

SEPARATE QUOTATIONS REQUIRED FOR ATTACHED 53 X IT SPECIFICATIONS

SINGLE STAGE TWO ENVELOPE PROCEDURE

INSTRUCTIONS FOR BIDDERS (SINGLE STAGE, TWO STAGE BIDDING PROCEDURE)

In accordance with applicable PPRA Rules and DPPI-35, all participating firms are required to submit their bids under the SINGLE-STAGE, TWO STAGE ENVELOPE Bidding System for the listed items. Each bid shall consist of two separate sealed envelopes, clearly marked "Technical Proposal" and "Commercial Proposal", and placed within two outer sealed envelopes.

Stage I – Technical Proposal (First Envelope)

The Technical Proposal shall be submitted without any reference to prices or financial information and must include the following:

1. A clear understanding of the scope of work and objectives of the assignment
2. Relevant experience of the firm in similar or comparable projects
3. Details of sourcing arrangements for goods and/or services proposed for the assignment
4. Proposed methodology and work plan.
5. Approach for successful and timely completion of the work
6. Copies of relevant documents, including but not limited to:
 - Company profile.
 - Registration certificates
 - NTN / STRN (where applicable)
 - Past performance certificates or client references

The Technical Proposal will be evaluated first. Only firms whose Technical Proposals are found responsive and compliant with the prescribed requirements will qualify for Stage II (Commercial Evaluation).

Stage II – Commercial Proposal (Second Envelope)

The Commercial Proposal shall be submitted in a separate sealed envelope and must include:

1. Complete item-wise price breakdown for all goods to be supplied and/or services to be rendered
2. Clear description of the scope of work or services covered under the quoted prices
3. All prices quoted in Pakistani Rupees (PKR), inclusive of applicable duties and taxes, as detailed below:
 - **General Sales Tax (GST) @ 18%** on applicable goods
 - **Sindh Sales Tax (SST) @ 15%** on services rendered

IT NO: IT/91/01/2025-26

IT SPECIFICATIONS

MAIN AND EMERGENCY SWITCHBOARDS - PMSS BASOL

S No	Details																																																											
1.	Ships Name	PMSS BASOL																																																										
2.	Parent Equipment	Main and emergency switchboards																																																										
3.	OEM	China																																																										
4.	Origin	China																																																										
5.	Sub Equipment	Main switchboard, emergency switchboard																																																										
6.	Assembly Component	Fuse holder Fuse Fuse Fuse Fuse Circuit breaker for emergency generator ACB 800A ABB AC400V 3 pole Frame type circuit breaker of generator ABB AC380V Changeover switch Changeover switch Changeover switch Changeover switch MCCB XT1C160TMD50-500 3PFF Emergency switchboard motorizing breaker																																																										
7.	Part No. of Assembly Component	<table border="1"><thead><tr><th>S No</th><th>Part No</th><th>Description</th><th>Qty</th></tr></thead><tbody><tr><td>a.</td><td>5920PV0020003</td><td>Fuse holder</td><td>2</td></tr><tr><td>b.</td><td>5920PV0010008</td><td>Fuse</td><td>2</td></tr><tr><td>c.</td><td>5920PV0010009</td><td>Fuse</td><td>2</td></tr><tr><td>d.</td><td>5920PV0010014</td><td>Fuse</td><td>2</td></tr><tr><td>e.</td><td>5920PV0010010</td><td>Fuse</td><td>2</td></tr><tr><td>f.</td><td>5925PV9000042</td><td>Circuit breaker for emergency generator ACB 800A ABB AC400V 3 pole</td><td>1</td></tr><tr><td>g.</td><td>5925PV9000041</td><td>Frame type circuit breaker of generator ABB AC380V</td><td>3</td></tr><tr><td>h.</td><td>5930PV0040082</td><td>Changeover switch</td><td>1</td></tr><tr><td>i.</td><td>5930PV0040056</td><td>Changeover switch</td><td>1</td></tr><tr><td>j.</td><td>5930PV0040049</td><td>Changeover switch</td><td>1</td></tr><tr><td>k.</td><td>5930PV0040037</td><td>Changeover switch</td><td>1</td></tr><tr><td>l.</td><td>5925PV2000059</td><td>MCCB XT1C160TMD50- 500 3PFF</td><td>2</td></tr><tr><td>m.</td><td>as per sample</td><td>Emergency switchboard - motorizing breaker</td><td>2</td></tr></tbody></table>	S No	Part No	Description	Qty	a.	5920PV0020003	Fuse holder	2	b.	5920PV0010008	Fuse	2	c.	5920PV0010009	Fuse	2	d.	5920PV0010014	Fuse	2	e.	5920PV0010010	Fuse	2	f.	5925PV9000042	Circuit breaker for emergency generator ACB 800A ABB AC400V 3 pole	1	g.	5925PV9000041	Frame type circuit breaker of generator ABB AC380V	3	h.	5930PV0040082	Changeover switch	1	i.	5930PV0040056	Changeover switch	1	j.	5930PV0040049	Changeover switch	1	k.	5930PV0040037	Changeover switch	1	l.	5925PV2000059	MCCB XT1C160TMD50- 500 3PFF	2	m.	as per sample	Emergency switchboard - motorizing breaker	2		
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8.	Quantity	As Per Para 7																																																										
9.	Source of Availability	LOCAL MARKET																																																										
10.	Justification	To conduct PMS Routine of main and emergency switchboard and																																																										

	for Work	replacement of motorizing breaker (PMS No: 5-1201-0001)			
11.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		PM- 005	Examine and clean main circuit/ supply breaker of all SSDGs on main and emergency switchboard	Inspection/ cleaning of main circuit/ supply breaker of all SSDGs on main and emergency switchboards required for SAT OPS	As per serial No 7
PM-006	Replacement of motorizing breaker (ABB- SACE 7MAX 600 AMP) at emergency switchboard.	inspection/ Replacement of motorizing breaker of emergency switchboard for SAT OPS			
12.	Detailed scope of work	Defect list	Repair work required	Services required	Spare required
		Examine and clean main circuit/ supply breaker of all SSDGs on main and emergency switchboard Replacement of motorizing breaker (ABB- SACE 7MAX 600 AMP) at emergency switchboard.	Inspection/ cleaning of main circuit/ supply breaker of all SSDGs on main and emergency switchboards required for SAT OPS inspection/ Replacement of motorizing breaker of emergency switchboard for SAT OPS	Inspection/ cleaning of main circuit/ supply breaker of all SSDGs on main and emergency switchboards required for SAT OPS inspection/ Replacement of motorizing breaker of emergency switchboard for SAT OPS	As per serial No 7
13.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA			
14.	EDC	07 Days			
15.	Warranty	01 Year			
16.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools			

IT NO: IT/91/02/2025-26

REPAIR OVERHAUL OF 03 X SSDGS ALTERNATOR - PMSS REHMAT

S No	Details																					
1.	Ships Name	PMSS REHMAT																				
2.	Parent Equipment	Power Generation and Distribution																				
3.	OEM	CUMMINS (USA)																				
4.	Model	6CTA 8.3																				
5.	Origin	USA																				
6.	Sub Equipment	SSDG 1, 2, & 3																				
7.	Assembly Component	Alternator																				
8.	Quantity	03 X SSDGS																				
9.	Source of Availability	Local Market																				
10.	Justification for Work	Preventive maintenance routine PMS 5-1101-0000 MOP 009 of 03 x SSDGs required to be carried out for satisfactory operation of SSDGs.																				
11.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Work requisition ME-20/26 dated 14-04-26 was forwarded to BMG and same was outsourced.</td> <td>Conduct of PMS routine is required for safe and smooth operation of SSDGs Completer overhauling of alternator including replacement of bearings</td> <td>As per Serial 12 Colum 'b'</td> <td>As per Serial 12 Colum b</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Work requisition ME-20/26 dated 14-04-26 was forwarded to BMG and same was outsourced.	Conduct of PMS routine is required for safe and smooth operation of SSDGs Completer overhauling of alternator including replacement of bearings	As per Serial 12 Colum 'b'	As per Serial 12 Colum b								
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		connection box	30 x Mtr Cable 30mm
		Replacement of 03 x AVR card Replacement of 03 x bridge rectified assembly	Removal of existing degraded AVR card and installation of new i AVR card Removal of existing bridge rectifier assembly, installation of new assembly and provision of a spare assembly
		Renewal of 03 x alternator body paint	Removal of existing degraded paint of alternator and application of new instrument paint
		Replacement of 03x alternator vibration mounts	Mounts are to be replaced with new
		Replacement of 03 x main breaker	Power Supply switch for generator is to be replaced with new.
			03 x AVR card as per existing cards (FAS/DS35) 04 x bridge rectifier assemblies
			Instrument paint as required for -03 x alternators
			06 x mounts as per existing size and type
			03 x Type Dw95-400B/332 Marine an switch
		Refitting of alternator is to be carried out by using SS nuts & bolts	
		All connections must be tightened properly	
		The firm will be responsible for welding/ cutting and external service is required	
		All spares must be genuine tools special equipment/ accessories required for said repair/ maintenance are to be arranged by the firm	
		The firm will be responsible for all removal, transportation and installation work during warranty/ grantee periods claims in case of any rework	
13.	Technical Specs	400 VAC, 3 Phase,50 Hz	
14.	Eligibilities	a. The firm must visit onboard and carry out diagnosis/ inspection to establish the extent of required work. b. NTN/GST registered. c. Firm must have sufficient experience of same kind of work on Corvette class.	
15.	EDC	20 x days after issuance of work/ confirmation order.	
16.	Warranty	01 x Year to be started after completion of successful trials.	
17.	Acceptance Criteria	a. Satisfactory operation of equipment. b. Acceptance by SS. c. Successful HATs/ SATs	

REPAIR OVERHAULING OF DAILY BILGES PUMP - PMSS BASOL

S No	Details																																	
1.	Ships Name	PMSS BASOL																																
2.	Parent Equipment	Daily bildges pump																																
3.	OEM	JIANGSU ZHENHUA PUMP INDYSTRY CO, LTD																																
4.	Model	CLH80-65-9(Z)																																
5.	Origin	China																																
6.	Sub Equipment	Daily bildges pump																																
7.	Assembly Component	Daily bildges pump																																
8.	Part No. of Assembly Component	<table border="1"> <thead> <tr> <th>S No</th> <th>Part No</th> <th>Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>NA</td> <td>Pump body</td> <td>01</td> </tr> <tr> <td>b.</td> <td>NA</td> <td>Impeller</td> <td>01</td> </tr> <tr> <td>c.</td> <td>58U-30</td> <td>Mechanical seal</td> <td>01</td> </tr> <tr> <td>d.</td> <td>6206</td> <td>Bearings</td> <td>03</td> </tr> <tr> <td>e.</td> <td>Z60-C-2.5</td> <td>Gauge with adaptor</td> <td>02</td> </tr> <tr> <td>f.</td> <td>NA</td> <td>Adaptor</td> <td>04</td> </tr> <tr> <td>g.</td> <td>NA</td> <td>Shaft</td> <td>01</td> </tr> </tbody> </table>	S No	Part No	Description	Qty	a.	NA	Pump body	01	b.	NA	Impeller	01	c.	58U-30	Mechanical seal	01	d.	6206	Bearings	03	e.	Z60-C-2.5	Gauge with adaptor	02	f.	NA	Adaptor	04	g.	NA	Shaft	01
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		f.	NA	Adaptor	04																													
g.	NA	Shaft	01																															
9.	Quantity	As per para 8																																
10.	Source of Availability	Local Market																																
11.	OEM Details	GJJM-9x4, Jiang Du Qu, Yang Zhou Shi, Jiang Su Sheng, China																																
12.	Justification for Work	Daily bildges pump found degraded. Mechanical seal leaky and, overhauling of pump is to be required for sat ops																																
13.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Daily bildges pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> <td>Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump</td> <td>Daily bildges pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> <td>As per serial No 8</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Daily bildges pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump	Daily bildges pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	As per serial No 8																				
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14.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA																																
15.	EDC	07 Days																																
16.	Warranty	01 Year																																
17.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools																																

CONDUCT OF PMS ROUTINE OF ELECTROMAGNETIC STARTER - PMSS BASOL

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	Electromagnetic starter control box			
3.	OEM	China			
4.	Origin	China			
5.	Sub Equipment	Electromagnetic starter control box			
6.	Assembly Component	Logo 24RC (AC/DC) Contractor LC1D32M7C Buzzer AD-16-22SM/r 23 2 position self-locking switch LA42X29-22B 3 position no self-locking switch LA42X29-22B 2P replay RJ2S-CLD-D24 2P replay RU4S-D24 Green indicator AD16-22D/G 23S white indicator AD16-22D/W 23S red indicator AD 16-22D/R 23S White button LA39-B322/W			
7.	Part No. of Assembly Component	S No	Part No	Description	Qty
		a.	6125PV1010051	Logo 24RC (AC/DC)	2
		b.	5935PV1000059	Contractor LC1D32M7C	2
		c.	5999PV9000092	Buzzer AD-16- 22SM/r 23	2
		d.	5930PV0010227	2 position self-locking switch LA42X29-22B	2
		e.	5930PV0010228	3 position no self-locking switch LA42X29-22B	2
		f.	5930PV0010228	2P replay RJ2S-CLD-D24	2
		g.	5945PV1000247	2P replay RU4S-D24	2
		h.	6240PV0010015	Green indicator AD16-22D/G 23S	2
		i.	6240PV0010023	white indicator AD16-22D/W 23S	2
		j.	6240PV0010016	red indicator AD16-22D/R 23S	2
k.	5930PV0010061	White button LA39-B322/W	2		
8.	Quantity	As Per Para 9			
9.	Source of Availability	Local Market			
10.	Justification for Work	To conduct PMS Routine of electromagnetic Starter Control Box (PMS No 5-3101-0001-0002)			

11.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		PM- 004	Annual maintenance of device	Inspection/ overhauling of Electromagnetic starter control box required for SAT OPS	As per serial No 8,9 & 10
		PM-005	Device overhaul		
		PM- 004	Annual maintenance of device		
PM- 005	Device overhaul				
12.	Detailed scope of work	Inspection/ overhauling of Electromagnetic starter control box required for SAT OPS defective parts must be replaced with new			
13.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA			
14.	EDC	07 Days			
15.	Warranty	01 Year			
16.	Acceptance Criteria	OEM Certified Items ALL BER Items is to be replaced with new Use tested tools			

**PROCUREMENT INSTALLATION OF SENSORS AND SAFETIES OF DIESEL GENERATORS
NO 1 - PMSS BASOL**

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	GENSET No 1			
3.	OEM	CATERPILLAR			
4.	Model	C9 MARINE GENSETs			
5.	Serial No	C9Z05164			
6.	Origin	USA			
7.	Sub Equipment	Gensets sensors/ safeties and associated fittings			
8.	Assembly Component	Lub Oil, Fuel, Air, differential, Sea Water Pressure Transmitters, Charge Air Cooler and Jacket Water Temperature Sensor/ Transmitters.			
9.	Part No. of Assembly Component	S No	NSN/ Model	Item Description	Qty
		a.	X00E50208388	Lube Oil Pressure Sensor	02
		b.	X00E50208388	Fuel Pressure Sensor	01
		c.	PT 100 ABGAS	Temperature Sensor	02
		d.	5205304069	Speed Transmitter VDO-PICK-UP	01
		e.	0005357633	Speed Sensor BR4000 KW	01
		f.	NA	Pressure Transmitter	02
		g.	NA	Level switch	02
10.	Quantity	As per mentioned in S No 9			
11.	Source of Availability	CATERPILLAR			
12.	OEM Details	Address MTU Friedrichshafen GmbH, Germany Contact Phone +4251178060 Contact Eman www.mtu.de			
13.	Justification for Work	Procurement of safeties and sensors for SAT ops			
14.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Nil	1. Check wiring to all sensors and safeties for firm grip or damage. Inspect sensor housings for corrosion or leaks. 2. Re-energize power supply under controlled conditions. Simulate trip conditions for safeties (high pressure, low pressure, over-temp, flow switch). Verify alarms/ trip signals at local & remote panels.	As mentioned in S No 9 .	

