto synchronizing to be replaced for safe operation of SSDGs. f. Control cable and wiring to be renewed or replaced. g. Repair/ maintenance of 3 Phase bus bar for phase sequence to be carried out. h. Voltage magnitude for operating of SSDGs in parallel to be ensured. i. Frequency of putting on load SSDGs must match with bus bar frequency to be ensured. j. The firm should arrange spares, tools, accessories etc required for the said repair / maintenance work. k. Requirement of external services will be responsibility of the firm.
11.	Eligibility Criteria	a. The firm must visit onboard and carry out diagnosis/ inspections to establish the extent of required work onboard corvettes. b. Income tax registered. c. Sales tax registered.
12.	EDC	07 x Working days after issuance of work/ confirmation order
13.	Warranty	01 Year
14.	Acceptance criteria	a. 380VAC Main supply b. 50Hz c. 3 Phase d. 220V-240VAC e. 24VDC control supply f. Satisfactory operation of equipment. g. Practical acceptance by SS

IT SPECIFICATIONS FOR REPAIR/ REPLACEMENT OF EXHAUST EXPANSION BELLOW GASKET OF MAIN ENGINE NO 16 PMSS HINGOL

No	Description	Remarks
1.	Parent Equipment	Main Engine No 1 & 2
2.	Sub Equipment	Exhaust Gas System
3.	Assembly Component	Turbocharger A & B
4.	Model	16V4000M73L
5.	Make	MTU
6.	Quantity/Item Details	02 x Gaskets
7.	Justification	Exhaust leakage observed from output gasket ME-1 turbocharger A and ME-2 turbocharger B due to fair wear and tear
8.	Work required/Defect	Repair/ replacement of exhaust expansion bellow gasket of ME-1 turbocharger A and ME-2 turbocharger B
9.	Scope of work	a. Removal of lagging and heat protective sheet from A bank of ME 1 and B bank of ME-2 b. Dismantling of Turbocharger exhaust line for inspection of gasket c. Removal of old defective gas kits. d. Installation of new gas kits e. Inspection of Exhaust expansion bellow for any leakage, bellow to be replaced if required. f. Pressure test of exhaust expansion bellow gasket be undertaken at 5 bar g. The exhaust expansion bellow be enwrapped by heat insulation material (lagging with heat sheet) having thickness above 80 mm and h. Onboard trials after installation of gaskets or exhaust expansion bellow i. All tools and test equipment will be arranged by the firm j. All in-way accessories be removed by the firm and fitted back k. Growth work will be sole responsibility of the firm. To avoid complications on later stage, firm is directed to visit the ship before quoting for understanding removal/installation and defect rectification
10.	Technical Specifications	a. Marine Main Diesel Engine: 16V4000M73L b. No Of Cylinder: 16 c. Cylinder Bore: 170mm d. Rated Output: 2880 kw e. Rated RPM: 2050 r/min f. Max Firing Pressure: 20 Mpa
11.	Eligibility Criteria	a. Any registered and security wise cleared local contractor who has working experience onboard HINGOL CLASS MPVs b. Firm must visit site for understanding the exact nature of defect/hindrances involved in job prior quoting to avoid inconvenience on later stage after award of Work Order.
12.	EDC	01 Week
13.	Warranty	01 Year
14.	Acceptance Criteria	Satisfactory operation of exhaust system of Main Engine No 1 and Main Engine No 2 without any leakage upto 1950 ERPMs

IT SPECIFICATION FOR PURCHASE OF TYRES																															
1	SYSTEM	TYRES OF MT VEHICLE																													
2	MAKE	HINO BUS/TOYOTA PARADO(V 6)/ HONDA DELUXE M/C & 02X CG																													
3	MODEL	125/02X KIA SPORTAGE/ SUZUKI VAN																													
4	VEHICLE NO / TYR	2010 / 2017/2017/2007/2005/2003/2002																													
5	TYPE OF TYRES REQUIRED	100406 170218 170508 070504 050503 030211 030213 020407 MS																													
6	ITEM DESCRIPTION	BRIDGESTONE/DUNLOP/GENERAL/SERVICE EQUIVALENT.																													
		<table> <tr> <th>S No</th><th>PATT/PART NO</th><th>DESCRIPTION</th><th>QTY</th></tr> <tr> <td>a</td><td>a</td><td>SIZE 9 00-20/14 PR</td><td>Tyre, Tube, flap 06 ✓</td></tr> <tr> <td>b</td><td></td><td>SIZE 265/65 R17C</td><td>Tubeless Tyre 04</td></tr> <tr> <td>c</td><td></td><td>SIZE 2 75-18, 90/90-18</td><td>Tyre, Tube 02 ✓</td></tr> <tr> <td>d</td><td>e</td><td>SIZE 2 50-18, 3 00-17</td><td>Tyre, Tube 04 ✓</td></tr> <tr> <td>e</td><td></td><td>SIZE 215/R15</td><td>Tubeless Tyre 08</td></tr> <tr> <td>f</td><td></td><td>SIZE 4 50/12H</td><td>Tyre, Tube, flap 04</td></tr> </table>	S No	PATT/PART NO	DESCRIPTION	QTY	a	a	SIZE 9 00-20/14 PR	Tyre, Tube, flap 06 ✓	b		SIZE 265/65 R17C	Tubeless Tyre 04	c		SIZE 2 75-18, 90/90-18	Tyre, Tube 02 ✓	d	e	SIZE 2 50-18, 3 00-17	Tyre, Tube 04 ✓	e		SIZE 215/R15	Tubeless Tyre 08	f		SIZE 4 50/12H	Tyre, Tube, flap 04	
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f		SIZE 4 50/12H	Tyre, Tube, flap 04																												
7.	TECHNICAL SPECIFICATIONS	AS PER SPECIFICATION																													
8.	PRELIMINARY INVESTIGATION BY SHIP'S STAFF	D(MT) & MTO STAFF																													
9.	ELIGIBILITY	REGISTERED CONTRACTOR																													
10.	EDD	15-DAYS																													
11.	WARRANTY	01 YEAR																													
12.	ACCEPTABCE CRITERIA	ON BOARD / SHELF LIFE NOT MORE THAN 06 MONTH																													
13.	ANY OTHER RELEVANT INFORMATION	WHEEL ALIGNMENT / BALLANCING AFTER FITTING OF NEW TYRES ARE REQUIRED. AUTHORIZED DISTRIBUTER CERTIFICATE IS REQUIRED.																													

IT SPECIFICATIONS – REPAIR/ MAINTENANCE OF 02 X SEA WATER PUMPS C-9 MAIN ENGINES OF FRB-155																											
1	Ship's Name	FRB-155																									
2	Parent Equipment	C-9 Main Engines																									
3	Sub Equipment	Sea water circulation system																									
4	Assembly Component	Pump GP-Auxiliary sea water																									
5	Make	Caterpillar, USA																									
6	Model	C-9																									
7	Quantity	02 in number																									
8	Justification i.e PMS/ Failure/ FWT etc	Performance of 02 x sea water pumps installed with C-9 Main engines pertaining to FRB-155 is degraded.																									
9	Work Required/ Defect	Repair/ maintenance of 02 x sea water pumps installed with C-9 Main engines is required.																									
10	Detail Scope of Work	Repair/ maintenance of 02 x sea water pumps including following associated accessories installed with Caterpillar C-9 marine engine:																									
		<table><tr><th>S.No</th><th>Description</th><th>Part No</th></tr><tr><td>a</td><td>Impeller pump</td><td>7E-0321</td></tr><tr><td>b</td><td>Sea As-pump</td><td>200-3062</td></tr><tr><td>c</td><td>Ball bearing</td><td>8H-4320</td></tr><tr><td>d</td><td>Shaft</td><td>8I-2072</td></tr><tr><td>e</td><td>Cam sea water pump</td><td>113-1110</td></tr><tr><td>f</td><td>Plate AS</td><td>7E-0328</td></tr><tr><td>g</td><td>Key stainless</td><td>4P-5926</td></tr></table>	S.No	Description	Part No	a	Impeller pump	7E-0321	b	Sea As-pump	200-3062	c	Ball bearing	8H-4320	d	Shaft	8I-2072	e	Cam sea water pump	113-1110	f	Plate AS	7E-0328	g	Key stainless	4P-5926	
S.No	Description	Part No																									
a	Impeller pump	7E-0321																									
b	Sea As-pump	200-3062																									
c	Ball bearing	8H-4320																									
d	Shaft	8I-2072																									
e	Cam sea water pump	113-1110																									
f	Plate AS	7E-0328																									
g	Key stainless	4P-5926																									
11	Technical Spec	Pump GP-auxiliary sea water (Part No 170-6116)																									
12	Eligibility criteria	Any well-known national/ international firm having good experience for repair/ maintenance of Caterpillar engines and associated auxiliaries/ parts																									
13	EDC	15 days																									
14	Warranty	01 year after installation and satisfactory onboard trials.																									
15	Acceptance Criteria	Inspection by end user after onboard installation.																									
16	Any other relevant information	Use of standard/ USA origin parts for C-9 engines may be ensured by contracted firm.																									