		<p>3. Compare actual sensor values with independent instruments (thermometer, pressure gauge). Record deviations.</p> <p>4. Remove faulty safety/ sensor unit. Fit new sensor/ safety device and reconnect wiring. Restore refrigerant system integrity and perform leak test.</p> <p>5. Check expansion valve, electrical control box ground pole and insulation resistance test. Carry out routine maintenance of compressor & electrical control box</p> <p>6. Restart Gensets safeties and sensors during start-up and normal running. Verify alarms/trips reset correctly.</p> <p>7. Record all test values, replacements & defective parts and replace (if required). OEM certified spares. Satisfactory operation of Gensets.</p>	
15.	Technical Specs	As per OEM/ Technical Manual.	
16.	Eligibilities	OEM authorized Rep having experience of GENSETs fitted onboard HINGOL class MPVs.	
17.	EDC	ASAP (07 days)	
18.	Warranty	1 year	
19.	Acceptance Criteria	Work will be carried out by/ through OEM rep. Satisfactory trials of GENSETs	

**REPAIR MAINTENANCE OF AUXILIARY SEA WATER COOLING PUMP NO 01 OF PMSS
BASOL**

S No	Details																																	
1.	Ships Name	PMSS BASOL																																
2.	Parent Equipment	Sea water cooling system																																
3.	OEM	JIANGSU ZHENHUA PUMP INDYSTRY CO, LTD																																
4.	Model	CLH50-32-4-5(Z)																																
5.	Origin	China																																
6.	Sub Equipment	Main Fridge fan stabilizers and stern seals cooling system																																
7.	Assembly Component	A/E seawater cooling pumps pumps																																
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		c.	58U-30	Mechanical seal	01																													
		d.	6206	Bearings	03																													
		e.	Z60-C-2.5	Guage with adaptor	02																													
		f.	NA	Adaptor	04																													
g.	NA	Shaft	01																															
9.	Quantity	As per para 8																																
10.	Source of Availability	Local Market																																
11.	OEM Details	GJJM-9x4, Jiang Du Qu, Yang Zhou Shi, Jiang Su Sheng, China, 255266																																
12.	Justification for Work	A/E sea water pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops																																
13.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>A/E sea water pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> <td>Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump</td> <td>A/E sea water pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> <td>As per serial No 9 & 10</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	A/E sea water pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump	A/E sea water pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	As per serial No 9 & 10																				
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14.	Technical Specs	As per sample																																

15.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA
16.	EDC	07 Days
17.	Warranty	01 Year
18.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools

DEFECT RECTIFICATION AND OVERHAULING OF DOMESTIC BOILER - PMSS BASOL

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	Hot water heating system			
3.	OEM	China			
4.	Model	RLHO 23-0.4-95/70			
5.	Origin	China			
6.	Sub Equipment	Boiler			
7.	Assembly Component	Burner, circulating pump, water make up and exhaust valves			
8.	Part No. of Assembly Component	S No	Part No	Description	Qty
		a.	4460PV2010026	Burner	01
		b.	4320PV9000001	Circulating pump	01
		c.	4410PV1010012	Water make up valve	01
		d.	4410PV1010008	Exhaust Valve	01
9.	Quantity	04 IN No			
10.	Source of Availability	Local Market			
11.	Justification for Work	defect rectification and overhauling of domestic boiler			
12.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		overhauling of hot water heating system	defect rectification and overhauling of domestic boiler	defect rectification and overhauling of domestic boiler	As per serial No 9 & 10
13.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		overhauling of hot water heating system	defect rectification and overhauling of domestic boiler	defect rectification and overhauling of domestic boiler	
14.	Technical Specs	As per sample			
15.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA			
16.	EDC	07 Days			
17.	Warranty	01 Year			
18.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools			

REPAIR OVERHAULING OF HEATING BOILER PUMP NO 1 AND VALVE OF PMSS BASOL

S No	Details																																					
1.	Ships Name	PMSS BASOL																																				
2.	Parent Equipment	Boiler pump and valve																																				
3.	OEM	JIANGSU ZHENHUA PUMP INDYSTRY CO, LTD																																				
4.	Origin	China																																				
5.	Sub Equipment	Heating Boiler pump and valve																																				
6.	Assembly Component	Heating Boiler pump and valve																																				
7.	Part No. of Assembly Component	<table border="1"> <thead> <tr> <th>S No</th> <th>Part No</th> <th>Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>NA</td> <td>Pump body</td> <td>01</td> </tr> <tr> <td>b.</td> <td>NA</td> <td>Impeller</td> <td>01</td> </tr> <tr> <td>c.</td> <td>NA</td> <td>Mechanical seal</td> <td>01</td> </tr> <tr> <td>d.</td> <td>NA</td> <td>Bearings</td> <td>03</td> </tr> <tr> <td>e.</td> <td>NA</td> <td>Guage with adaptor</td> <td>02</td> </tr> <tr> <td>f.</td> <td>NA</td> <td>Adaptor</td> <td>04</td> </tr> <tr> <td>g.</td> <td>NA</td> <td>Shaft</td> <td>01</td> </tr> <tr> <td>h.</td> <td>NA</td> <td>Valve</td> <td>04</td> </tr> </tbody> </table>	S No	Part No	Description	Qty	a.	NA	Pump body	01	b.	NA	Impeller	01	c.	NA	Mechanical seal	01	d.	NA	Bearings	03	e.	NA	Guage with adaptor	02	f.	NA	Adaptor	04	g.	NA	Shaft	01	h.	NA	Valve	04
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h.	NA	Valve	04																																			
8.	Quantity	As per para 9																																				
9.	Source of Availability	Local Market																																				
10.	OEM Details	GJJM-9x4, Jiang Du Qu, Yang Zhou Shi, Jiang Su Sheng, China																																				
11.	Alternate Source	Local Source																																				
12.	Justification for Work	Heating Boiler pump and valve found degraded. Mechanical seal leaky and valve decorated, overhauling of pump and replacement of valve is to be required for sat ops																																				
13.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Boiler pump and valve found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> <td>Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump</td> <td>Boiler pump and valve found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> <td>As per serial No 9& 10</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Boiler pump and valve found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump	Boiler pump and valve found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	As per serial No 9& 10																								
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14.	Technical Specs	As per sample
15.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA
16.	EDC	07 Days
17.	Warranty	01 Year
18.	Acceptance Criteria	a. OEM certified items b. All BER items is to be replaced with new aa. Use tested tools

**REPAIR/ OVERHAULING OF CHILLER SYSTEM CHILLED WATER PUMP NO 02 –
PMSS BASOL**

S No	Details																																	
1.	Ships Name	PMSS BASOL																																
2.	Parent Equipment	Chilled water cooling system																																
3.	OEM	JIANGSU ZHENHUA PUMP INDYSTRY CO, LTD																																
4.	Model	CLH80-65-9(Z)																																
5.	Origin	China																																
6.	Sub Equipment	Main AC chilled water cooling system																																
7.	Assembly Component	Main AC chilled water cooling system																																
8.	Part No. of Assembly Component	<table border="1"> <thead> <tr> <th>S No</th> <th>Part No</th> <th>Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>NA</td> <td>Pump body</td> <td>01</td> </tr> <tr> <td>b.</td> <td>NA</td> <td>Impeller</td> <td>01</td> </tr> <tr> <td>c.</td> <td>58U-30</td> <td>Mechanical seal</td> <td>01</td> </tr> <tr> <td>d.</td> <td>6206</td> <td>Bearings</td> <td>03</td> </tr> <tr> <td>e.</td> <td>Z60-C-2.5</td> <td>Guage with adaptor</td> <td>02</td> </tr> <tr> <td>f.</td> <td>NA</td> <td>Adaptor</td> <td>04</td> </tr> <tr> <td>g.</td> <td>NA</td> <td>Shaft</td> <td>01</td> </tr> </tbody> </table>	S No	Part No	Description	Qty	a.	NA	Pump body	01	b.	NA	Impeller	01	c.	58U-30	Mechanical seal	01	d.	6206	Bearings	03	e.	Z60-C-2.5	Guage with adaptor	02	f.	NA	Adaptor	04	g.	NA	Shaft	01
		S No	Part No	Description	Qty																													
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g.	NA	Shaft	01																															
9.	Quantity	As per para 8																																
10.	Source of Availability	Local Market																																
11.	Justification for Work	Main AC Chilled water pump found degraded. Mechanical seal leaky and, overhauling of pump is to be required for sat ops																																
12.	Detail Scope of Work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Main AC chilled water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> <td>Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump</td> <td>Main AC chilled water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> <td>As per serial No 9&10</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Main AC chilled water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump	Main AC chilled water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	As per serial No 9&10																				
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13.	Eligibilities	Local and international contractor registered with FBR and having																																

		working experience with PMSA
14.	EDC	07 Days
15.	Warranty	01 Year
16.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools

**SERVICING/ OVERHAULING OF HP AIR SYSTEM VALVES OF MAIN ENGINES 1 & 2 –
PMSS BASOL**

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	Air bottles set of starting main engines			
3.	OEM	China			
4.	Model	MKD-ma-15x0.85 □			
5.	Origin	China			
6.	Sub Equipment	HP air system			
7.	Assembly Component	HP air reducer, relief valve, pilot valve			
8.	Part No. of Assembly Component	SNo	Part No	Description	Qty
		a.	MKD-ZJK- 03	HP Air reducer	06
		b.	MKD-ZJK- 000	HP Air Relief Valves	06
		c.	MKD-ZJK- 04, 05	HP Air Pilot Valves	01
9.	Quantity	13 IN No			
10.	Source of Availability	Local Market			
11.	Justification for Work	servicing/ overhauling of HP Air System valves of main engines 1 & 2			
12.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		a	b	c	d
		Defect list	Repair work required	Services required	Spare required
		servicing/ overhauling of hp air system valves of main engines 1 & 2 '	servicing/ overhauling of hp air system valves of main engines 1 & 2 Required	servicing/ overhauling of hp air system valves of main engines 1 & 2 Required	As per serial No 9&10
13.	Detailed scope of work	a	b	c	
		Defect list	Repair work required	Services required	
		servicing/ overhauling of hp air system valves of main engines 1 & 2	servicing/ overhauling of hp air system valves of main engines 1 & 2 Required	servicing/ overhauling of hp air system valves of main engines 1 & 2 Required	
14.	Technical Specs	As per sample			

15.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA
16.	EDC	07 Days
17.	Warranty	01 Year
18.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools

CONDUCT OF PMS ROUTINE OF RCS CALLING SYSTEM – PMSS BASOL

S No	Description																																																	
1.	Ships Name	PMSS BASOL																																																
2.	Parent Equipment	RCS Calling System																																																
3.	OEM	China																																																
4.	Origin	China																																																
5.	Sub Equipment	Calling system																																																
6.	Assembly Equipment	Calling system																																																
7.	Part No. of Assembly Equipment	<table border="1"> <thead> <tr> <th>S No</th> <th>Part No</th> <th>Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>RL98B-15T 10A</td> <td>Fuse core</td> <td>2</td> </tr> <tr> <td>b.</td> <td>AD16- 22D/W23S</td> <td>Indicator Light</td> <td>4</td> </tr> <tr> <td>c.</td> <td>AD16- 22S/r23S</td> <td>Indicator Light</td> <td>4</td> </tr> <tr> <td>d.</td> <td>LA39-B1- 10T/r</td> <td>Button</td> <td>4</td> </tr> <tr> <td>e.</td> <td>N/A</td> <td>Seal cover F1</td> <td>4</td> </tr> <tr> <td>f.</td> <td>JWD1-2.5B</td> <td>Terminal block</td> <td>32</td> </tr> <tr> <td>g- _</td> <td>JWD1-6</td> <td>Terminal block</td> <td>2</td> </tr> <tr> <td>h.</td> <td>GB/T5783- 2000/M10X35</td> <td>OBolt</td> <td>4</td> </tr> <tr> <td>j-</td> <td>GB/T5783- 2000/M6X35</td> <td>Bolt</td> <td>4</td> </tr> <tr> <td>k.</td> <td>GB/T6170- 2000/M10</td> <td>Nut</td> <td>4</td> </tr> <tr> <td>l.</td> <td>GB/T6170- 2000/M6</td> <td>Nut</td> <td>4</td> </tr> </tbody> </table>	S No	Part No	Description	Qty	a.	RL98B-15T 10A	Fuse core	2	b.	AD16- 22D/W23S	Indicator Light	4	c.	AD16- 22S/r23S	Indicator Light	4	d.	LA39-B1- 10T/r	Button	4	e.	N/A	Seal cover F1	4	f.	JWD1-2.5B	Terminal block	32	g- _	JWD1-6	Terminal block	2	h.	GB/T5783- 2000/M10X35	OBolt	4	j-	GB/T5783- 2000/M6X35	Bolt	4	k.	GB/T6170- 2000/M10	Nut	4	l.	GB/T6170- 2000/M6	Nut	4
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k.	GB/T6170- 2000/M10	Nut	4																																															
l.	GB/T6170- 2000/M6	Nut	4																																															
8.	Quantity	As per S No 7																																																
9.	Source of Availability	Local Market																																																
10.	Alternate/ Local Source	Local Source																																																
11.	Justification of work	PMS routine of RCS calling system PMS No 5-5412-0000 JIC o 5-5412-PM-006																																																
12.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect list</th> <th>Repair work required</th> <th>Services required</th> <th>Spare required</th> </tr> </thead> <tbody> <tr> <td>PMS routine of RCS calling system</td> <td>Check and maintain the refrigeration calling system and</td> <td>Check and maintain the refrigeration calling system and</td> <td>As per serial No 7</td> </tr> </tbody> </table>	a	b	c	d	Defect list	Repair work required	Services required	Spare required	PMS routine of RCS calling system	Check and maintain the refrigeration calling system and	Check and maintain the refrigeration calling system and	As per serial No 7																																				
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		PMS routine of RCS calling system	Check and maintain the refrigeration calling system and device for sat ops	Check and maintain the refrigeration calling system and device for sat ops	As per serial No 9&10
14.	Technical Specs	As per sample			
15.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA			
16.	EDD/ EDC	07 Days			
17.	Warranty	01 Year			
18.	Acceptance Criteria (if any)	a. OEM certified items b. All BER items is to be replaced with new Use tested tools			

**PROCUREMENT AND APPLICATION OF ANTISKID PAINT ON CANNON DECK & BRIDGE
TOP - PMSS DASHT**

S No	Description				
1.	Ship's Name	PMSS DASHT			
2.	Parent Equipment	Anti-Skid Paint On Canon Deck & Bridge Top			
3.	Make/ Model	CSTS			
4.	Origin	Local			
5.	Sub Equipment	Anti-Skid Paint On Canon Deck & Bridge Top			
6.	Assembly components	Anti-Skid Paint On Canon Deck & Bridge Top			
7.	Quantity	3000 Sq Ft			
8.	Source of availability	Through Local/ International registered firm with good reputation.			
9.	Justification of work	Anti-skid paint on Canon Deck and Bridge Wings observed degraded.			
10.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Deteriorated condition due FWT	Application of Antiskid Paint on Canon Deck & Bridge Top	Application of Antiskid Paint on Canon Deck & Bridge Top	Application of Antiskid Paint on Canon Deck & Bridge Top
11.	Details Scope of Work	a. Removal of previously applied paint by shipping/ scrapping. b. Grit blasting using mixture of copper slag and silica. c. Application of gp-3 primer (03 coats). d. Detergent de-greasing. e. Solvent de-greasing. f. Application of grey epoxy base coat. g. Sprinkling of anti-skid grain. h. Application of dark grey epoxy top coat (02 coats).			
12.	Technical Specs	As per OEM Manual/ Specs			
13.	Eligibilities	a. Reputable local contractor having experience of provision/ application of anti-skid paint. b. Firm must visit site for understanding exact nature of work.			
14.	EDC	02 x Weeks			
15.	Warranty	Two year after satisfactory Application of Anti Skid Paint.			
16.	Acceptance Criteria	a. Visual inspection along with provision of documentation/ certificates. b. Shelf life of 01 year			
17.	Any other relevant information	a. Damage/ defect to item during work will be responsibility of contractor. Contractor must visit site before quoting to fully understood scope of work.			