S No.	Description	
1.	Parent Equipment	Ventilation System
2.	Sub Equipment	Flappers
3.	Assembly component	Air Flaps
4.	Make	China
5.	Model	N/A
6.	Qty	08
7.	Justification	Fair wear and tear due exposure of environment
8.	Work required	Repair/ replacement of crash ventilation air flappers
9.	Detailed Scope of Work	a. Repair/ replacement of all air flaps b. Movement of air flaps manually and pneumatically both c. Rectification of any defect w.r.t crash ventilation system operation d. Satisfactory test/ trials e. All tools and test equipments will be arranged by firm/ contractor f. All spare(s)/ part(s) to be provided by the firm g. Growth work will be responsibility of the firm
10.	Technical specs	As per OEM Manual/ Specs
11.	Eligibilities	Reputable local contractor having working experience of Pneumatic system onboard MPVs
12.	EDC	07 x Days
13.	Warranty	01 x Year
14.	Acceptance Criteria	a. OEM Certified spares. b. Upon scrutiny of item and provided technical details. c. Satisfactory operation without high vibration and noise. d. Satisfactory operation without any leakage.
15.	Any other Information	a. Damage/ defect occurred to system during work is responsibility of contractor. b. Dismantling/ assembling/ installation and in way removal work is responsibility of contractor.

IT SPECIFICATIONS FOR CALIBRATION AND OVERHAULING OF 12 X C9 GENSET FUEL INJECTORS - PMSS DASHT		
1.	Parent equipment	GENSET
2.	Sub-equipment	Fuel system
3.	Assembly Component	Fuel Injector
4.	Make	CATERPILLAR
5.	Model	Part No 387-9431
6.	Quantity	12 Injectors (02 Sets)
7.	Justification	Operational Failure
8.	Work Required/ Defect	Calibration/ Overhauling of 12 x Fuel Injectors to stop fuel dilution, frequency hunting in GENSETS
9.	Detailed Scope of Work	Complete Overhauling and Calibration of 12 x Fuel Injectors (P No 387-9431) for satisfactory operation on required working pressure (a) Injectors are to be fitted back on GENSETS for trials without any damage. (b) Degraded components including defective nozzles to be replaced with new part along with servicing/ overhauling. (c) All spares, tools and test equipment are to be arranged by the firm. (d) Any growth work will be sole responsibility of the firm. (e) Firm will be responsible for any damage during removal of accessories.
10.	Technical Specs	As per OEM Manual/ Specs
11.	Eligibility Criteria	Reputable contractor having relevant work experience
12.	EDC	14 Days
13.	Warranty	01 Year after installation
14.	Acceptance Criteria	a. Provision of pressure test record as per OEM standard b. Only OEM recommended spares to be used by firm c. Inspection of provided items/ OEM recommended quality spares used w.r.t physical inspection d. Full Power Trials , HATs & SATs upto 200 KW
15.	Any other information	Firms are requested to visit ship before quoting for further information

IT SPECIFICATION FOR REPAIR/ OVERHAULING OF CAPSTAN - PMSS DASHT		
S.No.	Description	
1.	Parent Equipment	Vertical Electrical Anchor Capstan
2.	Sub-equipment	Vertical Electrical Anchor Capstan
3.	Assembly equipment	Vertical Electrical Anchor Capstan
4.	Make	China
5.	Model	N/A
6.	Quantity	01
7.	Justification i.e PMS/Failure/FWT	F.W.T
8.	Work required/ Defect-	Overhauling of Vertical Electrical Anchor Capstan
9.	Detailed scope of work	(a) Removal of anchor and anchor cable (b) Dismantle of anchor cable to check/ replace thrust bearing (5116 & 51130) (c) Check and replace the capstan bushing (223MKD-22B-20), sprocket bushing (223MKD-22B-22) & base bushing (223MKD-22B-23) (d) Check/ repair/ replace clutch pressure plate, brake & main shaft. (e) Dismantling/ assembling/ installation and in way removal work is responsibility of contractor (f) Renewal of packing/ seals (g) Performance testing & provide testing certificate. (h) Corroded bolts and nuts to be replaced with SS bolts and nuts (i) All spares, tools and test equipment are to be arranged by the firm (k) Any growth work/ damage will be soul responsibility of the firm
10.	Technical specs	As per OEM Manual/ Specs
11.	Eligibility criteria	a). Reputable local contractor having working experience b). Firm must visit site for understanding exact nature of defect
12.	EDC	ASAP(15 days)
13.	Warranty	One year after satisfactory repair/ renewal work or defects
14.	Acceptance criteria	Smoothly obstruction free operation Vertical Electrical Anchor Capstan
15.	Any other information	Firms are to visit site before quoting to fully understand scope of work

IT SPECIFICATIONS – REPAIR/ REPLACEMENT OF V2A HEAVY DUTY MAINTENANCE FREE DRY BATTERIES – FAST RESPONSE BOATS		
1.	Ship's Name	Fast Response Boats
2.	Parent Equipment	Main engines starting and control system
3.	Sub Equipment	Heavy duty marine maintenance free Lead Acid (Dry) Battery 12V, 180 AH Part Number NSB-M12-210 or Equivalent
4.	Assembly Component	Heavy duty marine maintenance free Lead Acid (Dry) Battery 12V, 180 AH Part Number NSB-M12-210 or Equivalent
5.	Make	USA or Equivalent
6.	Model	North star battery company or Equivalent
7.	Quantity	05 in number
8.	Justification i.e PMS/ Failure/ FWT etc	Performance of batteries degraded due to completion of useful life and requires replacement
9.	Work Required/ Defect	Repair/ replacement of 05 x 12V 180 AH Heavy duty marine maintenance free Lead Acid (Dry) batteries.
10.	Detail Scope of Work	Repair/ replacement of 05 x 12V 180 AH Heavy duty marine maintenance free Lead Acid (Dry) batteries.
11.	Technical Spec	Heavy duty marine maintenance free Lead Acid (Dry) Battery 12V, 180 AH Part Number NSB-M12-210 or Equivalent Dimension Length (L): 22 Inches Width(W): 4.92 Inches Height(H): 12.6 Inches Overall Height(HT): 12.44 Inches Weight(kg): 128 Pounds Electrical Characteristics Cold cranking Amps@ 0°F: 1400 Cranking Amps@ 32°F: 1700 Reserve Capacity (Minutes) 400 Short Circuit Current: 5000 Ams Voltage: 12 Volts Material AGM (Absorbed Glass Mat)
12.	Eligibility criteria	Any well-known national/ international firm having good experience for repair/ replacement of heavy duty marine maintenance free dry batteries.
13.	EDC	15 days
14.	Warranty	02 years after onboard installation and satisfactory trials.
15.	Acceptance Criteria	Inspection by end user followed by onboard trials
16.	Any other relevant information	> Use of standard/USA origin batteries for C-9 engines may be ensured by contracted firm. > Shipment documents and COC required.