IT NO: IT/91/13/2025-26

REPAIR/ MAINTENANCE OF FUELING POINT - PMSA BASE GWADAR

S No	Details																																														
1.	Ships Name	PMSS NAZIM/ PMSA BASE GWADAR																																													
2.	Quantity	01																																													
3.	Justification for Work	The Structure of fueling point has become deteriorated. Despite its current severe condition, the fueling point remains in use, posing significant safety risk. Therefore, to mitigate this risk, repair/ maintenance of fueling point is essentially required.																																													
4.	Work Required	Following store items are required for repair/ maintenance of TPT Shed.																																													
		<table border="1"><thead><tr><th>S No</th><th>Description</th><th>Quantity</th><th>Remarks</th></tr></thead><tbody><tr><td>a.</td><td>Sand</td><td>1 X Dumper</td><td></td></tr><tr><td>b.</td><td>TR Garders</td><td>07 (18 ft)</td><td></td></tr><tr><td>c.</td><td>T Iron</td><td>26 (28 ft)</td><td></td></tr><tr><td>d.</td><td>Cement Bag</td><td>40 in No</td><td></td></tr><tr><td>e.</td><td>Slate Tiles</td><td>530 in No</td><td></td></tr><tr><td>f.</td><td>Cemented Block</td><td>500 in No</td><td></td></tr><tr><td>g.</td><td>Distemper</td><td>03 Buckets</td><td></td></tr><tr><td>h.</td><td>Oil Paint</td><td>12 Liters</td><td></td></tr><tr><td>j.</td><td>Lights</td><td>05 (24 W)</td><td></td></tr><tr><td>k.</td><td>Electric Wiring</td><td>N/A</td><td></td></tr></tbody></table>	S No	Description	Quantity	Remarks	a.	Sand	1 X Dumper		b.	TR Garders	07 (18 ft)		c.	T Iron	26 (28 ft)		d.	Cement Bag	40 in No		e.	Slate Tiles	530 in No		f.	Cemented Block	500 in No		g.	Distemper	03 Buckets		h.	Oil Paint	12 Liters		j.	Lights	05 (24 W)		k.	Electric Wiring	N/A		
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k.	Electric Wiring	N/A																																													
5.	Technical Specs	Length of fueling point roof: 28 ft Width of fueling point roof: 18 ft																																													
6.	Eligibility	Any local/ international well-reputed firm having experience for repair/ maintenance of shed.																																													
7.	EDC	15 days																																													
8.	Warranty	01 Year																																													
9.	Acceptance Criteria	Inspection by end user upon successful completion of work.																																													

IT NO: IT/91/14/2025-26

REPAIR/ MAINTENANCE OF 02 X TURNBO CHARGERS FRB-155 - PMSS NAZIM

S No	Details				
1.	Ships Name	FRB-155			
2.	Parent Equipment	C-9 Port Main Engine			
3.	OEM	Caterpillar			
4.	Model	Caterpillar/ C-9, USA			
5.	Origin	USA			
6.	Sub Equipment	Air intake system			
7.	Assembly Component	02 X Turbo chargers (part number 262-7609 GP part of 267-8925 GP)			
8.	Part No. of Assembly Component	S No	NSN/ Part No	Description	Qty
		a.	7W-7778	CLAMP AS	01
		b.	7M-9916	LOCKNUT	01
		c.	127-0839	CLAMP AS (TURBINE)	01
		d.	271-9416	CARTRIDGE GP-TURBO CHARGER	01
		e.	3S-8313	PLUG CUP	02
		f.	4K-0149	PLUG CUP	01
		g.	6V-1902	SEAL O RING	01
		h.	242-3360	HOSE	01
		j.	7M-7273	GASKET	01
9.	Source of availability	OEM / Local Market			
10.	Justification for Work	<p>a. Main engines speed trimming being observed and engines are not exceeding beyond 1200 ERPMS.</p> <p>b. Heavy smoke being observed at said RPMS.</p> <p>c. Turbo chargers have been dismantled and oil leakage/traces observed on compressor, turbine and inlet side of after cooler due suspected shaft seal of turbo charger leaky.</p>			
11.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Servicing and maintenance of turbo chargers	a. Cleaning and inspection of housing. b. Replacement of service kit including degraded/defective parts i.e. bush, seals, bearing, compressor, turbine wheel etc c. Alignment/ machining of turbine shaft	N/A	As per S No 9

		a	b	c
		Details of Repair Work Required	Details of services Required	Details of Spares Required
12.	Detailed scope of work	a. Cleaning and inspection of housing. b. Replacement of service kit including degraded/defective parts i.e. bush, seals, bearing, compressor, turbine wheel etc	N/A	As per S No 8
13.	Technical Specs	As per Technical Manual		
14.	Eligibility	Any well-known national/ international firm having good experience for repair/ maintenance of Caterpillar engines and associated auxiliaries/ parts.		
15.	EDC	30 days		
16.	Warranty	01 year after installation onboard and satisfactory trials.		
17.	Acceptance Criteria	Physical inspection of under mentioned parts by end user after installation onboard and trials upto maximum engine RPMs for satisfactory performance: <ul style="list-style-type: none"> a. Compressor and compressor housing. b. Turbine wheel and turbine housing. c. Presence of engine oil traces on shaft, turbine or inlet side of after cooler. 		
18.	Any other relevant information	<ul style="list-style-type: none"> a. Installation/Replacement of Marine Grade spares/ accessories are to be ensured by contracted firm. b. Dismantling and re-installation of in-way accessories is responsibility of the firm. c. Any breakage/material failure during dismantling/installation will be lies with the firm. 		

REPAIR/ MAINTENANCE OF FRB-155 - PMSS NAZIM FRBS WMR

S No	Details				
	Ships Name	FRB-155			
2.	Parent Equipment	C-9 STBD & Port Main Engine			
3.	OEM	Caterpillar			
4.	Model	Caterpillar/ C-9, USA			
	Origin	USA			
5.	Sub Equipment	<ul style="list-style-type: none"> ➤ 02 X Heat exchangers. ➤ 02 X After coolers. ➤ 02 X Lub oil coolers ➤ 02 X Gear driven Raw water pumps 			
6.	Assembly Component	As above			
7.	Part No. of Assembly Component	S No	NSN/ Part No	Description	Qty
		i.	197-5988	Heat exchanger	02
		j.	197-5991	After cooler	02
		k.	197-5989	Lub oil cooler	02
		l.	197-5993	Gear driven Raw water pumps	01
		m.	227-4301	Gear driven Raw water pumps	01
n.	7E-0321	Impeller raw water pump	02		
8.	Source of availability	OEM / Local Market			
9.	Justification for Work	<p>Performance of C-9 main engines degraded and engines not exceeding beyond 1200 RPMs due malfunctioning of following accessories/ equipment:</p> <ul style="list-style-type: none"> ➤ 02 X Heat exchangers. ➤ 02 X After coolers. ➤ 02 X Lub oil coolers ➤ 02 X Gear driven Raw water pumps 			
10.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		a. Repairing, chemical cleaning, pressure testing and seals replacement of 02 x heat exchangers. b. Repairing, chemical cleaning, pressure testing and seals replacement of 02 x after cooler. c. Repairing, chemical cleaning,	a. Repairing, chemical cleaning, pressure testing and seals replacement of 02 x heat exchangers, 02 x after cooler and 02 x Lub oil cooler. b. Repairing of 02 x gear driven Raw water pumps including replacement of impellers (part number impeller 7E-	NA	a. Heat exchanger b. After Cooler c. Lub oil cooler d. Raw water pump. e. Impeller

		pressure testing and seals replacement of 02 x Lub oil cooler. d. Repairing of 02 x gear driven Raw water pumps including replacement of impellers (part number impeller 7E-0321)	0321)			
11.	Detailed scope of work	a			b	c
		Details of Repair Work Required		Details of services Required	Details of Spares Required	
		a. Repairing, chemical cleaning, pressure testing and seals replacement of 02 x heat exchangers, 02 x after cooler and 02 x Lub oil cooler. b. Repairing of 02 x gear driven Raw water pumps including replacement of impellers (part number impeller 7E-0321)		NA	a. Heat exchanger b. After Cooler c. Lub oil cooler d. Raw water pump. e. Impeller	
12.	Technical Specs	As per Technical Manual				
13.	Eligibility	Any local/international firm having expertise of working on C-9 engines and associated auxiliaries/ accessories				
14.	EDC	30 days				
15.	Warranty	01 year after installation onboard and satisfactory trials.				
16.	Acceptance Criteria	Inspection by end user and satisfactory trials upto 2500 ERPMs and provision of pressure test certificate for heat exchangers and after coolers.				
17.	Any other relevant information	Use of standard/USA origin parts for C-9 engines may be ensured by contracted firm				

IT NO: IT/91/16/2025-26

CONDUCT OF 10000 HRS PMS ROUTINES OF 02 X MAIN ENGINES PORT & STBD - PMSS
KASHMIR

S No		Details			
1.	Ships Name	PMSS KASHMIR,			
2.	Parent Equipment	MAIN ENGINES			
3.	OEM	CRRRC China '			
4.	Model	MKD-50/150			
5.	Origin	UK			
6.	Sub Equipment	Port & Stbd Engine			
7.	Assembly Equipment	Misc			
8.	Part No. of Assembly Component	As per relevant JIC			
9.	Quantity	02 (Port & Stbd)			
10.	Source of Availability	OEM			
11.	OEM Details	Address: MAN B&W / DALIAN DIESEL ENGINE CO., LTD Contact Phone: N/A Contact Email: N/A			
12.	Alternate/ Local Source	Alternate Source: a. M/s MAN Energy Solution Pvt Ltd Karachi b. M/s Tritex Energy Solution Pvt Ltd Karachi Address: N/A Contact Phone: N/A Contact Email: N/A			
13.	Justification for Work	Conduct of 10000 Hrs PMS Routines, of Main Engines			
14..	Work Required	a	b	c	d
		Defect List	Repair Work Required	Services Required	Spares Required
		PMS	Check crankcase depression	Yes	Yes
			Check cylinder head and valve gear		
			Check operation of fuel control linkage		
			Check pneumatic over-speed trip		
			Cleaning of turbocharger air intake filter		
			Check rebound setting and height of AV mounts		
			Check crankshaft alignment		
			Renew filter elements		
			Fit new nozzle of fuel injector		
			Visually inspect vibration dampers for oil leakage		
			Inspect camshaft drive gears		
			Check crankshaft alignment		
Renew cylinder head rocker cover joints					
Drain governor/ actuator oil and refill					

			Instrumentation check and calibration		
			Check operation of protection systems		
			Remove charge cooler ashore for cleaning		
			Cleaning and examine of explosion relief valve		
			Examine fuel linkage		
			Turbocharger overhaul		
			Check and repair forced circulation cooling water preheater		
			Motor overhaul		
			Clean, examine and- test cooling water thermostatic valve		
			Check functional testing of all safeties (temp, pressure etc)		
			Clean, examine and test lub oil thermostatic valve		
15.	Technical Specs	As per relevant technical manual			
16.	Eligibilities	OEM authorized rep Spares to be provided by firm			
17.	EDC	30 Days after award of contract			
18.	Warranty	01 Year			
19.	Acceptance Criteria	a. OEM Certified item. b. Defective/ BER items must be replaced with new one. c. Upon scrutiny of items and provided documents along with production certificate by OEM. d. Defective/ BER items must be replaced with new. e. Firm will not be allowed to use ship tools and manpower			

IT NO: IT/91/17/2025-26

PROCUREMENT OF SPARES FOR MAIN ENGINE LOCAL MONITORING SYSTEM - PMSS KOLACHI

S No	Details																																																										
1.	Ships Name	PMSS KOLACHI																																																									
2.	Parent Equipment	Main Engine Local Monitoring System																																																									
3.	OEM	Shanghai Marine Diesel Engine Research Institute, CSIC																																																									
4.	Model	SAL-10 Type Main Engine Local Monitoring Box																																																									
5.	Serial No	781547~781550																																																									
6.	Origin	China																																																									
7.	Sub Equipment	Main Engine Local Monitoring Box																																																									
8.	Assembly Component	LCP Main Engine IXT 10A SM1223 Module SM1231 Module AI8-13 Bit SM1231 Module 8 x RTD SM1231 Module 8 x TC SM1223 DI8/ OQ8 Transformer 160 VA, 220V AC/ 24V AC Frequency Conversion Module (PH61V6D) NPGL Module CMIID 4-20mAmp one input two output Switching Power Supply 24V DC/ 24V DC																																																									
9.	Part No. of Assembly Component	<table border="1"> <thead> <tr> <th>S No</th> <th>Model/ Spec</th> <th>NSN/ Part No</th> <th>Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>iXT10A(HMI)</td> <td>7025PV0020036/ 711-605</td> <td>LCP Main Engine IXT10A(HMI)</td> <td>2</td> </tr> <tr> <td>b.</td> <td>6ES7-215-1AG40-0XB0</td> <td>5999PV9000025/ 711-401</td> <td>SM1223 Module</td> <td>2</td> </tr> <tr> <td>c.</td> <td>6ES7-231-4HF30-0XB0</td> <td>5999PV9000130/ 711-409</td> <td>SM1231 Module AIS-13 Bit</td> <td>2</td> </tr> <tr> <td>d.</td> <td>6ES7-231-5PF32-0XB0</td> <td>5999PV9000131/ 711-410</td> <td>SM1231 Module 8 x RTD</td> <td>2</td> </tr> <tr> <td>e.</td> <td>6ES7-231-5QF30-0XB0</td> <td>5999PV9000132/ 711-411</td> <td>SM1231 Module 8 x TC</td> <td>2</td> </tr> <tr> <td>f.</td> <td>6ES7 223-1BH32-0XB0</td> <td>5999PV9000133/ 711-412</td> <td>SM1223 DI8/OQ8</td> <td>2</td> </tr> <tr> <td>g.</td> <td>JBK3-160TH, 160VA (AC380-AC220/AC24)</td> <td>6120PV1000034/ 711-321</td> <td>Transformer 160VA, 220V AC/24V AC</td> <td>2</td> </tr> <tr> <td>h.</td> <td>PH61V6D</td> <td>6110PV6110004/ 711-436</td> <td>Frequency Conversion Module (PH61V6D)</td> <td>2</td> </tr> <tr> <td>i.</td> <td>NPGL-CM111D</td> <td>NPGL-CM111D/ 711-431</td> <td>NPGL Module CMIID 4-20mAmp one input two output</td> <td>2</td> </tr> <tr> <td>j.</td> <td>SD-200B-24</td> <td>6125PV1010029/ 711-309</td> <td>Switching Power Supply 24V DC/ 24V DC</td> <td>2</td> </tr> </tbody> </table>	S No	Model/ Spec	NSN/ Part No	Description	Qty	a.	iXT10A(HMI)	7025PV0020036/ 711-605	LCP Main Engine IXT10A(HMI)	2	b.	6ES7-215-1AG40-0XB0	5999PV9000025/ 711-401	SM1223 Module	2	c.	6ES7-231-4HF30-0XB0	5999PV9000130/ 711-409	SM1231 Module AIS-13 Bit	2	d.	6ES7-231-5PF32-0XB0	5999PV9000131/ 711-410	SM1231 Module 8 x RTD	2	e.	6ES7-231-5QF30-0XB0	5999PV9000132/ 711-411	SM1231 Module 8 x TC	2	f.	6ES7 223-1BH32-0XB0	5999PV9000133/ 711-412	SM1223 DI8/OQ8	2	g.	JBK3-160TH, 160VA (AC380-AC220/AC24)	6120PV1000034/ 711-321	Transformer 160VA, 220V AC/24V AC	2	h.	PH61V6D	6110PV6110004/ 711-436	Frequency Conversion Module (PH61V6D)	2	i.	NPGL-CM111D	NPGL-CM111D/ 711-431	NPGL Module CMIID 4-20mAmp one input two output	2	j.	SD-200B-24	6125PV1010029/ 711-309	Switching Power Supply 24V DC/ 24V DC	2		
S No	Model/ Spec	NSN/ Part No	Description	Qty																																																							
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10.	Source of availability	OEM/ LOCAL Market																																																									
11.	Justification for Work	To conduct PMS routine for inspection/ servicing of Main Engine Local Monitoring System (PMS No 5-6123-0001~0002)																																																									
12.	Work Required	a	b	c	d																																																						
		Defect/ Routine	Repair Work	Services	Spares																																																						