IT NO : IT/47/22/2024-25

**REPAIR OF RCS GRAPHICS DISPLAY OF ME NO 1 & THROTTLE LEVER DISPLAY OF ME NO 4
ALONG WITH DEFECTIVE BUTTONS – PMSS HINGOL**

1.	Ship's Name	PMSS HINGOL
2.	Parent Equipment	RCS 5
3.	Sub Equipment	Main Engine No 1 (S No 527 112 437) Main Engine No 4 (S No 527 112 456)
4.	Assembly Component	ECC Throttle Graphic Display/ Buttons
5.	Model	16V4000M73L
6.	Make	MTU
7.	Quantity/Item Details	02
8.	NSN/ Part Number	Part/ NSN No Description Qty B00E50204799 RCS Remote Control System 02
9.	Justification	a. ME 1 RCS graphic display was not displaying RPM, Engage/ disengage, control and alarms, whole display is blackish b. ME 4 RCS Ahead/ Astern lever position display was observed malfunctioning not displaying engine lever position c. Various buttons on RCS panels observed defective
10.	Work required/Defect	Repair of RCS graphic display of ME No 1 and Throttle lever display of ME No 4 along with defective buttons
11.	Scope of work	a. Repairing of RCS through trained technician b. Functional replacement can be undertaken for not available/ obsolete components c. Onboard Test/ trials to be conducted after repair d. Spare(s)/ components required for repair work will be arranged by the firm e. Firm is to inspect, identify defective buttons and display units of RCS-5 by visiting ship before quoting for job f. Any growth work during repair work will be borne by the firm. Ship will not provide any spare parts/ additional amount in case of any growth work g. Any damage to system during onboard testing of RCS will be born by the firm As per OEM technical manual
12.	Technical Specifications	
13.	Eligibility Criteria	Security wise clear & Reputable local contractor having working experience on Electronics/ Electrical equipment and with PMSA
14.	EDC	07 days
15.	Warranty	1 year
16.	Acceptance Criteria	a. Onboard successful test/ trials of RCS b. Certified spares to be used for avoiding damage to system

IT NO : IT/47/23/2024-25

REPAIR/ REPLACEMENT OF 01 X PROTECTION AND PARALLELING UNIT (PPU) – PMSS HINGOL

S No.	Description
1.	Ship
2.	Parent Equipment
3.	Sub Equipment
4.	Assembly component
5.	Make
6.	Model
7.	Qty
8.	NSN/ Part Number
9.	Justification
10.	Work req/ Defect
11.	Detailed Scope of Work
12.	Technical specs (if any)
13.	Eligibilities
14.	EDC
15.	Warranty
16.	Acceptance Criteria
17.	Any other Information

1.	Ship	PMSS HINGOL
2.	Parent Equipment	Power generation and distribution system.
3.	Sub Equipment	Main switch board.
4.	Assembly component	Protection and paralleling unit (PPU)
5.	Make	CHINA
6.	Model	N/A
7.	Qty	01
8.	NSN/ Part Number	6110PV1100019
9.	Justification	01 x Protection and paralleling unit (PPU) fail to perform its function.
10.	Work req/ Defect	Repair / replacement of 01 x Protection and paralleling unit (PPU) is to be required
11.	Detailed Scope of Work	a. Repairing of Protection and paralleling unit (PPU) if required. b. Installation of software as per OEM specification. c. Satisfactory test and trials of Protection and paralleling unit (PPU). d. Satisfactory load shifting parallel, auto and Semi auto modes without any fluctuation.
12.	Technical specs (if any)	Type PPU-1 Order No 100169825.10 Meas voltage(Max) 600VAC Meas current 1A or 5A Supply 12 /24VDC Relay output 250VAC / 24VDC Analogue output 0-20mA
13.	Eligibilities	Reputable local contractor having working experience on Power generation and distribution system of HINGOL class MPVS
14.	EDC	03 x Day
15.	Warranty	a. One year warranty after satisfactory test/ trials. b. If any malfunctioning found in Protection and paralleling unit (PPU) during warranty period (PPU) will be replace by firm with new. c. Any fault occurred in PGD system during repair / replacement of (PPU) will be rectified by firm.
16.	Acceptance Criteria	a. Satisfactory operation of Protection and paralleling unit (PPU) without any grounding. b. Satisfactory operation of Protection and paralleling unit (PPU) without any malfunctioning. c. Satisfactory load shifting parallel, auto and Semi auto modes without any fluctuation.
17.	Any other Information	a. Contact SS/ visit onboard for clear understanding of scope of work. b. Damage/ defect occurred to system during work is responsibility of contractor. c. Dismantling/ assembling/ installation and in way removal work is responsibility of contractor.

IT SPECS FOR REPAIR/ REPLACEMENT OF OFFICERS AND CPOs/ SAILORS WASHROOMS DURING DED : PMSS BARKAT			18
1.	Ship's Name	PMSS BARKAT	
2.	Parent equipment/system	03 x Officers washrooms 01 x CPOs/ Sailors washroom	
3.	Sub equipment	Sanitary work	
4.	Assembly/ equipment	Doors, walls, ceiling paneling, flooring tiles, sanitary fittings, commodes/ seats fittings and washroom lights	
5.	Make	China	
6.	Model	-	
7.	Qty	04	
8.	Justification	Degraded over the period of time.	
9.	Work required	Repair/ replacement work	
10.	Detailed scope of work	Scope of work is as under: a. Repair/ replacement of roof ceiling with lights. b. Repair/ replacement of flooring tiles. c. Repair/ replacement of wooden doors. d. Marine plywood is to be used for any kind of wood work. e. Repair/ replacement of sanitary associated fittings. f. Repair/ replacement of exhaust fans. g. Repair/ replacement of waste drain pipes as required size. h. Repair/ replacement of NRV on discharge sewerage lines. i. Repair/ replacement of walls paneling. j. All items of repair/ replacement must be used fire retardant material. k. The firm will be responsible for welding/ cutting. l. All spares (must be genuine) tools special equipment /accessories required for said repair/ replacement are to be arranged by the firm. m. Any damage/ defect/wear tear occurred during course of repair and replacement of system/equipment will be met by firm. n. Requirement of external services, if required will be responsibility of firm.	
11.	Technical spec	As per IT specifications	
12.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN /GST registered	
13.	EDC	15 x days after issuance of work/confirmation order.	
14.	Warranty	01 Year	
15.	Acceptance criteria	a. Satisfactory work done by the firm. b. Successful completion and acceptance by the end user. c. Satisfactory trials (HATs/ SATs).	

IT SPECS FOR REFURBISHMENT OF CPO SAILOR MESSSES: PMSS BARKAT			38
1.	Ship's Name	PMSS BARKAT	
2.	Parent equipment/system	Refurbished/ renovation work of CPO sailor messes	
3.	Sub equipment	CPO/ PO Senior rates mess, FWD mess, Technical mess	
4.	Assembly/ equipment	N/A	
5.	Make	China	
6.	Model	-	
7.	Qty	03	
8.	Justification	Degraded over the period of time.	
9.	Work required	Refurbished work of CPO sailor messes.	
10.	Detailed scope of work	Scope of work is as under: a. Repairing of wooden doors of tech mess. b. Repairing of cupboards at Fwd and tech mess. c. Repair/ replacement of roof ceiling Fwd mess (Diver cabin). d. Repairing of wooden beds 02 x Fwd mess and 02 x Tech mess. e. The firm will be responsible for welding/ cutting, if required. f. All spares (must be genuine) tools special equipment /accessories required for said Repair/ replacement are to be arranged by the firm.	
11.	Technical spec	As per IT specifications	
12.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN /GST registered.	
13.	EDC	15 x days after issuance of work/confirmation order.	
14.	Warranty	01 Year	
15.	Acceptance criteria	a. Satisfactory work done by the firm. b. Successful completion and acceptance by the end user. c. Satisfactory trials (HATs/ SATs).	