		List	Required	Required	Required
		Intermittent response of 2 x LOPs observed due to malfunctioning of software	Repair/ replacement of both main engine LOPs required	Inspection/ Servicing of Main Engine Local Monitoring System required	As per S No 9
13.	Detailed scope of work	Details of Repair Work Required	Details of services Required	Details of Spares Required	
		Repair/ replacement of both main engine LOPs required	Inspection/ Servicing of Main Engine Local Monitoring System required	As per S No 9	
14.	Technical Specs	Type of engine: DATE of manufacture Serial No: Speed: Power supply: Rated current Monitoring box	20RK270 September 2016 781547-781550 1000rpm DC 24 V (±20%) 5 A 145Kg		
15.	Eligibility	Reputable local/ international contractor registered with FBR and having working experience with PMSA.			
16.	EDC	30 Days after award of contract			
17.	Warranty	01 Year			
18.	Acceptance Criteria	a. OEM Certified item. b. Upon scrutiny of items and provided documents along with production certificate by OEM. c. Defective/ BER items must be replaced with new. d. Firm will not be allowed to use ship tools and manpower e. QA/QC certificate issuance by QA/QC department			
19.	Any other relevant information	Contractor/ Rep of firm should visit ship prior quoting to inspect exact scope of work			

**CONDUCT OF 8A REPAIR/ MAINTENANCE ROUTINES OF 04 X MARINE GEARBOX - PMSS
BASOL**

S No	Description				
1.	Ship's Name	PMSS BASOL			
2.	Parent	MARINE GEARBOX			
3.	OEM	ZF Friedrichshafen AG Marine Propulsion Systems 88038 Friedrichshafen Deutschland			
4.	Model	ZF 9000			
5.	Origin	Germany			
6.	Sub Equipment	Marine Gearbox			
7.	Part No. of Assembly	As per spare parts catalog ZF 9000 3103 002 035 ZF 9050 MTU FRIEDRICHSHAFEN			
8.	Quantity	04 x Marine Gearbox			
9.	Sources of	ZF Friedrichshafen AG Marine Propulsion Systems			
10.	OEM Details	<p><u>Address</u> ZF Friedrichshafen AG Marine Propulsion Systems 88038 Friedrichshafen Deutschland - Germany</p> <p><u>Contact Phone</u> Tel: +49 7541 77-2207</p> <p><u>Contact Email</u> www.zf.com</p>			
11.	Justification for work	As per PMS routines/ technical manual To carry out following maintenance routines of 04 x Marine Gearbox:			
		MOP	Description	Period	
		PM-016	Recalibrate display devices	8A	
		PM-018	Check shaft seal of input shaft	8A	
		PM-019	Check shaft seal of output shaft	8A	
		PM-009	Flexible clutch: visual inspection	8A	
		PM-010	Flexible engine and transmission support; visual inspection	8A	
		PM-011	Clutch discs	8A	
		PM-012	Running gears: visual inspection	8A	
		PM-013	Check oil pump	8A	
		PM-014	Check control unit	8A	
PM-015	Check actuation device (mechanical/	8A			
12.	Work Required	Defect List	Repair Work Required	Services Required	Spares Required
		Nil	Yes	Yes	Yes
13.	Detail scope of work	a	b		c
		Detail of Repair Work Required	Details of Services Required		Details of Spares Required

		As per requirements	<p>Detailed work scope for carrying out 8A routines of Marine Gearbox is as under:</p> <ol style="list-style-type: none"> a. Remove the inspection cover and check the gearing of wheels on input shaft, intermediate shaft, and output shaft. b. Check rubber rings of flexible clutch for flawless condition. To do this, rotate Engine slowly and check rubber parts through inspection hole of bell housing c. For checking the control unit If possible, replace rather than dismantle the complete control unit. Readjustment of the control unit is not required when dismantling is necessary for cleaning or replacing individual pressure springs. However, a pressure test on the transmission is required. d. Check/ calibrate display devices for oil pressures and oil temperatures for correct display values. Connect calibrated display devices in parallel and compare values displayed. Display errors must not exceed 10% of individual operating ranges. Dismantle display devices and arrange for recalibration and/or use replacement display devices. e. Check/ Replace shaft seal of output shaft for leaks. f. Check/ Replace shaft seal of input shaft for leaks. g. Loosen fixing screws and remove mechanical actuation. Replace the complete unit and make sure mechanical actuation runs freely. h. Loosen fixing screws and remove electrical actuation. Replace the complete unit and measure the electrical resistance (26.7 ohm +/- 8% at 20°C). j. Carry out all maintenance routines as per JICs h. Conduct of HATs and SATs. Record all operating parameters (oil pressure, discharge pressure, temperature) as per OEM recommendation 	As per requirements
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14.	Technical Specs	As per technical manual
15.	Eligibilities	Reputable local contractor having working experience of Marine Gearbox
16.	EDC	02 weeks
17.	Warranty	01 Year
18.	Acceptance Criteria	<ul style="list-style-type: none"> a. Satisfactory operation of Marine Gearbox b. Satisfactory SATs followed by HATs. c. Satisfactory operation without noise and vibration. d. Leakage free operation of system.
19.	Any relevant information other	<ul style="list-style-type: none"> a. Contactor may contact SS/ visit onboard ship to resolve any query. b. Growth work, damage/ defect occurring during work will be responsibility of contractor.

PROCUREMENT AND INSTALLATION OF DATA CABLE TRANSAS RADAR - PMSS NUSRAT

S No	Details			
1.	Ships Name	PMSS NUSRAT		
2.	Parent Equipment	TRANSAS-II		
3.	OEM	Japan		
4.	Serial No	1505284		
5.	Origin	Japan		
6.	Sub Equipment	Transceiver Unit		
7.	Assembly Component	Transceiver Unit		
8.	Quantity	S No	Description	Qty
		a.	Radar Data Cable	25 meters
		b.	Bearing PCB	01
		c.	Magnetron	01
9.	Source of Availability	N/A		
10.	Justification for Work	PCB and radar data cable is critically required for smooth operational of TRANSA-II radar		
11.	Work Required	a	b	c
		Defect/ Routine List	Repair Work Required	Services Required
		<ul style="list-style-type: none"> Radar display indicating Radar Failure message Radar automatically shifts Transmission to Standby Mode Radar Video is not available 	Repair/ Replacement of Bearing PCB and Radar data cable	As per Serial 12 Column b.
12.	Detailed scope of work	a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
		<ul style="list-style-type: none"> Check transmission and reception of Radar Replace the defective PCB with new one 	<ul style="list-style-type: none"> Repair/ Replacement of Bearing PCB for smooth operation of TRANSAS Replace data cable from 	<ul style="list-style-type: none"> Bearing PCB Radar data cable from transceiver to MFD SSD for RADAR backup
13.	Eligibilities	a. As per TSR b. The firm should visit onboard and assess the extent of required work. c. The firm should be having good experience in repair/maintenance of such system/ equipment.		

		d. The firm should be NTN /GST registered
14.	EDC	30 x working days after issuance of work order.
15.	Warranty	01 x Year
16.	Acceptance Criteria	<ul style="list-style-type: none"> a. Satisfactory operation of TRANSAS-II Radar after completion of work b. Satisfactory HATs/ SATs of Radar

REPAIR/ MAINTENANCE OF MSB BHAMBHORE - PMSA BASE GWADAR

S No	Details																					
1.	Ships Name	PMSS NAZIM/ PMSA BASE GWADAR-																				
2.	Parent Equipment	Repair/ maintenance of Howra (Bhambhore)																				
3.	Quantity	01																				
4.	Justification for Work	Presently, 01 x Howra (Bhambhore) is held at PMSA Base Gwadar and same asset plays vital role to conduct efficient & effective operations. Moreover, presently Bhambhore is in ops condition However, under mentioned defects have been observed:																				
5.	Work Required	Following items/ parts are required to repair/ replace: <table border="1"><thead><tr><th>S No</th><th>Description</th></tr></thead><tbody><tr><td>a.</td><td>Engine is reducing the Blue Oil</td></tr><tr><td>b.</td><td>Engine creating heavy noise upon operation</td></tr><tr><td>c.</td><td>Engine became hot upon variation of speed</td></tr><tr><td>d.</td><td>Bilges motor/ pump is not held</td></tr><tr><td>e.</td><td>Anchor winch is defective/ deteriorated</td></tr><tr><td>f.</td><td>Upper deck/ wooden patties/ plies are deteriorated causing heavy water dripping in engine room/ various compartments upon washing/ rain</td></tr><tr><td>g.</td><td>Upper deck fresh water tanks outlets pipes (i.e for washroom/ kitchen) are defective-</td></tr><tr><td>h.</td><td>Washroom wooden door is broken</td></tr><tr><td>j.</td><td>All ropes are in shabby/ deteriorated</td></tr></tbody></table>	S No	Description	a.	Engine is reducing the Blue Oil	b.	Engine creating heavy noise upon operation	c.	Engine became hot upon variation of speed	d.	Bilges motor/ pump is not held	e.	Anchor winch is defective/ deteriorated	f.	Upper deck/ wooden patties/ plies are deteriorated causing heavy water dripping in engine room/ various compartments upon washing/ rain	g.	Upper deck fresh water tanks outlets pipes (i.e for washroom/ kitchen) are defective-	h.	Washroom wooden door is broken	j.	All ropes are in shabby/ deteriorated
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		h.	Washroom wooden door is broken																			
j.	All ropes are in shabby/ deteriorated																					
6.	Detailed scope of work	Overhauling of engine repair/ maintenance work Howra (Bhambhore) PMSA Base Gwadar is required. Presently, Bhambhore is in OPS condition with defects mentioned in Para 15. The same defects are required to be rectified for safe operation in future.																				
7.	Eligibilities	Any local/ international well reputed firm having experience of said work. Firm must visit and physically inspect the work site.																				
8.	EDC	30 days																				
9.	Warranty	01 year																				
10.	Acceptance Criteria	Inspection by end user and successful completion of work																				

REPLACEMENT OF 05 X MARINE BINOCULARS - PMSS KASHMIR

S No	Details				
1.	Ships Name	PMSS KASHMIR			
2.	Parent Equipment	Replacement of 5 x Marine Binoculars			
3.	OEM	Bushnell Marine			
4.	Sub Equipment	Replacement of 5 x Marine Binoculars			
5.	Assembly Component	Replacement of 5 x Marine Binoculars			
6.	Quantity	5 x in No			
7.	Source of Availability	Through Local Contractor			
8.	Justification for Work	Replacement of 5 x Marine Binoculars including following merits: a. Image stability b. Water/fog Proof construction c. Lowlight performance d. Wide field of view			
9.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Replacement of 5 x Marine Binoculars (Broucher Attached)	Replacement of 5 x Marine Binoculars (Broucher Attached)	Replacement of 5 x Marine Binoculars (Broucher Attached)	N/A
10.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Replacement of 5 x Marine Binoculars (Broucher Attached)	Replacement of 5 x Marine Binoculars (Broucher Attached)	N/A	
11.	Technical Specs	As prescribed by SS			
12.	Eligibilities	As prescribed by SS			
13.	EDC	10 x days upon receipt of work order			
14.	Warranty	a. 3 x year warranty after delivery b. Material will be reported if deformity or wear is developed during warranty period			
15.	Acceptance Criteria	Satisfactory work as per provided sample			
16.	Any other relevant info	a. Contact SS/ visit onboard for clear understanding of scope of work b. Damage/ defect occurred is responsibility of contractor			

TECHNICAL SPECIFICATIONS FOR REPLACEMENT OF 10x MARINEBINOCULARS - PMSS
KASHMIR

S No	Specification	Details
1.	Brand	Bushnell Marine Binoculars
2.	Model	10 - 90x80 Zoom Binoculars
3.	Magnification	10x - 90x Zoom
4.	Objective Lens Diameter	80 mm
5.	Prism Type	Porro Prism
6.	Field of view	Approx. 78m at 1000m
7.	Focus System	Center Focus
8.	Eyepiece Diameter	18mm
9.	Body Material	Alloy and Rubber Armor
10.	Waterproof	Yes
11.	Fog proof	Yes
12.	Grip	Anti-Slip Rubber Coating
13.	Dimensions	Approx. 29 x 34 x 10 cm
14.	Color	Black
15.	Included Accessories	Carrying Case, Neck Strap, Cleaning Cloth
16.	Ideal For	Marine Use (Lookouts), Surveillance
17.	Pictures	<u>Attached Opposite</u>

REQUIREMENT OF WEIGHT TEST OF CO2 PILOT CYLINDER HALON FLOODING SYSTEM
- PMSS RAFAQAT

S No	Details				
1.	Ships Name	PMSS RAFAQAT			
2.	Parent Equipment	CO2 Pilot Cylinder			
3.	OEM	USA			
4.	Origin	USA			
5.	Sub Equipment	HALON 1301 (bromotrifluoromethane)			
6.	Assembly Component	Actuator assembly			
7.	Part No. of Assembly Component	28034N			
8.	Quantity	03 IN NO			
9.	Justification for Work	CO2 Pilot Cylinder (HALON flooding system) weight test required.			
10.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		CO2 Pilot Cylinder for HALON flooding system weight test due.	03 in no CO2 Pilot Cylinder for HALON flooding system weight test required.	-	All material, spares, tools, special equipment / tools, accessories etc required for said work are to arrange by the contractor
11.	Detailed scope of work	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		03 in no CO2 Pilot Cylinder for HALON flooding system weight test required with certificate.	Requirement of external services if any will be responsibility of the firm without any liability on the part of ship Any damage occurs during the course of inspection work will be done by firm without any responsibility on part of the ship.	All material, spares, tools, special equipment/ tools, accessories etc required for said work are to arrange by the contractor	
12.	Technical Specs	CO2 Pilot Cylinder capacity 5 lbs Cylinder full weight 25-1/2 lbs			
13.	Eligibilities	FBR register supplier.			
14.	EDC	07 working days.			
15.	Warranty	1 year			
16.	Acceptance Criteria	a. Success trials by end user.			
		b. QA/QC certificate issued by QA/QC deptt.			