IT SPECS FOR REPAIR/ REPLACEMENT OF MAIN MACHINERY SEA WATER COOLING LINES : PMSS BARKAT - PMSS BARKAT		
1.	Ship's Name	PMSS BARKAT
2.	Parent equipment/system	Main propulsion system
3.	Sub equipment	Gear box, Shaft bearing cooling lines
4.	Assembly/ equipment	Sea water cooling lines
5.	Make	China
6.	Model	N/A
7.	Qty	As per scope of work
8.	Justification	Degraded over the period of time.
9.	Work required	Repair/Replacement for sat ops.
10.	Detailed scope of work	<p>a. Repair / replacement of under mentioned Lines</p> <ol style="list-style-type: none"> 1) 04x Gear box overboard lines (Dia 3" length 66') 2) 04 x Gear box cooling inlet lines (Dia 2" length 96') 3) ASME shaft bearing cooling in AER (Dia 2" Length 8') 4) ASME shaft bearing cooling in AER (Dia 2" Length 5') 5) APME shaft bearing cooling in AER (Dia 2" Length 9') 6) FPME shaft bearing cooling in FER (Dia 2" Length 10') 7) FPME shaft bearing cooling in FER (Dia 2" Length 9') 8) FSME shaft bearing cooling in AER (Dia 2" Length 8') 9) FSME shaft bearing cooling in AER (Dia 2" Length 12') 10) FSME sea water pump suction line Dia 6", length 5' <p>b. All spares (must be genuine) tools special equipment /accessories required for said Repair/ replacement are to be arranged by the firm.</p> <p>c. Any damage/ defect/wear tear occurred during course of removal; repair and installation of system/equipment will be repaired /met by firm.</p> <p>d. The firm will be responsible for all removal, transportation and installation work during warranty/ grantee periods.</p>
11.	Technical spec	As per scope of work
12.	Eligibilities	<p>a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work.</p> <p>b. The firm must have sufficient experience of same kind of work and experienced.</p> <p>c. The firm should be NTN /GST registered</p>
13.	EDC	07 x days after issuance of work/confirmation order.
14.	Warranty	01 Year
15.	Acceptance criteria	<p>a. Satisfactory work done by the firm.</p> <p>b. Successful completion and acceptance by the end user.</p> <p>c. Satisfactory trials (HATs/ SATs).</p>

REPAIR/ REPLACEMENT OF DECKS DRAIN PIPES: PMSS BARKAT		
1.	Ship's Name	PMSS BARKAT
2.	Parent equipment/system	Decks drain/ wash basins drain pipe
3.	Sub equipment	All water drains
4.	Assembly/ equipment	-
5.	Make	China
6.	Model	N/A
7.	Qty	As per scope of work.
8.	Justification	Deck drains are failed in smooth water discharging due to F.W.T.
9.	Work required	Repair/Replacement work for sat ops
10.	Detailed scope of work	<p>Scope of work is as under:</p> <p>a. Repair work of under mentioned deck drain pipes:</p> <ol style="list-style-type: none"> 1) Drain pipe (STBD passage bridge wing) dia 2" length 1 feet deteriorated 2) Drain pipe (STBD passage in front of CPOs lobby) 2" length 2 feet deteriorated 3) Drain pipe (STBD passage in front of FM-200 Compt) 2" length 3 feet deteriorated 4) Drain pipe (Port passage near fueling point) 2" length 2 feet deteriorated 5) Drain pipe (Port passage in front of WEO cabin) 2" length 4 feet deteriorated 6) Drain pipe (Port passage in front of pantry) 2" length 3' deteriorated <p>b. Repair work of 08 x deck drains with drain pipes.</p> <p>c. Repair/ replacement of Sailor washroom, ship's galley, officer washroom and pantry all drains must be as per sample with NRV.</p> <p>d. All accessories are to be used should be stainless steel for re-installation of lines and pipes.</p> <p>e. Requirement of external services, if required will be responsibility of firm.</p> <p>f. All spares (must be genuine) tools special equipment /accessories required for said Repair/ Maintenance are to be arranged by the firm.</p> <p>g. Any damage/ defect/wear tear occurred during course of removal; repair and installation of system/equipment will be repaired /met by firm.</p> <p>h. The firm will be responsible for all removal, transportation and installation work during warranty/ grantee periods claims in case of any rework.</p>
11.	Technical spec	<p>a. Dia 3"</p> <p>b. Dia 2"</p> <p>c. Dia 1.5"</p> <p>d. Dia 1"</p>
12.	Eligibilities	<p>a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work.</p> <p>b. The firm must have sufficient experience of same kind of work and experienced.</p>
13.	EDC	c. The firm should be NTN /GST registered
14.	Warranty	07 x days after issuance of work/confirmation order.
15.	Acceptance criteria	01 Year
		<p>a. Satisfactory work done by the firm.</p> <p>b. Acceptance by the end user.</p> <p>c. Satisfactory trials (HATs/ SATs).</p>

IT SPECS FOR RENOVATION/ UPLIFT OF OFFICER'S CABINS : PMSS BARKAT		
1.	Ship's Name	PMSS BARKAT
2.	Parent equipment/system	Uplift/ Renovation work of officer cabins
3.	Sub equipment	Wooden fitting
4.	Assembly/ equipment	N/A
5.	Make	China
6.	Model	-
7.	Qty	05
8.	Justification	Degraded over the period of time.
9.	Work required	Renovation and uplift work of officers cabins.
10.	Detailed scope of work	Scope of work is as under: a. Replacement of wall paper of officer cabins. b. Repair work of wood fittings (tables, cupboards and wooden drawers of beds). c. Inspect the wooden door with lock and repair work to be carried out if defective. d. Inspect wall paneling and repair/ replace if damaged. e. Marine plywood is to be used for any kind of wood work. f. Replacement of 07 x marine version sockets to be changed. g. Repair work of 02 x wooden beds. h. Replacement of 02 x dressing mirrors. j. Replacement of 03 x floor mats. k. The firm will be responsible for welding/ cutting, if required. l. All spares (must be genuine) tools special equipment /accessories required for said Repair/ replacement are to be arranged by the firm.
11.	Technical spec	As per IT specifications
12.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN /GST registered.
13.	EDC	15 x days after issuance of work/confirmation order.
14.	Warranty	01 Year
15.	Acceptance criteria	a. Satisfactory work done by the firm. b. Successful completion and acceptance by the end user. c. Satisfactory trials (HATs/ SATs).

REPAIR/ REPLACEMENT OF DEFECTIVE/ DEGRADED MISC ELECTRICAL EQUIPMENTS: PMSS BARKAT		
1.	Ship's Name	PMSS BARKAT
2.	Parent equipment/system	Power Generation & Distribution (PGD)
3.	Sub equipment	DC Cables, Breakers, Supply boxes/ Panels, Starters, Battery terminal lugs, Shore supply cable lugs, Relays, Switches/Sockets, Reflectors, Navigation lights, Electric hooter and MOB alarm system.
4.	Assembly/ equipment	Nil
5.	Make	China
6.	Model	NA
7.	Qty	-
8.	Justification	Electrical equipment's degraded over the period of time.
9.	Work requisition	Repair/ replacement of miscellaneous electrical equipment's.
10.	Detailed scope of work	Scope of work is as under: a. Repair/ replacement of Main engines starting DC cables. b. Repair/ replacement of Main and aux machinery 22 x starting batteries L-type lead terminal lugs. c. Replacement 20 x supply breaker/ control cards of ACs (Breaker 30 AMP 2 POLE). d. Replacement of 02 x 400 volt marine version AC supply sockets (04 PIN) at Fox'l and Q/ Deck. e. Replacement of On/Off switches & multipurpose sockets with new switches. (140 x multipurpose sockets and 78 x switches as required) f. Replacement of 12 x Marine version sockets in machinery compartments and on upper decks. g. Repair/ Replacement and Servicing of 01 x Rectifier. h. Repair/ replacement of 02 x police lights. j. Replacement of 02 x reflectors with high intensity reflectors (>1NM range) at Signal deck. k. Servicing Main mast and aft mast navigation lights. l. Servicing of 02 x 400 volt distribution box at MCR and Evac Compt. m. Servicing of 02 x Split ACs Supply boxes at FER and AC Compt. n. Servicing of 02 x starters of fire main pumps. p. Servicing of 03 x fresh water pumps starters. q. Servicing of 04 x Engine room exhaust fans. r. Servicing of 04 x Main engine vent fan control panel in FER & AER. s. Servicing of sea crane starter panel and remote panel. t. Servicing of 05 x 220 volt distribution boxes at Bridge alleyway, CPOs lobby, Fwd mess, MCR and Bridge. u. Servicing of flood alarm system. v. Servicing of FM200 control system. w. Servicing of electrical hooter 24 volts DC. x. Servicing/ replacement of Man overboard (MOB) control panel switches and cable. y. Servicing of shore supply box and of new punching lugs with shore supply cable. z. Repair/ replacement of weather deck lights bases. aa. Repair/ replacement of electrical equipment's fitting bases on upper decks. ab. Repair/ replacement of PVC cable ducting on upper decks. ac. Repair/ replacement of new flexible conduit pipe on all

		<p>cables and split AC lines on upper decks.</p> <p>ad. Repair/ replacement of cable channel (Metallic) on PORT outer alleyway from FWD to AFT.</p> <p>ae. Repair/ maintenance of wiring and lamps of Aux machinery indication lights in MCR (11x indication light).</p> <p>af. All associated fittings should be properly secured as per standard.</p> <p>ag. Standard wiring is required where necessary, cable must be marine version.</p> <p>ah. Standard marking of all cables/ connection is required.</p> <p>aj. All spares (must be genuine) tools special equipment /accessories required for said Repair/ Replacement are to be arranged by the firm.</p> <p>ak. Any damage/ defect/wear tear occurred during course of repair and replacement of system/equipment will be repaired /met by firm.</p>
11.	Technical spec	Standard parts/items are to be used.
12.	Eligibilities	<p>a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work.</p> <p>b. The firm must have sufficient experience of same kind of work and experienced.</p> <p>c. The firm should be NTN /GST registered.</p>
13.	EDC	20 x days after issuance of work/confirmation order
14.	Warranty	01 Year
15.	Acceptance criteria	<p>a. Satisfactory work done by the firm.</p> <p>b. Successful completion and acceptance by the end user.</p> <p>c. Satisfactory trials (HATs/ SATs).</p>

IT NO : IT/47/30/2024-25

IT SPECS FOR REPAIR/ REPLACEMENT AND UPLIFT OF SICKBAY : PMSS BARKAT			15
1.	Ship's Name	PMSS BARKAT	
2.	Parent equipment/system	Sickbay	
3.	Sub equipment	Repair/ replacement and uplifting work.	
4.	Assembly/ equipment	Medicine stowage Lockers, drawers, oxygen cylinder holding mechanism, paneling, flooring, ceiling and fitting of AC for controlled environment.	
5.	Make	China	
6.	Model	-	
7.	Qty	01	
8.	Justification	Degraded condition over the period of time	
9.	Work required	Repair/ replacement Work	
10.	Detailed scope of work	<p>Scope of work is as under:</p> <p>a. Repair/ replacement of curtains in said compartments.</p> <p>b. Repair/ replacement of wall paneling (ALCA bond sheets) and ceiling including sockets.</p> <p>c. Repair/ replacement of steel fittings cabinets/ shelving for documents.</p> <p>d. Repair/ replacement of roof ceiling with lights.</p> <p>e. Replacement of tables, cupboards and chairs.</p> <p>f. Replacement of wooden door.</p> <p>g. Marine plywood is to be used for any kind of wood work.</p> <p>h. Replacement of fans in said compartments.</p> <p>i. Fitting of 01 x New AC (01 Ton).</p> <p>j. Fitting of holding mechanism for oxygen cylinder.</p> <p>k. Repair/ replacement of 01 x patient bed.</p> <p>l. Repair/ replacement of lockers and drawers.</p> <p>m. The firm will be responsible for welding/ cutting, if required.</p> <p>n. All spares (must be genuine) tools special equipment /accessories required for said Repair/ replacement are to be arranged by the firm.</p> <p>q. Any damage/ defect/wear tear occurred during course of repair and replacement of system/equipment will be met by firm.</p>	
11.	Technical spec	As per IT specifications	
12.	Eligibilities	<p>a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work.</p> <p>b. The firm must have sufficient experience of same kind of work and experienced.</p> <p>c. The firm should be NTN /GST registered.</p>	
13.	EDC	15 x days after issuance of work/confirmation order.	
14.	Warranty	01 Year	
15.	Acceptance criteria	<p>a. Satisfactory work done by the firm.</p> <p>b. Successful completion and acceptance by the end user.</p> <p>c. Satisfactory trials (HATs/ SATs).</p>	

IT NO : IT/47/31/2024-25

IT SPECIFICATIONS FOR REPAIR/ REPLACEMENT OF PORT & STBD RHIB DAVIT SEALS - PMSS KOLACHI				
5 No	Description			
1.	Parent Equipment	RHIB Davit		
2.	Sub Equipment	Hydraulic system		
3.	Assembly Equipment	Seals & O-rings		
4.	Make	CSSC Luzhou Zhenjian Marine auxiliary machinery		
5.	Model	LWYH25		
6.	Required Quantity	Part Number	Description	Quantity
		GB1235 Φ11x1.9	O-ring	04
		GB1235 Φ16x2.4	O-ring	02
		GB1235 Φ20x2.4	O-ring	04
		GB1235 Φ30x3.1	O-ring	08
		GB1235 Φ35x3.1	O-ring	04
		GB1235 Φ40x3.1	O-ring	06
		YWZ-350T	Oil Level Meter	02
		YN60-III	Pressure gauge	04
		JB982-77 10	Gasket	10
7.	Justification	Repair/ replacement defective parts of both RHIB Davits.		
8.	Work required/ defect	Repairing/ replacement of O-ring, Seals, Gaskets and gauges of Port and STBD boat davits.		
9.	Detailed scope of work	<p>Repair/ replacement of following parts:</p> <p>a. All O-rings</p> <p>b. All ram seals</p> <p>c. Pressure gauges</p> <p>d. Level indicators</p>		
10.	Technical specifications	As per OEM specifications/ Manual		
11.	Eligibility Criteria	Reputable local/ international contractor having working experience with PMSA.		
12.	EDD/EDC	15 Days after award of contract		
13.	Warranty	01 Year		
14.	Acceptance Criteria (if any)	<p>a. OEM Certified item</p> <p>b. Zero leakage of hydraulic oil</p> <p>c. Upon scrutiny of items and provided documents along with production certificate by OEM</p>		
15.	Any other relevant information	Contact MEO (0333-8948563)		

IT SPECIFICATION FOR OVERHAUL OF LANDING GEARS – DEFENDER BN-2T AIRCRAF

1.	Ship's Name	93 PMSA SQN		
2.	Parent Equipment	Defender BN-2T Aircraft		
3.	Sub Equipment	Defender BN-2T Aircraft		
4.	Assembly Equipment	Landing Gears		
5.	Make	UK		
6.	Model	--		
7.	Quantity	As mentioned against each		
8.	Justification	To meet overhaul requirement of landing gears		
9.	Work Required/ Defect	Replacement of spares/ consumables		
10.	Detail Scope of Work	--		
11.	Item Description	S No	Part No	Qty
		1.	AIR46112	Seal 02
		2.	AIR46114	Seal 02
		3.	AIR45930	Seal 02
		4.	AIR111958	Ring Back Up 04
		5.	SP90H15	Pin Split 02
		6.	AIR14950	Valve Inflation 02
		7.	AIR45932	Seal 02
		8.	AEROSHELL 41	Hydraulic Fluid 01 USG
		9.	JC5A	Jointing Compound 02 Tube
		10.	PR1422A2	Sealing Compound 02 Set
12.	Technical Specs (If any)	--		
13.	Eligibilities	<p>a. Items are to be provided in New Condition only, from OEM or OEM authorized aviation vendors</p> <p>b. Firms have to provide authorization letter of their principal firms and bank statement of last 01 year of their firm</p> <p>c. Firms must have at least 02 years' experience of provision/ repair of Aviation components/ spare parts. Experience certificate of Aviation related contracts by contracting agency in Pakistan is mandatory.</p> <p>d. Firms need to include freight/ Insurance charges and custom duties/ taxes, etc (as applicable) in quotation.</p> <p>e. Firms need to get import/ export licenses from respective abroad firms/ agencies where applicable.</p> <p>f. In case of failure to meet acceptance criteria or any defect during physical/ operational testing of items post installation on aircraft, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time</p>		
14.	EDD	03 weeks after award of contract		
15.	Warranty	01 Year		
16.	Acceptance Criteria (if any)	a. Satisfactory physical condition and operational check of items (where Applicable).		

- b. Items part numbers should be identical to the part numbers mentioned against each item in IT Specification. Alternatively, OEM letter for change in Part No may also be provided (COC) certificate of conformity.
- c. Provision of EASA/ FAA release Form.
- d. Date of manufacturing for supplied items should not be more than 6-8 weeks.