PROCUREMENT OF 10 KVA UPS - PMSS NUSRAT

S No	Details													
1.	Ships Name	PMSS NUSRAT												
2.	Parent Equipment	EATON 9355 UPS 10 KVA												
3.	OEM	USA												
4.	Model	EATON 9355												
5.	Origin	USA												
6.	Sub Equipment	EATON 9355 UPS 10 KVA												
7.	Assembly Component	EATON 9355 UPS 10 KVA												
8.	Part No. of Assembly Component	KA1011200000010												
9.	Quantity	<table border="1"> <thead> <tr> <th>S No</th> <th>Item Description</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>d.</td> <td>EATON 9355 UPS 10 KVA</td> <td>01</td> </tr> </tbody> </table>	S No	Item Description	Quantity	d.	EATON 9355 UPS 10 KVA	01						
S No	Item Description	Quantity												
d.	EATON 9355 UPS 10 KVA	01												
10.	Source of Availability	NSD												
11.	Justification for Work	As per Policy Tech Div-5/2016, online/ offline UPS are to be installed with sensitive/ mission critical equipment for graceful shut down/ switching off. Considering the essential requirement of emergency backup power supply for mission critical equipment, item is critically required onboard as old UPS has been declared BER.												
12.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Old 10 KVA UPS has been declared BER by competent authority</td> <td>Essential requirement of emergency backup power supply for mission critical equipment (System/ Sensors) onboard</td> <td>As per Serial 14 Column B.</td> <td>As per Serial 14 Column C.</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Old 10 KVA UPS has been declared BER by competent authority	Essential requirement of emergency backup power supply for mission critical equipment (System/ Sensors) onboard	As per Serial 14 Column B.	As per Serial 14 Column C.
a	b	c	d											
Defect/ Routine List	Repair Work Required	Services Required	Spares Required											
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13.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td> a. Requirement of EATON 9355 UPS 10 KVA. b. All tools/ special equipment /accessories (must be genuine) required for said repair/ maintenance are to be arranged by the firm. c. Any damage/ defect/ wear tear occurred during course of removal; repair and installation of system/ equipment will be repaired /met by firm. d. The firm will be responsible for all removal, transportation and installation work during warranty/ </td> <td>Requirement of external services, if required, will be responsibility of firm.</td> <td>Nil</td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	a. Requirement of EATON 9355 UPS 10 KVA. b. All tools/ special equipment /accessories (must be genuine) required for said repair/ maintenance are to be arranged by the firm. c. Any damage/ defect/ wear tear occurred during course of removal; repair and installation of system/ equipment will be repaired /met by firm. d. The firm will be responsible for all removal, transportation and installation work during warranty/	Requirement of external services, if required, will be responsibility of firm.	Nil			
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		<p>guarantee periods claims in case of any rework.</p> <p>f. No growth work will be processed.</p>		
14.	Technical Specs	<p>Rating 10KVA/9KW at 0.9 Power Factor</p> <p>Input voltage 220V/120V, three phase</p> <p>Frequency 50/60 Hz</p> <p>Output Voltage 220V/120VAC</p> <p>Battery 9Ah sealed, Lead Acid, maintenance free</p> <p>Quality ISO 9001:2015 & ISO 4001:2004 certified</p>		
15.	Eligibilities	<p>a. The firm must visit onboard and carry out diagnoses/ inspection 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>		
16.	EDC	07 x days after issuance of work/confirmation order.		
17.	Warranty	As per OEM Standards or 1 Year (whichever is higher)		
18.	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</p>		
19.	Any other relevant info	Item should be authentic/OEM verified.		

PROCUREMENT INSTALLATION OF CRADLE & HANDSET OF ISAT DOCK II MARINE SET - PMSS REHMAT

S No	Details													
1.	Ships Name	PMSS REHMAT												
2.	Parent Equipment	ISAT DOCK II MARINE												
3.	OEM	INMARSAT												
4.	Model	ISD 2 MARINE 2.1												
5.	Serial No	MNN 14899												
6.	Origin	China												
7.	Sub Equipment	Handset												
8.	Assembly Component	ISAT DOCK II MARINE handset and base station												
9.	Quantity	<table border="1"> <thead> <tr> <th>S No</th> <th>Item Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>Handset</td> <td>01</td> </tr> <tr> <td>b.</td> <td>Base Station</td> <td>01</td> </tr> </tbody> </table>	S No	Item Description	Qty	a.	Handset	01	b.	Base Station	01			
		S No	Item Description	Qty										
		a.	Handset	01										
b.	Base Station	01												
10.	Justification for Work	Components are critically required for operation-ability of ISAT DOCK II MARINE set onboard												
11.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td>Defect/ Routine List</td> <td>Repair Work Required</td> <td>Services Required</td> <td>Spares Required</td> </tr> <tr> <td>ISAT DOCK II Handset and base station is defective due FWT</td> <td>Replacement of ISAT DOCK II MARINE Handset and base Station with cables and connectors</td> <td>See S No 14 para b</td> <td>See S No 14 para c</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	ISAT DOCK II Handset and base station is defective due FWT	Replacement of ISAT DOCK II MARINE Handset and base Station with cables and connectors	See S No 14 para b	See S No 14 para c
		a	b	c	d									
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required									
ISAT DOCK II Handset and base station is defective due FWT	Replacement of ISAT DOCK II MARINE Handset and base Station with cables and connectors	See S No 14 para b	See S No 14 para c											
12.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>Detail of Repair Work Required</td> <td>Detail of Services Required</td> <td>Detail of Spares Required</td> </tr> <tr> <td>Replacement of ISAT DOCK II MARINE Handset and base Station with cables and connectors</td> <td>a. Replacement of Handset and base station with connectors b. Servicing of Antenna</td> <td>a. Spear Power Charger b. Digital Multimeter</td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Replacement of ISAT DOCK II MARINE Handset and base Station with cables and connectors	a. Replacement of Handset and base station with connectors b. Servicing of Antenna	a. Spear Power Charger b. Digital Multimeter			
		a	b	c										
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required										
Replacement of ISAT DOCK II MARINE Handset and base Station with cables and connectors	a. Replacement of Handset and base station with connectors b. Servicing of Antenna	a. Spear Power Charger b. Digital Multimeter												
13.	Technical Specs	<ul style="list-style-type: none"> a. Power supplied by ISATDOCK b. Temperature range: (-40C to 70C) c. Frequency : L BAND (1-2 GHz) 												
14.	Eligibilities	<ul style="list-style-type: none"> a. As perTSR b. The firm should visit onboard, access the extent of required work, and understand exact nature of defect before quotation. 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 ISAT DOCK II MARINE Handset and Docking station warranty period 												

15.	EDC	02x Weeks after issuance of work order.
16.	Warranty	01 Year
17.	Acceptance Criteria	HATs/ SATs after completion of work

PROCUREMENT/ INSTALLATION OF COMPRESSOR & EVAPORATOR OF HIGH PRESSURE AIR COMPRESSOR NO 01 - PMSS DASHT

S No	Details				
1.	Ships Name	PMSS DASHT			
2.	Parent Equipment	High Pressure Air Compressor			
3.	OEM	Germany			
4.	Model	I15.1-11-5			
5.	Origin	China			
6.	Sub Equipment	HPAC No 1			
7.	Assembly Component	HPAC No 1 alongwith Motor.			
8.	Part No. of Assembly Component	160m 1-2			
9.	Quantity	02			
10.	Source of Availability	OEM/ Local Contractor			
11.	Justification for Work	Repair/ Replacement of Compressor and Evaporator of HPAC No 1			
12.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		As per defect list	Repair/ Replacement of compressor and evaporator of HPAC No 1	a. Dismantling and installing of all stages air system. b. Repair/ overhauling of HAPC No 1 alongwith motors. c. Removing of paint and applying paint according to the machinery. d. Repair/ replacement of compressor and evaporator.	N/A
13.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Repairing/ Overhauling	a. Dismantling and installing of all stages air system. b. Repair/ overhauling of HAPC No 1 alongwith motors. c. Removing of paint and applying paint according to the machinery. d. Repair/ replacement of compressor and evaporator.	N/A	
14.	Technical	As per technical Specs/ Manual.			

	Specs	
15.	Eligibilities	Authorized rep of OEM/ Local contractor having working experience on HAPC. Contractor is to get visit certificate from MEO prior participation in tender to fully understand the scope of work.
16.	EDC	07 x Days
17.	Warranty	01 x Year
18.	Acceptance Criteria	a. Satisfactory operation without increased noise, vibration & leakage. b. Damage/ defect occurred during work is responsibility of firm/ contractor.
19.	Any other relevant info	visit onboard to resolve any query.

IT NO: IT/91/26/2025-26

REPAIR/ REPLACEMENT OF BOAT DECK & CPO SAILOR LOBBY LADDERS - PMSS ZHOB

S No	Details	
1.	Ships Name	PMSS ZHOB
2.	Parent Equipment	Boat Deck & CPO/ Sailor Lobby ladders
3.	OEM	China
4.	Model	China
5.	Origin	China
6.	Sub Equipment	Repair/ Replacement of Boat deck & CPO/ Sailor Lobby ladders
7.	Assembly Component	Repair/ Replacement of Boat deck & CPO/ Sailor Lobby ladders
8.	Quantity	02
9.	Source of Availability	Any local/ international registered firm with good reputation.
10.	Justification for Work	As per PMS routines/technical manual
11.	Work Required	Repair/ replacement of Boat deck & CPO/ Sailor Lobby ladders foot plates welding & alignment of frame.
12.	Detailed scope of work	a. Replacement of rubber on stairs b. Buffing c. Repair of few steps
13.	Technical Specs	a. Material: Stainless Steel b. Dimensions: 400-600 mm c. Rungs: Anti-slip surface d. Safety Features: Safety cage e. Non-slip footing
14.	Eligibilities	Any firm having experience with PMSA.
15.	EDC	ASAP
16.	Warranty	1 year
17.	Acceptance Criteria	a. Ladder found structurally sound. b. Properly secured. c. All Rubber replaced d. Corrosion free. e. Compliant with design specifications. f. Safe for operational use. g. Visually inspection of provided item w.r.t physical inspection.

**CHEMICAL CLEANING & PRESSURE TESTING OF INTERCOOLERS OF MAIN ENGINES -
PMSS NUSRAT**

S No	Details				
1.	Ships Name	PMSS NUSRAT			
2.	Parent Equipment	FPME, ASME and APME			
3.	OEM	MTU (Germany)			
4.	Model	16 V 396 TB 93			
5.	Serial No	FPME 5590576, ASME 5590578 & APME 5590577			
6.	Origin	Germany			
7.	Sub Equipment	Fresh Water Cooling System			
8.	Assembly Component	Intercoolers			
9.	Quantity	03			
10.	Justification for Work	Chemical cleaning and pressure testing Of Intercoolers Of FPME, ASME and APME is required.			
11.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Chemical cleaning and pressure testing of Intercoolers of FPME, ASME and APME is required.	Chemical cleaning and pressure testing work to be required for sat ops	See details at S.No 14 Column b	As per requirement
12.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Chemical cleaning/ pressure testing of intercoolers of FPME, ASME and APME	a. All Main Engine intercoolers are to be dismantled. b. All intercoolers chemical cleaning and pressure testing to be carried out. c. Defective intercoolers are to be replaced with new. d. New intercoolers are to be made as per sample and fitted back. e. Special tools are to be arranged by the firm f. The firm will be responsible to undertake any work not covered above to ensure good quality of work. g. The firm will be responsible for welding/ cutting, if required.	As per requirement	

		<p>h. The firm will be responsible for requirement of external services.</p> <p>j. The firm will be responsible for all removal, transportation and installation work during warranty/ guarantee period claims and in case of any re-work</p>	
13.	Technical Specs	As per scope of work	
14.	Eligibilities	<p>a. The firm should visit onboard and carry out inspection to establish the extent of required work and spares</p> <p>b. The firm should have good experience of the same kind of work required onboard</p> <p>f. The firm should be NTN/GTN registered</p>	
15.	EDC	02 x weeks after issuance of work/ confirmation order	
16.	Warranty	01 year from the date of acceptance	
17.	Acceptance Criteria	<p>a. Satisfactory work done by the firm</p> <p>b. Satisfactory HATs and SATs</p> <p>c. Practical acceptance by SS</p>	

PROCUREMENT OF 04 X FIRE HELMET HEROS H30 - PMSS NUSRAT

S No	Details				
	Ships Name	PMSS NUSRAT			
2.	Parent Equipment	Firefighting helmet			
3.	Sub Equipment	Firefighting helmet			
4.	Assembly Component	Firefighting helmet			
5.	Quantity	04 x No			
6.	Justification for Work	Procurement of fire helmet Heros H30. Item required as per DC&FF allowance.			
7.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Procurement of fire helmet Heros H30. Item required as; per DC&FF allowance. Moreover, item is not available in stock (NSD). Same has been highlighted in DC&FF workup :	Procurement of fire helmet Heros H30. Item required as per DC&FF allowance.	See detail S No 8 Column b	As per DC&FF allowance
8.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Procurement of fire helmet Heros H30. Item required as per DC&FF allowance.	a. 04 x No fire Heros H30. b. The firm will be responsible for provision of standard and high quality item as per requirement. c. Guarantee period claims for the period of 01 ye	As per DC&FF allowance	
9.	Technical Specs	As per scope of work			
10.	Eligibilities	a. The firm should have good experience of the same kind of work required onboard. b. The firm should NTN/ GTN registered.			
11.	EDC	07 days after issuance of work/ confirmation order			
12.	Warranty	01 year from the date of acceptance			
13.	Acceptance Criteria	a. Satisfactory work done by the firm. b. Practical acceptance by SS			

REQUIREMENT OF HORN LOUD SPEAKERS - PMSS NUSRAT

S No	Details													
1.	Ships Name	PMSS NUSRAT												
2.	Parent Equipment	MAIN BROADCAST SYSTEM												
3.	OEM	TOA (Japan)												
4.	Model	SC-615M HM												
5.	Origin	JAPAN												
6.	Sub Equipment	HORN LOUD SPEAKERS												
7.	Quantity	<table border="1"> <thead> <tr> <th>S No</th> <th>Item Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>TOA Horn Loud Speakers</td> <td>05</td> </tr> <tr> <td>b.</td> <td>Push to Talk MIC</td> <td>05</td> </tr> </tbody> </table>	S No	Item Description	Qty	a.	TOA Horn Loud Speakers	05	b.	Push to Talk MIC	05			
		S No	Item Description	Qty										
		a.	TOA Horn Loud Speakers	05										
b.	Push to Talk MIC	05												
8.	Justification for Work	Horn Speaker are required onboard for smooth operation of Main Broadcast/RICE communication system.												
9.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>05 X Horn Speakers declared BER/Unserviceable by BMG</td> <td>05 X TOA Horn Speakers required</td> <td>See S.NO – 10 para b</td> <td>See S.NO – 10 para c</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	05 X Horn Speakers declared BER/Unserviceable by BMG	05 X TOA Horn Speakers required	See S.NO – 10 para b	See S.NO – 10 para c
		a	b	c	d									
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required									
05 X Horn Speakers declared BER/Unserviceable by BMG	05 X TOA Horn Speakers required	See S.NO – 10 para b	See S.NO – 10 para c											
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05 X TOA Horn Speakers required	05 X Horn Speakers required	05 x TOA Loud Speakers 05 X Push to Talk MIC for SRE												
11.	Technical Specs	Rated Power: 15 Watt												
12.	Eligibilities	g. Have past experience w.r.t procurement onboard PMSA ships h. Local contractor must visit ships to understand scope of work												
13.	EDC	07 x working days after issuance of work order.												
14.	Warranty	01 Year												
15.	Acceptance Criteria	Upon successful completion of installation												
16.	Any other relevant info	SS may be contacted for any query/requirement												

**IT SPECIFICATION FOR PROCUREMENT OF PNEUMATIC FENDERS EASTERN WING/
TUGS**

S No	Description				
1.	Ship's Name	EASTERN WING			
2.	Parent Equipment	PNEUMATIC FENDERS			
3.	Serial No	5133458			
4.	Origin	UK			
5.	Quantity	10			
6.	Justification for work	Procurement of pneumatic fenders for safety of PMSA Ships			
7.	Work Requires	Procurement of pneumatic fenders for safety of PMSA Ships			
8.	Detail scope of Work	a	b	c	d
		Defect list	Repair Work Required	Services Required	Quantity Required
		-		Pneumatic fender	10
9.	Eligibilities	Acceptance by End-user			
10.	EDC	30 Days after Issuance of order			
11.	Warranty	1 Year after delivery			
12.	Acceptance Criteria	Accepted by end-user after inspection			

REPAIR OF 01 X HOT WATER BOILER - PMSS HINGOL

S No	Details													
1.	Ships Name	PMSS HINGOL												
2.	Parent Equipment	Fresh water system.												
3.	OEM	JIUJIANG HAITIAN EQUIPMENT MANUFACTURE CO..LTD.												
4.	Model	RLH0.23-0.4/95/70												
5.	Origin	China												
6.	Sub Equipment	Hot water system.												
7.	Assembly Component	Hot-water heating device with f o												
8.	Part No. of Assembly Component	As Provided by OEM												
9.	Quantity	01												
10.	Source of Availability	Local engineering houses												
11.	Justification for Work	Hot-water heating device found deteriorated												
12.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Hot-water heating device found deteriorated and defective.</td> <td>a. Replacement of heat exchange coil. b. Repair/ replacement of burner assembly. c. Replacement of temperature controller. d. Repair/ maintenance of control box. e. Repair/ replacement and testing of all safeties fitted with hot water heating device (auto exhaust valve, auto water make-up valve, temperature sensor, safety valve, electric contact pressure gauge, water level electrode and alarm bell). f. Replacement</td> <td>Replacement of heat exchange coil, burner assembly, Temperature controller and expansion tank. Repair/ replacement and testing of all safeties fitted with hot water heating device (auto exhaust valve, auto water make-up valve, temperature sensor, safety valve, electric contact pressure gauge, water level electrode and alarm bell). Corroded/ damaged bolts</td> <td>01x heat exchange coil 01 x burner assembly. 01 x Temperature controller. 01 x expansion tank. 01 x auto exhaust valve. 01 x auto water make-up valve. 01 x temperature sensor. 01 x safety</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Hot-water heating device found deteriorated and defective.	a. Replacement of heat exchange coil. b. Repair/ replacement of burner assembly. c. Replacement of temperature controller. d. Repair/ maintenance of control box. e. Repair/ replacement and testing of all safeties fitted with hot water heating device (auto exhaust valve, auto water make-up valve, temperature sensor, safety valve, electric contact pressure gauge, water level electrode and alarm bell). f. Replacement	Replacement of heat exchange coil, burner assembly, Temperature controller and expansion tank. Repair/ replacement and testing of all safeties fitted with hot water heating device (auto exhaust valve, auto water make-up valve, temperature sensor, safety valve, electric contact pressure gauge, water level electrode and alarm bell). Corroded/ damaged bolts	01x heat exchange coil 01 x burner assembly. 01 x Temperature controller. 01 x expansion tank. 01 x auto exhaust valve. 01 x auto water make-up valve. 01 x temperature sensor. 01 x safety
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14.	Technical Specs	As per OEM manual.
15.	Eligibilities	Security wise dear firm having qualified technicians and forking experience on Hot-water heating device on board HINGOL Class MPVs of PMSA. ^
16.	EDC	07 Days
17.	Warranty	<p>One year warranty after satisfactory test/trails w.r.t:</p> <ul style="list-style-type: none"> a. Satisfactory operation of Hot-water heating device without any leakage and malfunctioning. b. Satisfactory operation of burner assembly. c. Satisfactory operation of all safeties (auto exhaust valve, auto water make-up valve, temperature sensor, safety valve, electric contact pressure gauge , water level electrode and alarm bell). d. Satisfactory operation of temperature controller. e. Satisfactory operation control box components. f. Any abnormality in operation of hot water healing device will be rectified by the firm during warranty period.
18.	Acceptance Criteria	<ul style="list-style-type: none"> a. Satisfactory operation of Hot-water heating device without any leakage and malfunctioning. b. Satisfactory operation of burner assembly. c. Satisfactory operation of all safeties (auto exhaust valve, auto water make-up valve, temperature sensor, safety valve, electric contact pressure gauge, water level electrode and alarm bell). d. Satisfactory operation of temperature controller. e. Satisfactory operation control box components. f. only OEM recommended spares will be acceptable.
19.	Any other relevant info	Firm may visit onboard for clear understanding of scope of work before quoting.

IT SPECIFICATION FOR AIRFRAME SPARES OF DEFENDER BN2T-4S AIRCRAFT - PMSA
93 SQN

S No	Details																																																																																																																																	
1.	Ships Name	93 PMSA SQN																																																																																																																																
2.	Parent Equipment	BN2T-4S Defender Aircraft																																																																																																																																
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32)	483L533J1M1B2SOZE-5A	Circuit Breaker 5amp	1
33)	483L533J1M1B2SOZE-7.5	Circuit Breaker 7.5amp	1
34)	5SP4YB8(SP4YB8)	Cotter pin	1
35)	6041H202	Contactora	1
36)	606C66-8	Tyre (600x6x6 ply) Flight Custom 3	2
37)	658C66-2	Tyre (650x8x6 ply) Flight Custom 3	4
38)	6726656-200	Retaining ring	1
39)	6840136	Screen, Oil Pressure Assy	1
40)	6876073	Plug Magnetic	3
41)	6889947	Filter	6
42)	6895028	Fuel filter kit	6
43)	6895177	Filter Ring	4
44)	6898986	Resistor Pressure	1
45)	7740-00434	Sensor liquid level	2
46)	A102-28J	Bolt	1
47)	A102-3B	Bolt	100
48)	A103GC	Nut	40
49)	A111-11E	Bolt	8
50)	A111-7G	Bolt	16
51)	A112-12G	Bolt	2
52)	A125E	Nut	48
53)	AA442CW	Pump, dry air	2
54)	AGS2050-524BS	Rivet Pop	800
55)	AGS2050-530BS	Rivet Pop	500
56)	AN509-10R15	Screw	100 l
57)	AN509-416R14	Screw	100
58)	AN509-416R16	Screw	100
59)	APT-1-1000-150G	Pressure Transducer Psi	1
60)	AS3084-03	O Ring	8
61)	AS560	Aeroshell Oil 560	2
62)	B3-5-1	Filter	22
63)	BN2T-MS16-300-KIT	Turbine Engine 300Hr Check Kit	6
64)	CD 5/16A(KSP5APSP4R)	Bearing	10
65)	CD-5-16B (KSP5APSP5R)	Bearing	1
66)	Fluid 41	Aero Shell Fluid 41	2
67)	GCSG505-21B	Generator Control Unit	1
68)	GN3058	Nyco Grease	12
69)	Grease 22	Aero Shell Grease 22	2
70)	KP6APSP7	Bearing	2
71)	KUP14D55	Relay (RL178)	1
72)	L1055-1	Fuse 1 Amp	2 1
73)	MK1000-8	Anchor Nut	100
74)	MK2000-03	Anchor Nut	98
75)	MK3000-03	Anchor Nut	98
76)	MK3000-08	Anchor nut	100
77)	MS28775-132	O Ring	10

78)	MS35649-2242	Nut	2
79)	MS9387-904	Seal, O ring	4
80)	NAS617-5	Packing	4
81)	NB-00-1091	Bolt	8
82)	NB-03-5223	Chair Bracket	1
83)	NB-03-5229	Retainer Bolt	1
84)	NB-04-7359	Spacer	2
85)	NB-15-1203	Spring	2
86)	NB-15-2133	Strip Window Glazing	2
87)	NB-15-2567	Door Seal	1
88)	NB-20-2595	Sleeve	4
89)	NB-24-0237	Bolt	2
90)	NB-24-0247	Bush	4
91)	NB-24-0249	Bush	2
92)	NB-24-0331	Bush	4
93)	NB-24-0333	Bush	4
94)	NB-25-0209	Bolt	4
95)	NB-31-0151	Bolt special	2
96)	NB-31-0269	Spacer	2
97)	NB-31-0601	Hinge	1
98)	NB-31-0693	Hinge	1
99)	NB-31-0781	Hinge	1
100)	NB-40-0113	Bracket	2
101)	NB-45-0323	Clip Bonding	5
102)	NB-45-0867	Turnbuckle Assy	2
103)	NB-45-0927	Spacer	4
104)	NB-45-0937	Spacer	6
105)	NB-45-0979	Nut special	1
106)	NB-45-1051	Rod Assy Elevator	1
107)	NB-45-1533	Elevator Stop Screw	1
108)	NB-45-1965	Stop	2
109)	NB-45-3145	Cable Assy, inboard steer	1
110)	NB-45-3147	Cable Assy, outboard steer	1
111)	NB-45-3611	Rod assembly drive	1
112)	NB-45-851	Roller guide Assy	3
113)	NB-50-0793	Adapter Oilway	1
114)	NB-51-2429	Washer, lock	1
115)	NB-51-2515	Intake, duct air	1
116)	NB-57-0351	Adaptor	3
117)	NB-59-547	Tank, Oil	1
118)	NB-73-0365	Hose Assy brake	2
119)	NB-88-0221	Pin Assy Rigging	1
120)	NB-88-0355	Plate Assy Aileron Rigging Level L/H	1
121)	NB-88-0356	Plate Assy Aileron Rigging Level R/H	1
122)	NB-88-0357	Plate Assembly Rigging- Rudder	1
123)	NB-88-0465	Flag Assembly	1
124)	NB-88-0637	Plate Assembly Rigging Elevator Trim Tab	1
125)	NB-88-0645	Plate Rigging Rudder	1
126)	NB-88-0657	Pin Rigging	1

		127)	NB-88-0663	Actuator Slave Flap	1
		128)	PR1440B2	Sealant	8
		129)	PS41-30-2MNB-C-FL18	Pressure Switch	1
		130)	RA1J7-1	Gyro Filter Assy	2
		131)	RS412-239	Fuse 500mA	2
		132)	RS541-3300 (ALT RS422-084)	Fuse 5 amp	2
		133)	RTV732	Silastic White	2
		134)	SP4YB3	Clevis Pin	1
		135)	SP85-504	Rivet Mush Head	500
		136)	SP90C12	Pin Split	20
9.	Quantity	As mentioned against each			
10.	Source of Availability	OEM or OEM authorized aviation vendors			
11.	OEM Details	<p>Address Britten-Norman Aerospace Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom</p> <p>Contact Phone +442033714000</p> <p>Contact Email info@britten-norman.com sales@britten-norman.com</p>			
12.	Justification for Work	Replacement required to cater daily schedule/ unscheduled maintenance of BN2T- 4S			
13.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Nil	Nil	Spares replacement for Defender/ BN2T-4S aircraft scheduled/ unscheduled maintenance	As per para 8
14.	Detailed scope of work	a	B		c
		Detail of Repair Work Required	Detail of Services Required		Detail of Spares Required
		Nil	Spares replacement for Defender/ BN2T-4S aircraft scheduled/ unscheduled maintenance		As per para 8
15.	Technical Specs	Islander Illustrated Parts Catalogue Publication of Defender BN2T-4S aircraft (as per para 9 above)			
16.	Eligibilities	<p>a. Replacement of items are to be delivered 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 1 x year of their firm.</p> <p>c. Firms must have at least 2 x years' experience of procurement/repair/overhaul 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 charges/ insurance/ custom duties for transportation of the spares.</p>			

		<p>e. Firms need to get import/ export licenses from respective abroad firms/ agencies (where applicable). Furthermore, firm will be sole responsible for transportation.</p> <p>f. In case of failure to meet acceptance criteria or defect during physical/ operational inspection of items, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time.</p> <p>g. Offered quotes are to be firm and final. No adjustments against Foreign Exchange rate variations will be accommodated.</p>
17.	EDC	08 weeks after award of contract
18.	Warranty	01 Year
19.	Acceptance Criteria	<p>a. Satisfactory physical condition and operational check of items (where Applicable).</p> <p>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.</p> <p>c. Provision of OEM certification from EASA/ FAA (if applicable).</p> <p>d. Provision of import documents.</p> <p>e. Items having shelf life/ expiry date should be within 6-8 weeks from date of manufacturing.</p>

IT SPECIFICATION FOR ENGINE SPARES OF DEFENDER BN2T-4S AIRCRAFT - PMSA 93 SQN

S No	Details																													
1.	Ships Name	93 PMSA SQN																												
2.	Parent Equipment	BN2T-4S Defender Aircraft																												
3.	OEM	M/s Britten Norman Aerospace Ltd UK																												
4.	Model	BN2T-4S																												
5.	Serial No	Nil																												
6.	Origin	Britten Norman Aerospace, UK																												
7.	Sub Equipment	Defender BN2T-4S Aircraft components/ spares																												
8.	Assembly Component	Defender BN2T-4s Aircraft components/ spares																												
9.	Part No. of Assembly Component	<table border="1"> <thead> <tr> <th>S No</th> <th>Part No</th> <th>Description</th> <th>Qty Req</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>6875708</td> <td>Over Speed Governor</td> <td>1</td> </tr> <tr> <td>b.</td> <td>699253/23003114</td> <td>Fuel Pump</td> <td>1</td> </tr> <tr> <td>c.</td> <td>6890917</td> <td>Fuel Nozzle</td> <td>1</td> </tr> <tr> <td>d.</td> <td>6785703</td> <td>Combined Governor</td> <td>1</td> </tr> <tr> <td>e.</td> <td>23036660</td> <td>Fuel Control Unit</td> <td>1</td> </tr> <tr> <td>f.</td> <td>23036668</td> <td>Bleed Valve</td> <td>1</td> </tr> </tbody> </table>	S No	Part No	Description	Qty Req	a.	6875708	Over Speed Governor	1	b.	699253/23003114	Fuel Pump	1	c.	6890917	Fuel Nozzle	1	d.	6785703	Combined Governor	1	e.	23036660	Fuel Control Unit	1	f.	23036668	Bleed Valve	1
S No	Part No	Description	Qty Req																											
a.	6875708	Over Speed Governor	1																											
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d.	6785703	Combined Governor	1																											
e.	23036660	Fuel Control Unit	1																											
f.	23036668	Bleed Valve	1																											
10.	Quantity	As mentioned against each																												
11.	Source of Availability	OEM or OEM authorized aviation vendors																												
12.	OEM Details	<p><u>Address</u> Britten-Norman Aerospace Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom</p> <p><u>Contact Phone</u> +442033714000</p> <p><u>Contact Email</u></p>																												

		info@britten-nrman.com sales@britten-norman.com			
13.	Justification for Work	Replacement required to cater daily schedule/ unscheduled maintenance of BN2T-4S			
14.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Nil	Nil	Spares replacement for Defender BN2T-4S aircraft scheduled/ unscheduled maintenance	As per para 9 a-f
15.	Detailed scope of work	a	B		c
		Detail of Repair Work Required	Detail of Services Required		Detail of Spares Required
		Nil	Spares replacement for Defender BN2T-4S aircraft scheduled/ unscheduled maintenance		As per para 9 a-f
16.	Technical Specs	Islander Illustrated Parts Catalogue Publication of Defender BN2T-4S aircraft (as per para 9 above)			
17.	Eligibilities	<p>a. Replacement of items are to be delivered in New/ Overhauled 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 1 x year of their firm.</p> <p>c. Firms must have at least 2 x years' experience of procurement/repair/overhaul 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 charges/ insurance/ custom duties for transportation of the spares.</p> <p>e. Firms need to get import/ export licenses from respective abroad firms/ agencies (where applicable). Furthermore, firm will be sole responsible for transportation.</p> <p>f. In case of failure to meet acceptance criteria or defect during physical/ operational inspection of items, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time.</p> <p>g. Offered quotes are to be firm and final. No adjustments against Foreign Exchange rate variations will be accommodated.</p>			
18.	EDC	08 weeks after award of contract			
19.	Warranty	01 Year			
20.	Acceptance Criteria	<p>a. Satisfactory physical condition and operational check of items (where Applicable).</p> <p>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.</p> <p>c. Provision of OEM certification from EASA/ FAA (if applicable).</p> <p>d. Provision of import documents.</p> <p>Items having shelf life/ expiry date should be within 6-8 weeks for date of manufacturing.</p>			

IT SPECIFICATION FOR AVIONICS SPARES OF DEFENDER BN2T-4S AIRCRAFT - PMSA 93 SQN

S No	Details				
1.	Ships Name	93 PMSA SQN			
2.	Parent Equipment	BN2T-4S Defender Aircraft			
3.	OEM	M/s Britten Norman Aerospace Ltd UK			
4.	Model	BN2T-4S			
5.	Serial No	Nil			
6.	Origin	Britten Norman Aerospace, UK			
7.	Sub Equipment	Defender BN2T-4S Aircraft components/ spares			
8.	Assembly Component	Defender BN2T-4s Aircraft components/ spares			
9.	Part No. of Assembly Component	S No	Part No	Description	Qty Req
		a.	065-00030-0000	Mounting Servo KM275	3
		b.	065-00041-0000	Mounting Servo KM277	1
		c.	065-00059-0004	Servo Pitch KS270A	1
		d.	065-00060-0000	Servo Roll/Yaw KS271A	1
		e.	065-00060-0001	Servo Roll/ Yaw KS271A	1
		f.	065-00061-0050	Servo Trim KS272A	1
		g.	065-00085-0002	Computer Air Data KDC222	1
		h.	065-00086-0008	Controller Mode KMC321	1
		j.	065-00064-0009	Computer Flight KPC220	1
		k.	066-01153-0101	Transceiver Radar Altimeter KRA405B	1
10.	Quantity	As mentioned against each			
11.	Source of Availability	OEM or OEM authorized aviation vendors			
12.	OEM Details	<u>Address</u> Britten-Norman Aerospace Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom <u>Contact Phone</u> +442033714000 <u>Contact Email</u> info@britten-norman.com sales@britten-norman.com			
13.	Justification for Work	Replacement required to cater daily schedule/ unscheduled maintenance of BN2T-4S			
14.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Nil	Nil	Spares replacement for Defender BN2T-4S aircraft scheduled/ unscheduled maintenance	As per para 9 a-k