IT SPECIFICATION – DATUM PLATES FOR 12.7mm GUNS – PMSS HINGOL

S No.	Description	
1.	Parent System	12.7mm Guns
2.	Sub System	12.7mm Guns (Port/ Stbd)
3.	Assay Component	Datum Plates
4.	Origin	Local Contractor
5.	Make	High strength aluminum or stainless steel for durability and corrosion resistance
6.	Model	-
7.	Quantity	02
8.	Technical specification	Size: Approx. 12 inches x 8 inches Thickness: 5mm to 10mm Tolerance: Maintain tolerance of ± 0.5 mm for precision
9.	Justification	Required for safety of Gun Crew
10.	Scope of Work	Fabrication and installation of Datum Plates
11.	Eligibilities	Reputable local contractor having working experience onboard HINGOL Class MPVs.
12.	EDC	ASAP
13.	Warranty	1 Year
14.	Acceptance Criteria	As Per IT spec
15.	Any other Information	<p>a. Damage/ defect occurred to guns/ surrounding fittings during work is responsibility of contractor.</p> <p>b. Dismantling/ assembling/ installation and in way removal work is responsibility of contractor.</p>

**IT SPECIFICATION – SHIFTING OF SHORE DGs AND 02 CONTAINERS OF COASTAL BASES
PMSS NAZIM**

1.	Ships Name	PMSS NAZIM
2.	Parent equipment	02 x Shore DGs (100 KVA & 30 KVA) AND 02 x Containers
3.	Sub equipment	N/A
4.	Assembly component	N/A
5.	Make	N/A
6.	Model	N/A
7.	Quantity	N/A
8.	Justification/ i.e PMS/ Failure/ FWT etc	Transportation is required for shifting of DGs and containers as per S No 9
9.	Work required/ Defect	a. 100 KVA DG from Gwadar to Pasni. b. 30 KVA DG from Pasni to Korangi Fish Harbour (Karachi) c. 2 x 20 Feet containers from Ormara to Korangi Fish Harbour (Karachi) ?
10.	Detail Scope of Work	As per S No 9
11.	Technical Specs	a. Firm will visit on site to ascertain the actual dimension of Shore DGs. b. Containers Dimension Height 8'4 Inches, Length 19' 10 inches and Width 8 Ft.
12.	Eligibility criteria	Any local well reputed firm having experience for shifting of goods in Pakistan.
13.	EDC	15 Days
14.	Warranty	N/A
15.	Acceptance Criteria	Inspection by end user and successful shifting of items.

**IT SPECIFICATION OF REPAIR/REPLACEMENT OF BOTH MDEs CONTROL AND
MONITORING SYSTEM – PMSS RAFAQAT**

1.	Parent equipment	MDEs Control and monitoring system
2.	Sub equipment	Control system
3.	Assembly component	Port and Stbd MDEs control system
4.	Make	USA
5.	Model	N/A
6.	Qty	02
7.	Justification i.e PMS/Failure/ FWT/Defect	Both HMI, Stbd MDE speed transmitter, Stbd MDE D-6 module, MDEs exhaust temperature modules and both shaft RPM sensors are malfunctioning
8.	Work required/ Defect	Repair/replacement Both HMI, MDEs speed transmitters, D-6 modules, MDEs exhaust temperature modules and shaft RPM sensors for Sat Ops.
9.	Detailed scope of work	a. Repair/replacement of control & monitoring system is essentially required for sat Ops. b. Repair/replacement Both HMI in mess deck c. Repair/replacement Stbd MDE speed transmitters. d. Repair/replacement Stbd D-6 module e. Repair/replacement port MDE exhaust bunks temperature modules f. Repair/replacement both shaft RPM sensors with transmitters g. All material, spares, tools, special equipment/ tools, accessories etc required for said work are to be arranged by the contractor. h. Requirement of external services, if any will be responsibility of the firm without any liability on the part of ship. i. When visit onboard to carry out inspection to establish the extent of required work. k. Repair/replacement/calibration of complete control & monitoring system.
10.	Technical specification	-
11.		a. The firm should visit onboard and carry out inspection to establish the extent of required work. b. The firm should have experience of the same kind of work. c. the firm should be NTN/GST registered.
12.	EDC	07 Days
13.	Warranty	01 Year
14.	Acceptance criteria	a. OEM certified material. b. Satisfactory running trials. c. Successful operation of MDEs control & monitoring system.

IT SPECIFICATIONS FOR REPLACEMENT OF INSULATED RUBBER MAT - PMSS ZHOB

S.No	Description	
1.	Parent equipment	Rubber Mat
2.	Sub equipment	Insulated rubber mat
3.	Assembly component	
4.	Model	N/A
5.	Make	N/A
6.	Qty	01 (30 x 4 ft) 15MM
7.	Justification	With the passage of time the rubber mat have become deteriorated and same need replacement considering safety of men.
8.	Work required/Defect	Replacement of insulated rubber mat
9.	Scope Of Work	a. Contractor is to visit ship and carry out detailed inspection of mat placement area b. Replacement of mat
10.	Technical specifications	Sustainable upto at least 500 Volts
11.	Eligibility criteria	Reputable local contractor having working experience of electrical safety mats
12.	EDC	5 days
13.	Warranty	1-year
14.	Acceptance criteria	To ensure safety of men and material while carrying out operation & repair/ maintenance activities on switchboards
15.	Any other information	Growth Work. Damage/ defect occurred during work is responsibility of contractor

IT SPECIFICATION FOR DEFECT RECTIFICATION OF RAW WATER SYSTEM FWD PORT MAIN ENGINE (FPME) - PMSS NUSRAT		
S No	IT Specifications	PMSS NUSRAT
1.	Ship's Name	Fwd Port Main Engine (FPME)
2.	Parent Equipment	Raw Water System
3.	Sub System	Raw Water Pump
4.	Assembly Components	
5.	Make	MTU Germany
6.	Model	MTU 16V396TB963
7.	Quantity	01
8.	Justification i.e PMS/ Failure/ FWT etc	Raw water system/ pump performance degraded unit raised OPDEF/ME/03-25 of PMSS NUSRAT
9.	Work Required/ Defects	Defect rectification of existing Raw Water system
10.	Scope of Work	Work of scope as under a. Gear driven raw water pump is to be dismantled to determine/ diagnose the defect b. Inspect pump body, impeller and other accessories c. Repair/ Replacement of existing raw water pump d. Remove the pump cover and inspect impeller for wear, cracks or damage. Replace if necessary e. Repair/ replacement of suction & discharge line if deteriorated f. Raw water pump to be calibrated and pressure tested for satisfactory operation g. Raw water pump mechanical seal is to be replaced h. Assembling of the raw water pump is to be done as per MTU manual instructions i. The firm will be responsible to undertake any work not covered above to ensure good quality of work k. There will no growth work l. The firm will be responsible for welding/ cutting, if required m. All spares, tools, special equipment/ tools, accessories etc for fabrication/ installation are to be arranged by the contractor n. The firm will be responsible for requirement of external services
11.	Technical Spec	p. Any damage/ defect/ wear tear occur during the removal and installation of core assembly will be met by firm q. The firm will be responsible for all transportation installation work during warranty/ guarantee period claims and in case of any re-work a. Self-priming centrifugal pump b. Pump flow 18 liters per seconds at 1500 engine RPM
12.	Eligibility Criteria	c. Weight 55.5 Kg a. The firm should visit onboard and carryout inspection to establish the extent of required work b. The firm should having good experience of the similar work required onboard
13.	EDC	c. The firm should be NTN/GTN registered
14.	Warranty / Guarantee	20 x working days after issuance of work/ confirmation of completion 01 year/1500 Hrs from the date of acceptance
15.	Acceptance criteria	a. Successful defect rectification of raw water system b. HATs/ SATs

IT SPECIFICATION FOR CALIBRATION OF GAUGES AND METERS -PMSS ZHOB 16		
No	Description	
1.	Parent equipment	Pressure temperature gauges & electrical meters
2.	Sub equipment	
3.	Assembly component	
4.	Model	N/A
5.	Make	China
6.	Qty	252
7.	Justification	All gauges and electrical meters mentioned as per attached list needs to be calibrated.
8.	Work required/Defect	All gauges and electrical meters mentioned as per attached list needs to be calibrated.
9.	Scope Of Work	a. Repair/ replacement of defective gauges and meters as per enclosed list. b. Removal/ installation and isolation of system whose gauges are being removed for calibration. c. Provision of calibrations certificates of every gauge/ meter. d. All gauges/ meters are to be tested prior removal. All operational gauges/ meters are to be returned in operational state. Any gauge/ meter which become defective during calibration are to be replaced by contractor. e. Zoning of gauges as per the requirement of SS. f. Contractor is to provide brazing/ repair works of associated gauges/ meters lines g. Conduct of harbor and sea trials.
10.	Technical specifications	As per OEM Manual
11.	Eligibility criteria	a. Company must be sales tax and income tax registered. b. Contractor is to be visit the ship prior participants in job to quantify the number of gauges/ meters, repair/ brazing work (if required). c. Contractor is to mention/ verify the testing facility being utilized for calibration of gauges.
12.	EDC	15 Days
13.	Warranty	1-year
14.	Acceptance Criteria	Upon completion of work and successful HATs & SATs
15.	Any other information	Growth Work, Damage/ defect occurred during work is responsibility of contractor.