15.	Detailed scope of work	a	B	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
		Nil	Spares replacement for Defender BN2T-4S aircraft scheduled/unscheduled maintenance	As per para 9 a-k
16.	Technical Specs	Islander Illustrated Parts Catalogue Publication of Defender BN2T-4S aircraft (as per para 9 above)		
17.	Eligibilities	<p>a. Replacement of items are to be delivered in New/ Overhauled 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 1 x year of their firm.</p> <p>c. Firms must have at least 2 x years' experience of procurement/repair/overhaul 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 charges/ insurance/ custom duties for transportation of the spares.</p> <p>e. Firms need to get import/ export licenses from respective abroad firms/ agencies (where applicable). Furthermore, firm will be sole responsible for transportation.</p> <p>f. In case of failure to meet acceptance criteria or defect during physical/ operational inspection of items, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time.</p> <p>g. Offered quotes are to be firm and final. No adjustments against Foreign Exchange rate variations will be accommodated.</p>		
18.	EDC	08 weeks after award of contract		
19.	Warranty	01 Year		
20.	Acceptance Criteria	<p>a. Satisfactory physical condition and operational check of items (where Applicable).</p> <p>e. 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.</p> <p>f. Provision of OEM certification from EASA/ FAA (if applicable).</p> <p>g. Provision of import documents.</p> <p>Items having shelf life/ expiry date should be within 6-8 weeks for date of manufacturing.</p>		

IT SPECIFICATION FOR GARMIN SPARES OF DEFENDER BN2T-4S AIRCRAFT PMSA 93 SQN

S No	Details	
1.	Ships Name	93 PMSA SQN
2.	Parent Equipment	BN2T-4S Defender Aircraft
3.	OEM	M/s Britten Norman Aerospace Ltd UK
4.	Model	BN2T-4S
5.	Origin	Britten Norman Aerospace, UK
6.	Sub Equipment	Defender BN2T-4S Aircraft components/ spares
7.	Assembly Component	Defender BN2T-4s Aircraft components/ spares

8.	Part No. of Assembly Component	S No	Part No	Description	Qty Req
		a.	010-02002-05	GTN750Xi	1
		b.	010-01220-73	GDU1060	1
		c.	010-01350-01	GCU485	1
		d.	010-02326-30	GI275(S/BY UNIT)	1
		e.	010-01218-23	GDU700P	1
		f.	010-00831-81	GMA35C	1
		g.	010-01215-02	GTX355R	1
		h.	010-00852-01	GAD43e	1
		j.	010-01589-00	GWX75 WHEATHER RADAR	1
		k.	010-01405-00	GEA71B	1
		l.	010-02091-00	GPSMAP 8410	1
		m.	013-00235-00	GA35 GPS ANTENNA	1
		n.	010-02004-16	G600TXi LRU KIT	1
9.	Quantity	As mentioned against each			
10.	Source of Availability	OEM or OEM authorized aviation vendors			
11.	OEM Details	Address Britten-Norman Aerospace Ltd, Bembridge Airport, Bembridge, Isle of Wight, PO35 5PR, United Kingdom Contact Phone +442033714000 Contact Email info@britten-norman.com sales@britten-norman.com			
12.	Justification for Work	Replacement required to cater daily schedule/ unscheduled maintenance of BN2T-4S			
13.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Nil	Nil	Spares replacement of Defender 3N2T-4S aircraft for scheduled/ unscheduled maintenance	As per para 8 a-n
14.	Detailed scope of work	a	B		c
		Detail of Repair Work Required	Detail of Services Required		Detail of Spares Required
		Nil	Spares replacement of Defender 3N2T-4S aircraft for scheduled/ unscheduled maintenance		As per para 8 a-n
15.	Technical Specs	Islander Illustrated Parts Catalogue Publication of Defender BN2T-4S aircraft (as per para 9 above)			
16.	Eligibilities	a. Replacement of items are to be delivered in New/ Overhauled Condition only, from OEM or OEM authorized aviation vendors b. Firms have to provide authorization letter of their principal firms and bank statement of last 1 x year of their firm. c. Firms must have at least 2 x years' experience of procurement/repair/overhaul of Aviation components/ spare parts. Experience certificate of Aviation related contracts by contracting agency in Pakistan is mandatory.			

		<p>d. Firms need to include freight charges/ insurance/ custom duties for transportation of the spares.</p> <p>e. Firms need to get import/ export licenses from respective abroad firms/ agencies (where applicable). Furthermore, firm will be sole responsible for transportation.</p> <p>f. In case of failure to meet acceptance criteria or defect during physical/ operational inspection of items, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time.</p> <p>g. Offered quotes are to be firm and final. No adjustments against Foreign Exchange rate variations will be accommodated.</p>
17.	EDC	08 weeks after award of contract
18.	Warranty	01 Year
19.	Acceptance Criteria	<p>a. Satisfactory physical condition and operational check of items (where Applicable).</p> <p>h. 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.</p> <p>i. Provision of OEM certification from EASA/ FAA (if applicable).</p> <p>j. Provision of import documents.</p> <p>k. Items having shelf life/ expiry date should be within 6-8 weeks for date of manufacturing.</p>

**REPAIR/ REPLACEMENT OF POWER STATION MONITORING AND CONTROL SYSTEM –
PMSS ZHOB**

S No	Details								
1.	Ships Name	PMSS ZHOB							
2.	Parent Equipment	Power Station Monitoring And Control System (Switch Board)							
3.	OEM	Systems Engineering Research Institute Of China State Shipbuilding Corporation							
4.	Model	S7-300 CPU314C-2PN/DP, DEIF PPU3+H3							
5.	Origin	China							
6.	Sub Equipment	PLCandPPU							
7.	Assembly Component	PLCandPPU							
8.	Part No. of Assembly Component	PLC PPU	CPU314C-2P N/DP 24DI 16DO 4AI 2AO PPU + H3Y11(PPU3)						
9.	Quantity	2							
10.	Source of Availability	Wuhan Mekand Equipment Co Ltd							
11.	Justification for Work	Upon inspection of control system PPU and PLC suspected defective due which load bearing/ shifting capability degraded							
12.	Work Required	a		b		c		d	
		Defect/ Routine List		Repair Work Required		Services Required		Spares Required	
		N/A		Repair/ Replacement Power Station Monitoring And Control System by local engineering house		See S.No 13 Para b		See S.No 13 Para c	

		a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
13.	Detailed scope of work	Repair/ Replacement Power Station Monitoring And Control System by local engineering house	<p>a Contractor is to visit ship and carry out detailed inspection of Power Station Monitoring And Control System.</p> <p>b. Repair/ Maintenance of PLC and PPU of Power Station Monitoring And Control System.</p> <p>c. Defect diagnosis of any other defective parts and its rectification, replacement of any defective relays.</p> <p>d. Repair/ replacement of any defective breakers related to load bearing/ shifting.</p>	<p>PLC Part No: CPU314C-2P N/DP 24DI 16DO4AI2AO</p> <p>PPU Part No: PPU +H3 Y11(PPU3)</p>
14.	Technical Specs	As per OEM manual specs		
15.	Eligibilities	<p>a. Reputable local contractor having working experience of Electronic system related activity in PMSA.</p> <p>b. Local contractor must visit ship to understand exact requirement/ scope of work.</p>		
16.	EDC	10 Days		
17.	Warranty	1-year warranty for all mentioned works.		
18.	Acceptance Criteria	Satisfactory harbor trials followed by successful sea trials of load shifting and load bearing in parallel mode in auto mode.		
19.	Any other relevant info	Growth work, Damage/ defect occurred during work is responsibility of contractor.		

**FABRICATION INSTALLATION OF GREY WATER LINES OF DRAINAGE SYSTEM
ONBOARD PMSS RAFAQAT**

S No	Details													
1.	Ships Name	PMSS RAFAQAT												
2.	Parent Equipment	Drainage System												
3.	OEM	USA												
4.	Origin	USA												
5.	Sub Equipment	Grey Water Lines												
6.	Assembly Component	Grey Water Lines												
7.	Quantity	a. 20 x Feet Lines, b. 01 x valve c. 02 x Union d. 01 x Elbow												
8.	Source of Availability	USA												
9.	Justification for Work	REPAIR / REPLACEMENT OF GREY WATER LINES OF DRAINAGE SYSTEM												
10.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td>Defect List</td> <td>Repair Work Req</td> <td>Services Req</td> <td>Spares Req</td> </tr> <tr> <td>Repair / Replacement of Grey water lines of drainage system</td> <td>Repair / replacement of grey water lines of drainage system with union, adaptor and elbow change with new and prove system leak free</td> <td>Repair / replacement of grey water lines of drainage system</td> <td>All material, spares, tools, special equipment / tools, accessories etc. required for said work are to arrange by the contractor</td> </tr> </tbody> </table>	a	b	c	d	Defect List	Repair Work Req	Services Req	Spares Req	Repair / Replacement of Grey water lines of drainage system	Repair / replacement of grey water lines of drainage system with union, adaptor and elbow change with new and prove system leak free	Repair / replacement of grey water lines of drainage system	All material, spares, tools, special equipment / tools, accessories etc. required for said work are to arrange by the contractor
		a	b	c	d									
		Defect List	Repair Work Req	Services Req	Spares Req									
Repair / Replacement of Grey water lines of drainage system	Repair / replacement of grey water lines of drainage system with union, adaptor and elbow change with new and prove system leak free	Repair / replacement of grey water lines of drainage system	All material, spares, tools, special equipment / tools, accessories etc. required for said work are to arrange by the contractor											
<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>Detail of Repair Work Required</td> <td>Detail of Services Required</td> <td>Detail of Spares Required</td> </tr> <tr> <td>Repair / replacement of grey water lines of drainage system with union, adaptor and elbow change</td> <td>Repair / replacement of grey water lines of drainage system with union, adaptor and elbow change with new and prove system leak free</td> <td>All material, spares, tools, special equipment / tools, accessories etc. required for said work are to</td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Repair / replacement of grey water lines of drainage system with union, adaptor and elbow change	Repair / replacement of grey water lines of drainage system with union, adaptor and elbow change with new and prove system leak free	All material, spares, tools, special equipment / tools, accessories etc. required for said work are to					
a	b	c												
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required												
Repair / replacement of grey water lines of drainage system with union, adaptor and elbow change	Repair / replacement of grey water lines of drainage system with union, adaptor and elbow change with new and prove system leak free	All material, spares, tools, special equipment / tools, accessories etc. required for said work are to												
11.	Detailed scope of work													

		with new and prove system leak free	Any damage occurs during the course of inspection work will be done by firm without any liability/responsibility on part of the ship. Requirement of external services if any will be responsibility of the firm without any liability on the part of ship	arrange <u>by the contractor</u>
12.	Technical Specs	Nil		
13.	Eligibilities	The firm should visit onboard and carry out inspection to establish the extent of required work . The firm should have experience of the same kind of work The firm should be NTN/GST registered.		
14.	EDC	07 working days.		
15.	Warranty	1 year		
16.	Acceptance Criteria	a. Use SS 316L nonmagnetic material. b. Successful installation as per requirement. c. Prove system leak free d. Satisfactory trials.		

OVERHAULING OF HEADER TANKS INLET & OUTLET ONBOARD - PMSS BASOL

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	Header Tanks			
3.	Origin	China			
4.	Sub Equipment	Inlet & Outlet vv			
5.	Assembly Component	Inlet & Outlet vv			
6.	Part No. of Assembly Component	SNo	Part No	Description	Qty
		a.	NA	Inlet & Outlet vv	18
		b.	NA	Sensor	01
7.	Quantity	19 IN No Inlet & Outlet vv and sensors			
8.	Source of Availability	Local Market			
9.	Justification for Work	All Inlet & Outlet vv overhauled			
10.	Work Required	a	b	c	d
		Defect List	Repair Work Req	Services Req	Spares Req
		Header tanks inlet & outlet vv need to be replaced or overhauled	Header tanks inlet & outlet vv need to be replaced or overhauled	Inspection/ repair/ overhauling of sensor and inlet & outlet vv for sat ops.	As per serial No 9&10
11.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Header tanks inlet & outlet vv need to be replaced or overhauled	Header tanks inlet & outlet vv need to be replaced or overhauled	Inspection/ repair/ overhauling of sensor and inlet & outlet vv for sat ops.	
12.	Technical Specs	As per sample			
13.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA			
14.	EDC	07 Days			
15.	Warranty	01 Year			
16.	Acceptance Criteria	OEM certified items			

REPAIR OVERHAULING OF MAIN BILGES PUMP ONBOARD PMSS BASOL

S No	Details																																	
1.	Ships Name	<u>PMSS BASOL</u>																																
2.	Parent Equipment	Main bildges pump																																
3.	OEM	JIANGSU ZHENHUA PUMP INDYSTRY CO, LTD																																
4.	Model	CLH80-65-9(Z)																																
5.	Origin	China																																
6.	Sub Equipment	Main bildges pump																																
7.	Part No. of Assembly Component	<table border="1"> <thead> <tr> <th>SNo</th> <th>Part No</th> <th>Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>NA</td> <td>Pump body</td> <td>01</td> </tr> <tr> <td>b.</td> <td>NA</td> <td>Impeller</td> <td>01</td> </tr> <tr> <td>c.</td> <td>58U-30</td> <td>Mechanical seal</td> <td>01</td> </tr> <tr> <td>d.</td> <td>6206</td> <td>Bearings</td> <td>03</td> </tr> <tr> <td>e.</td> <td>Z60-C-2.5</td> <td>Guage with adaptor</td> <td>02</td> </tr> <tr> <td>f.</td> <td>NA</td> <td>Adaptor</td> <td>04</td> </tr> <tr> <td>g.</td> <td>NA</td> <td>Shaft</td> <td>01</td> </tr> </tbody> </table>	SNo	Part No	Description	Qty	a.	NA	Pump body	01	b.	NA	Impeller	01	c.	58U-30	Mechanical seal	01	d.	6206	Bearings	03	e.	Z60-C-2.5	Guage with adaptor	02	f.	NA	Adaptor	04	g.	NA	Shaft	01
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		observed, overhauling of pump is to be required for sat ops		observed, overhauling of pump is to be required for sat ops
13.	Technical Specs	As per sample		
14.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA		
15.	EDC	07 Days		
16.	Warranty	01 Year		
17.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools		

IT NO: IT/91/37/2025-26

REPAIR OVERHAULING OF SEA WATER PUMP NO 02 ONBOARD - PMSS BASOL

S No	Details					
1.	Ships Name	PMSS BASOL				
2.	Parent Equipment	Sea water cooling system				
3.	OEM	JIANGSU ZHENHUA PUMP INDYSTRY CO, LTD				
4.	Model	CLH80-65-9(Z)				
5.	Origin	China				
6.	Sub Equipment	Main AC Sea water cooling system				
7.	Assembly Component	Main AC Sea water cooling system				
8.	Part No. of Assembly Component	S No	Part No	Description	Qty	
		a.	NA	Pump body	01	
		b.	NA	Impeller	01	
		c.	58U-30	Mechanical seal	01	
		d.	6206	Bearings	03	
		e.	Z60-C-2.5	Guage with adaptor	02	
		f.	NA	Adaptor	04	
		g-	NA	Shaft	01	
9.	Quantity	As per para 8				
10.	Source of Availability	Local Market				
11.	Justification for Work	Main AC sea water pump found degraded. Mechanical seal leaky and, overhauling of pump is to be required for sat ops				
12.	Work Required	a	b	c	d	
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required	