IT NO : IT/47/39/2024-25

REPAIR/ REPLACEMENT AND INSTALLATION OF RADAR ANTEENA BASE ALONGWITH OEM CERTIFIED CABEL – PMSS DASHT

S No.	Description	
1.	Parent Equipment	JMA 5312 Radar
2.	Sub Equipment	JMA 5312 Radar Antenna
3.	Assembly component	Antenna Base
4.	Make	JRC
5.	Model	JMA 5312- 6/6HS
6.	Qty	01
7.	Justification i.e PMS/Failure/FWT etc	Increase the radar detection range and decrease blind arc
8.	Work required/ Defect	Extension of Radar Antenna Base
9.	Detailed Scope of Work	Replacement and installation of Radar Antenna Base alongwith OEM certified cable
10.	Technical specs	10 KW, X Band
11.	Eligibility Criteria	Any firm having good experience with PMSA. OEM/ authorized reps will be given preference
12.	EDD	10 Days
13.	Warranty	Service and repair warranty of 01 year
14.	Acceptance Criteria	a. Only OEM Certified item be accepted b. Item be accepted after satisfactory test/trials onboard at sea c. Successful Trials by end user alongwith satisfactory test/ trials sheets duly signed by the firm

IT NO : IT/47/40/2024-25

PMSS KASHMIR

IT SPECIFICATION: CONDUCT OF PMS ROUTINES RELATED TO MISCs CONTROL DEVICES (SYSTEMS)

1.	System	Control Devices (Systems)																																				
2.	Sub system	Main Engines, Gearbox, Rudder, Brake																																				
3.	Assembly Component	Misc																																				
4.	Make	a. Systems Engineering Research Institute Of China State Shipbuilding Corporation b. Shanghai Marine Diesel Engine Research Institute, CSIC																																				
5.	Model	Misc																																				
6.	Quantity	13																																				
7.	Justification i.e PMS/ Failure/ FWT etc	PMS Routines																																				
8.	Work Required/ Defect	Conduct of following PMS Routines alongwith replacement of requisite spares (if required): <table border="1"> <thead> <tr> <th>S No</th><th>PMS</th><th>Description</th></tr> </thead> <tbody> <tr> <td>a.</td><td>5-6121-0000</td><td>Power Station Monitoring and Control System</td></tr> <tr> <td>b.</td><td>5-6123-0001</td><td>Main Engine Local Control And Monitoring System (Port & Stbd)</td></tr> <tr> <td>c.</td><td>5-5701-0000</td><td>Emergency Main Engine Telegraph System (Port & Stbd)</td></tr> <tr> <td>d.</td><td>5-6129-0000</td><td>Gearbox Electrical Monitoring And Control System (Port & Stbd)</td></tr> <tr> <td>e.</td><td>5-6202-0003</td><td>Local Control Panel (Port & Stbd)</td></tr> <tr> <td>f.</td><td>5-3109-0001</td><td>Brake Control Device (Port & Stbd)</td></tr> <tr> <td>g.</td><td>5-6320-0000</td><td>Rudder Control System (Port & Stbd)</td></tr> </tbody> </table>	S No	PMS	Description	a.	5-6121-0000	Power Station Monitoring and Control System	b.	5-6123-0001	Main Engine Local Control And Monitoring System (Port & Stbd)	c.	5-5701-0000	Emergency Main Engine Telegraph System (Port & Stbd)	d.	5-6129-0000	Gearbox Electrical Monitoring And Control System (Port & Stbd)	e.	5-6202-0003	Local Control Panel (Port & Stbd)	f.	5-3109-0001	Brake Control Device (Port & Stbd)	g.	5-6320-0000	Rudder Control System (Port & Stbd)												
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		<table border="1"> <tbody> <tr> <td colspan="3">PMS No: 5-6202-0003</td></tr> <tr> <td>h.</td><td>Maintenance and Service of System</td><td>001</td></tr> <tr> <td colspan="3">PMS No: 5-3109-0001</td></tr> <tr> <td>i.</td><td>Device Overhaul</td><td>005</td></tr> <tr> <td colspan="3">PMS No: 5-6320-0000</td></tr> <tr> <td>j.</td><td>Replace Backup Battery (Qty. 04 Type: NiMH (rechargeable) with a capacity of 8.4V and minimum 170mAh)</td><td>001</td></tr> </tbody> </table> <p>Note:</p> <ul style="list-style-type: none"> Spares required to conduct the routines will be provided by firm. Any growth work will be bear by firm. 	PMS No: 5-6202-0003			h.	Maintenance and Service of System	001	PMS No: 5-3109-0001			i.	Device Overhaul	005	PMS No: 5-6320-0000			j.	Replace Backup Battery (Qty. 04 Type: NiMH (rechargeable) with a capacity of 8.4V and minimum 170mAh)	001																		
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j.	Replace Backup Battery (Qty. 04 Type: NiMH (rechargeable) with a capacity of 8.4V and minimum 170mAh)	001																																				
10.	Technical Specs	As per relevant TPIs & JICs																																				
11.	Eligibility Criteria	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																																				
12.	EDC	04 weeks after confirmation of order																																				
13.	Warranty	01 x Years																																				
14.	Acceptance Criteria	Satisfactory trials of all systems for 01 x month																																				
15.	Any other relevant information	Firm must visit onboard before providing quotation to verify exact scope of work as per JIC (Contact: 0321-3000503)																																				

IT SPECS FOR REFURBISHMENT OF DEGRADED COMPARTMENTS: PMSS BARKAT			30
1.	Ship's Name	PMSS BARKAT	
2.	Parent equipment/system	Repair/ replacement work to uplift the compartments	
3.	Sub equipment	Bridge, MRO, MCR, Ship' office, Ship' dining hall, Store office and Wardroom pantry.	
4.	Assembly/ equipment	N/A	
5.	Make	China	
6.	Model	-	
7.	Qty	07 x Compartments	
8.	Justification	Compartments at para 02 are degraded over the period of time.	
9.	Work required	Repair/ replacement Work	
10.	Detailed scope of work	Scope of work is as under: a. Replacement of wall paper in ship's office. b. Repairing of tables at ship's office and MRO. c. Repair/ replacement of roof ceiling at ship's office, bridge and MCR. d. Replacement of insulated mat at MCR. e. Repairing of wooden door at ship's office and MCR. f. Repairing of lockers at BRIDGE & MRO. g. Repair/ replacement of deck flooring of wardroom pantry. h. Repair/ replacement of Hot plate at wardroom pantry. i. Repair work required at ship's office (wooden racks, lockers and tables). j. Repair work of dining tables and wood benches of sailors dining hall. k. Repair/ replacement of roof paneling at sailor dining hall. l. Repair work of locking mechanism, rubber seal of compartments windows. m. Marine plywood is to be used for any kind of wood work. n. Replacement of fans. ✓ o. Replacement of floor mats at MCR and bridge. p. Repairing of wall sealing of MCR. q. The firm will be responsible for welding/ cutting, if required. r. All spares (must be genuine) tools special equipment /accessories required for said Repair/ replacement are to be arranged by the firm.	
11.	Technical spec	As per IT specifications	
12.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN /GST registered	
13.	EDC	15 x days after issuance of work/confirmation order.	
14.	Warranty	01 Year	
15.	Acceptance criteria	a. Satisfactory work done by the firm. b. Successful completion and acceptance by the end user. c. Satisfactory trials (HATs/ SATs).	

REPAIR/ REPLACEMENT OF SHIP'S GALLEY : PMSS BARKAT			31
1.	Ship's Name	PMSS BARKAT	
2.	Parent equipment/system	Ship's Galley	
3.	Sub equipment	Deep fryer and Flooring work.	
4.	Assembly/ equipment	-	
5.	Make	China	
6.	Model	N/A	
7.	Qty	-	
8.	Justification	DED work	
9.	Work required	Repair/ replacement work	
10.	Detailed scope of work	Scope of work is as under: a. Replacement of ceramic tiles. b. Servicing of 02 x Hot plates with associated equipment's. c. Repair work of steel tables, racks, lockers drawers and tables. d. Required installation of Deep fryer. e. Replacement of heat proof lights. f. Servicing of exhaust fan. g. Repair/ replacement of sanitary fittings including drain lines with NRV. h. Replacement of insulated mats. ✓ i. Repairing of wooden door. j. Standard wiring is to be used in lighting circuits and properly secured. k. Connections must be tightened. l. The firm will be responsible to undertake any work not covered above to ensure good quality of work. m. The firm will be responsible of welding/ cutting if required. n. Requirement of external services, if required will be responsibility of firm. o. All spares (must be genuine) tools special equipment /accessories required for said Repair/ Maintenance are to be arranged by the firm. p. Any damage/ defect/wear tear occurred during course of removal, repair and installation of system/equipment will be repaired /met by firm. q. The firm will be responsible for all removal, transportation and installation work during warranty/ grantee periods claims in case of any rework. r. No growth work will be processed.	
11.	Technical spec	As per scope of work.	
12.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN /GST registered. d. Any damage/defect/wear tear occurred during course of repair and replacement of system/ equipment will be repaired/ met by firm. e. Cables are to be marked properly for identification.	
13.	EDC	15 x days after issuance of work/confirmation order	
14.	Warranty	01 Year	
15.	Acceptance criteria	a. Satisfactory work done by the firm. b. All spare wires to be used marine version and branded. c. Physical inspection and suitability for spares by end user d. Satisfactory trials (HATs/ SATs).	

REPAIR/ REPLACEMENT OF STEERING SYSTEM, PMSS BARKAT			38
1	Ship's Name	PMSS BARKAT	
2	Parent equipment/system	Steering system	
3	Sub equipment	Steering control system, follow up & non-follow up modes of steering system and inspection of hydraulic system including steering motors.	
4	Assembly/ equipment	NA	
5	Make	China	
6	Model	NA	
7	Qty		
8	Justification	Degraded over the period of time	
9	Work requisition	Repair/ replacement of steering system.	
10	Detailed scope of work	Scope of work is as under: a. Complete servicing & overhauling of steering control system of Bridge & ASP in both modes (follow up and non-follow up). b. Inspect and servicing of hydraulic system & steering motors. c. Repair/ replacement and inspection of steering control system (All cables, control cards, switches, sensors & relays from ASP to Bridge check/ inspect and replace if necessary). d. All associated fittings should be properly secured as per standard. e. Marine standard wiring is required where necessary. f. Standard marking of all cables/ connection is required. g. All spares (must be genuine) tools special equipment /accessories required for said Repair/ Replacement are to be arranged by the firm. h. Any damage/ defect/wear tear occurred during course of repair and replacement of system/equipment will be repaired /met by firm.	
11	Technical spec	Standard parts/items are to be used	
12	Eligibilities	a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN /GST registered.	
13	EDC	14 x days after issuance of work/confirmation order	
14	Warranty	01 Year	
15	Acceptance criteria	a. Satisfactory work done by the firm. b. Successful completion and acceptance by the end user. c. Satisfactory (PATA/ SATs) of steering system follow-up and non-follow-up modes.	

IT SPECIFICATION FOR PURCHASE OF TELEPHONE SETS -		
PMSS NUSRAT, COMEMR, 93 PMSA SQN AND D LEGAL		
S No	DESCRIPTION	SPECIFICATIONS
a.	System/ Item	Telephone Sets
b.	Model/Origin	Model No: KXTS934 MX (15 x Telephone Sets)
c.	Quantity	15
d.	Scope of Work	Provision of 15 x Telephone Sets for COMEMR PMSS NUSRAT, 93 PMSA SQN and D Legal office.
e.	EDC	10 days
f.	Warranty/ validity	Company warranty
g.	Acceptance	Items(Telephone Sets) will be accepted upon inspection by HQ PMSA rep.
h.	Any Other relevant information	In case of any query please contact 021-48508942 (0300-5051996)
IT SPECIFICATION FOR PURCHASE OF TELEPHONE SETS -		
DP AND CC OFFICE, PMSS NUSRAT & COMEMR		
No	DESCRIPTION	SPECIFICATIONS
a.	System/ Item	Telephone Set
b.	Model/Origin	Model No: KXTS934 MX (10 x Telephone Sets)
c.	Quantity	10
d.	Scope of Work	Provision of 10 x Telephone Sets for DP AND CC COMEMR & PMSS NUSRAT
e.	EDC	10 days
f.	Warranty/ validity	Company warranty
g.	Acceptance	Items(Telephone Sets) will be accepted upon inspection by HQ PMSA rep.
h.	Any Other relevant information	In case of any query please contact 021-48508942 (0300-5051996)

EASTERN WING

IT SPECIFICATIONS - REPAIR/ REPLACEMENT OF 05 X HEAVY DUTY MAINTENANCE FREE DRY BATTERIES - FAST RESPONSE BOATS		
1	Ship's Name	Fast Response Boats
2	Parent Equipment	Main engines starting and control system
3	Sub Equipment	Heavy duty marine maintenance free Lead Acid (Dry) Battery 12V, 180 AH Part Number NSB-M12-210 or Equivalent
4	Assembly Component	Heavy duty marine maintenance free Lead Acid (Dry) Battery 12V, 180 AH Part Number NSB-M12-210 or Equivalent
5	Make	USA or Equivalent
6	Model	North star battery company or Equivalent
7	Quantity	05 in number
8	Justification i.e PMS/ Failure/ FWT etc	Performance of batteries degraded due to completion of useful life and requires replacement
9	Work Required/ Defect	Repair/ replacement of 05 x 12V 180 AH Heavy duty marine maintenance free Lead Acid (Dry) batteries.
10	Detail Scope of Work	Repair/ replacement of 05 x 12V 180 AH Heavy duty marine maintenance free Lead Acid (Dry) batteries.
11	Technical Spec	Heavy duty marine maintenance free Lead Acid (Dry) Battery 12V, 180 AH Part Number NSB-M12-210 or Equivalent Dimension Length (L): 22 inches Width(W): 4.92 inches Height(H): 12.5 inches Overall Height(HT): 12.44 inches Weight(kg): 128 Pounds Electrical Characteristics Cold cranking Amps@ 0°F: 1400 Cranking Amps@ 32°F: 1700 Reserve Capacity (Minutes): 400 Short Circuit Current: 5000 Ams Voltage: 12 Volts Material AGM (Absorbed Glass Mat)
12	Eligibility criteria	Any well-known national/ international firm having good experience for repair/ replacement of heavy duty marine maintenance free dry batteries.
13	EDC	15 days
14	Warranty	02 years after onboard installation and satisfactory trials.
15	Acceptance Criteria	Inspection by end user followed by onboard trials.
16	Any other relevant information	> Use of standard/USA origin batteries for C-B engines may be ensured by contracted firm. > Shipment documents and CDC required.

Note: 100% Payment after completion by CNA

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 to 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.
- c. **BID SECURITY:** All registered firms are exempted from provision of bid security upto Rs.500,000/- and unregistered firms have to provide bid security equals to 02% for bids amounting upto Rs.500,000/- in the shape of Pay Order in favor of "IT Sale Account DG PMSA". Furthermore, firms are required to deposit bid security not exceeding 05% of the bid price for bid value amounting more than Rs.500,000/-. Moreover, following guidelines will be followed:
 - i. 2% from registered firms.
 - ii. 5% from un-registered firms.
- d. Total price of the items quoted against the tender is to be clearly mentioned. It should also contain a **pay order 2% or 5% 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.
- e. **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:

S No	Description	Qty	U/Price	GST/SST/Taxes	Total Price
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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.1,000/-** nonrefundable as tender fee (In favour of IT Sale Account DG PMSA) (**Separate Quotations required for each IT Specification**).

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 along with the quotes where applicable:

- a. OEM / Authorized Dealer/Agent Certificate along with 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“. Furthermore, it is imperative to mention that deposit of PBG for HMI and Core Exchange cases will be equal to the total value of engine.

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. Partial supply as per lowest rates will be awarded to the lowest bidder.

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. Manufacture'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 late.