		Main AC Sea water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump	Main AC Sea water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	As per serial No 8									
13.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td>Main AC Sea water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> <td>Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump</td> <td>Main AC Sea water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops</td> </tr> </tbody> </table>				a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Main AC Sea water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of pump	Main AC Sea water cooling system pump found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops
a	b	c												
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14.	Technical Specs	As per sample												
15.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA												
16.	EDC	07 Days												
17.	Warranty	01 Year												
18.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools												

PROCUREMENT & INSTALLATION OF PUBLIC ADDRESS SYSTEM PMSS DASHT

S No	Details				
1.	Ships Name	PMSS DASHT			
2.	Parent Equipment	Public Address System			
3.	OEM	Jiaxing Kexun Electronic Co, LTD.			
4.	Origin	CHINA			
5.	Sub Equipment	a. Public Address Main unit			
6.	Assembly Component	Main control PCB, Key PCB, Power supply PCB, Relay PCB			
7.	Part No. of Assembly Component	Description	Part no		
		Main Control PCB	KX2.588.002		
		Key PCB	KX2.588.095		
		Power supply PCB	KX2.908.012		
		Relay PCB	KX2.354.012		
8.	Quantity	Description	Quantity		
		Main Control PCB	01		
		<u>Key PCB</u>	01		
		Power supply PCB	01		
		Relay PCB	02		
9.	Source of Availability	Local market/ Firm			
10.	Justification for Work	a. Repair/ Replacement work required of Public Address System for satisfactory operation			
11.	Work Required	a	b	c	d
		Defect List	Repair Work Req	Services Req	Spares Req
		KG-2T Public Address main unit, Main Control PCB, Key PCB, Power supply PCB defective.	Repair/ Replacement of Public Address System for satisfactory operation	Repair/ Replacement of Public Address System for satisfactory operation	N/A
12.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Repair/ Replacement of Public Address System for satisfactory operation	a. Repair/ Replacement of KG-2T Public Address main unit, Main control PCB, Key PCB, Power supply PCB, Relay PCB	N/A	
13.	Eligibilities	a. Any registered and security wise cleared local contractor having good experience in above mentioned scope of work Firm must visit site for understanding exact nature of work involved in job prior quoting to avoid inconvenience on later stage after reward of			

		Work Order. Firm is to quote for growth work by visiting ship in commercial quotation prior award of work order. HQ PMSA/ Ship will not accept growth work changes on later stages at all
14.	EDC	01 x Month
15.	Warranty	01 x Year warranty
16.	Acceptance Criteria	<ul style="list-style-type: none"> a. OEM certified item b. Technical specification to be provided c. Upon scrutiny of items and provided documents i.e technical specification along with production certificates by OEM d. Items will be accepted after satisfactorily test and trials onboard e. OEM technical documents and warranty certificates of items required f. Items must be genuine and OEM packed. Aftermarket products and item will not be accepted g. Satisfactorily trails onboard ship
17.	Any other relevant info	Firm must visit onboard for clarification of any query and better understanding of requirement

DEFECT RECTIFICATION OF ICCP CATHODIC PROTECTION SYSTEM - PMSS RAFAQAT

S No	Details				
1.	Ships Name	PMSS RAFAQAT			
2.	Parent Equipment	ICCP System			
3.	OEM	Electro catalytic USA			
4.	Model	50135			
5.	Origin	USA			
6.	Sub Equipment	Hull Cathodic protection system			
7.	Assembly Component	02x Anode plates, 02x Reference cells, 01 x control module, junction boxes with complete wiring			
8.	Quantity	01			
9.	Source of Availability	USA			
10.	Justification for Work	ICCP reference cells and control module are malfunctioning			
11.	Work Required	a	b	c	d
		Defect List	Repair Work Req	Services Req	Spares Req
		Repair maintenance of reference cell junction boxes and sealing arrangement. Repair maintenance and thoroughly inspection of all wiring and control unit along with its module	Repair/ Replacement of ICCP components are required	Repair/ Replacement of reference cell sand control module is required	All material, spares, tools, special equipment / tools, accessories etc. required for said work are to arrange by the contractor
12.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Repair maintenance of reference cell junction boxes and sealing	Repair / Replacement of reference cells, control module, wiring, cable sealing and junction boxes is required Any damage occurs during the course of	All material, spares, tools, special equipment / tools, accessories <u>etc.</u> required for said are to arrange	

		<p>arrangement.</p> <p>Repair maintenance and thoroughly inspection of all wiring and control unit along with its module</p>	<p>inspection work will be done by firm without any liability/ responsibility on part of the ship.</p> <p>Requirement of external services if any will be responsibility of the firm without any liability on the part of ship</p>	<p>by the contractor</p>
13.	Technical Specs	Input power 120VAC +- 10%, Single Phase, 60 Hz +-5%, Reference electro<Oo2, Anodes 02.		
14.	Eligibilities	<p>The firm should visit onboard and carry out inspection to establish the extent of required work.</p> <p>The firm should have experience of the same kind of work</p> <p>The firm should be NTN/GST registered.</p>		
15.	EDC	07 working days.		
16.	Warranty	1 year		
17.	Acceptance Criteria	<p>a. OEM certified parts.</p> <p>b. Satisfactory running trials.</p> <p>HATs complete.</p>		

PROCUREMENT OF 03 X NEW OBMs FOR EASTERN WING FRB-159

S No	Details									
1.	Ships Name	FRB-159								
2.	Parent Equipment	Outboard Motors (OBMs)								
3.	OEM	SUZUKI								
4.	Model	SUZUKI, JAPAN								
5.	Make	DF 300AP								
6.	Origin	JAPAN								
7.	Quantity	03								
8.	OEM Details	Adress DSU-13, Pakistan Steel Industrial Estate, Bin Qasim, Karachi. Contact Phone +92-21-34723551 Contact Email Fahad.Qamar@paksuzuki.com.pk								
9.	Justification for Work	03 x new OBMs (Suzuki 300 HP four stroke) alongwith complete associated accessories required to be installed onboard FRB-159 after completion of Hull modification								
10.	Work Required	a		b		c		d		
		Defect List		Repair Work Req		Services Req		Spares Req		
		N/A		N/A		Free of cost installation of OBMs complete associated accessories/ equipment alongwith steering system		Yes, as per attached list		
11.	Detailed scope of work	a			b			c		
		Detail of Repair Work Required			Detail of Services Required			Detail of Spares Required		
		Procurement/ replacement of 03 x Suzuki (DF 300AP, Four stroke) OBMs alongwith standard accessories with multi-function displays and spares supportability upto 1000 hrs.			Free of cost installation of OBMs associated accessories/ equipment alongwith steering system			As per attached list		

12.	Technical Specs	03 x Suzuki OBMs (Model DF 300APX) for triplet installation.
13.	Eligibilities	Any well reputed local/ international firm having experience for repair/ replacement of OBMs alongwith accessories/ scheduled maintenance parts for small boats
14.	EDC	90 Days
15.	Warranty	01 x Year after onboard installation and successful trials.
16.	Acceptance Criteria	<p>Delivery of OBMs alongwith schedule maintenance parts/ per OBM upto 1000 hours.</p> <p>Provision of OEM operation, Maintenance manuals alongwith parts catalogue^ and defect diagnostic software/ tools/ spare boxes.</p>

IT NO: IT/91/41/2025-26

ITEMS REQUIRED FOR DDG SECTT AT HQ PMSA

S No	Details					
1.	Ships Name	HQ PMSA.				
2.	Store Required	S. No	Prescription	Den	Qty	
		1.	Wooden Polish	Ltr	<u>05</u>	
		2.	Distemper 3.64 Ltr	Bucket	05	
		3.	Paint	Ltr	<u>40</u>	
		4.	Lassani Sheet (MR MDF)	No	30	
		5.	LED Lights	No	05	
		6.	Notice Board	No	<u>01</u>	
		7.	Office Revolving Computer Chairs	No	03	
		8.	Door Mat	No	03	
		9.	Formica Sheet	No	15	
10.	Ceramic Tiles	Sq Ft	300			
3.	Eligibilities	FBR and SRB Registered Firm				
4.	EDC	30 days				
5.	Warranty	01 Year				
6.	Acceptance Criteria	Upon acceptance and satisfaction of end user				

IT NO: IT/91/42/2025-26

PROCUREMENT REFURBISHMENT OF REVOLING CHAIRS - MCO OFFICE

S No	Details	
1.	Ships Name	INDUS/HQ PMSA/Maritime Operations Centre
2.	Parent Equipment	Chairs
3.	Quantity	12 in Number
4.	Source of Availability	Local Market
5.	Alternate/ Local Source	Through Local contractor
6.	Justification for Work	12 x chairs are required for weekly Ops Brief.
7.	Work Required	Procurement of new chairs
8.	Detain scope of work	a. The chairs should be brand new of good quality and durable make, suitable for prolonged office use. b. The material and finish should ensure comfort, reliability and presentable appearance.
9.	Defect History	Nil
10.	Eligibility	The Firm Registered in PMSA & NTN/GST registered
11.	EDC	14 x Working Days
12.	Warranty	1 x Year to be started after completion of work
13.	Acceptance Criteria	a. Material will be reported if deformity or wear is developed during warranty period. Acceptance after delivery and Inspection by Staff.

SERVICING VARNISH OF ALTERNATOR GENSET NO 2 ONBOARD PMSS BASOL

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	Gensets			
3.	OEM	Caterpillar			
4.	Model	C9			
5.	Origin	Caterpillar			
6.	Sub Equipment	Genset No 2 alternator			
7.	Assembly Component	Genset No 2 alternator			
8.	Part No. of Assembly Component	S No	Part No	Description	Qty
		a.	BL16P00125	alternator	01
9.	Quantity	As per para 9			
10.	Source of Availability	Local Market/ Allied Engineering and services Karachi			
11.	Justification for Work	Alternator servicing/ varnish work required for sat ops			
12.	Work Required	a	b	c	d
		Defect List	Repair Work Req	Services Req	Spares Req
		Alternator servicing/ varnish work required for sat ops	Alternator servicing/ varnish work required for sat ops	Alternator servicing/ varnish work required for sat ops	As per serial No 08
13.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Alternator servicing/ varnish work required for sat ops	Alternator servicing/ varnish work required for sat ops	Alternator servicing/ varnish work required for sat ops	
14.	Technical Specs	As per sample			
15.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA			
16.	EDC	07 Days			
17.	Warranty	01 Year			
18.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools			

IT NO: IT/91/44/2025-26

REPAIR OVERHAUL OF 15 X PNEUMATIC CENTRE PIVOTED BUTTERFLY VALVES
ONBORAD PMSS BASOL

S No	Details													
1.	Ships Name	PMSS BASOL												
2.	Parent Equipment	Pneumatic control valve												
3.	OEM	China												
4.	Origin	China												
5.	Sub Equipment	Pneumatic butterfly valves												
6.	Assembly Component	Center Pivoted Butterfly Valves												
7.	Part No. of Assembly Component	Q/SF0306 DN40, Q/SF0306 DN50, Q/SF0306 DN65 Q/SF0306 DN80, Q/SF0306 DN100												
8.	Quantity	15 IN No												
9.	Source of Availability	Local Market												
10.	Justification for Work	Repair/ overhauling of 15 x butterfly valves												
11.	Work Required	<table border="1"><thead><tr><th>a</th><th>b</th><th>c</th><th>d</th></tr></thead><tbody><tr><td>Defect/ Routine List</td><td>Repair Work Required</td><td>Services Required</td><td>Spares Required</td></tr><tr><td>Repair/ overhauling of 15 x butterfly valves</td><td>Repair/ overhauling of 15 x butterfly valves</td><td>Repair/ overhauling of 15 x butterfly valves</td><td>Repair/ overhauling of 15 x butterfly valves</td></tr></tbody></table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Repair/ overhauling of 15 x butterfly valves	Repair/ overhauling of 15 x butterfly valves	Repair/ overhauling of 15 x butterfly valves	Repair/ overhauling of 15 x butterfly valves
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13.	Technical Specs	As per sample												
14.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA												
15.	EDC	07 Days												
16.	Warranty	01 Year												
17.	Acceptance Criteria	OEM certified items All BER items is to be replaced with new Use tested tools												

REPAIR/ OVERHAULING OF SEA WATER PUMP OF GENSET NO 02 - PMSS DASHT

S No	Details				
1.	Ships Name	PMSS DASHT			
2.	Parent Equipment	GENSET No 2			
3.	OEM	Caterpillar			
4.	Model	CAT C-9			
5.	Origin	USA			
6.	Sub Equipment	Auxiliary Seawater System			
7.	Assembly Component	Pump-GP Auxiliary Seawater			
8.	Part No. of Assembly Component	170-6116			
9.	Quantity	01			
10.	Source of Availability	Local Contractor			
11.	Justification for Work	Repair/ Replacement of seawater pump of GENSET No 2			
12.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		As per defect history	a. Seawater pump to be completely dismantled. b. Pump to be inspected for wear in body/ casing and other components. c. Shaft trueness to be checked and corrected if required.	a. Replacement of mechanical seal. b. Pump impeller to be replaced with new. c. Pump AS plate along with comb plate. d. Assembling of pump and fitting back by the firm. e. Satisfactory trials in presence of SS to be done, there should be no misalignment, play or vibration.	Sea Water Pump.
13.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		a. Seawater pump to be completely dismantled. b. Pump to be	a. Replacement of mechanical seal. b. Pump impeller to be replaced with new.	Sea Water Pump.	

		<p>inspected for wear in body/ casing and other components.</p> <p>c. Shaft trueness to be checked and corrected if required.</p>	<p>c. Pump AS plate along with comb plate.</p> <p>d. Assembling of pump and fitting back by the firm.</p> <p>e. Satisfactory trials in presence of SS to be done, there should be no misalignment, play or vibration.</p>	
14.	Technical Specs	As per technical manual/ OEM.		
15.	Eligibilities	Reputable contractor having relevant work experience.		
16.	EDC	07 x Days		
17.	Warranty	01 x Year		
18.	Acceptance Criteria	Satisfactory operation of GENSET No 2 up to 85% load trials with zero leakage up to satisfaction of ship staff.		
19.	Any other relevant info	visit onboard to resolve any query.		

OVERHAULING OF CHILLER COOLING SEA WATER PUMP NO 01 & 02 - PMSS DASHT

S No	Details				
1.	Ships Name	PMSS DASHT			
2.	Parent Equipment	Air Conditioning System JTLS-168 (IV) Marine Light Water Chiller			
3.	OEM	China			
4.	Model	JTLS-42 (I) Water Chiller Module			
5.	Serial No	CLH80-65-9(Z)			
6.	Origin	China			
7.	Sub Equipment	Chiller Cooling Seawater Pump			
8.	Assembly Component	Pump Body, Shaft, Impeller and Mechanical Seal			
9.	Quantity	02			
10.	Source of Availability	Local Contractor			
11.	Justification for Work	Overhauling of Seawater Pump No 1&2.			
12.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		As per defect history	Overhauling of Seawater Pump No 1&2.	a. Sea Water Pumps to be removed and dismantled completely. b. All degraded/defective components to be fabricated new as per sample. Bronze and cast steel material should be used. c. Pump body/ casing is to be made new as per sample. d. Sea Water Pump to be installed back, followed by successful onboard trials up to command satisfaction. e. Replacement of all Nuts/ Bolts with new one of SS. f. System will be blanked on priority with exact size of blank to be provided by the firm. g. Pump suction/	-

				<p>Discharge lines should be inspected/ repaired/ replaced (in needed) by the firm</p> <p>h. Mechanical seal/ Shaft/ Impeller will be installed after clearance by ship staff of exact material.</p> <p>j. 02 x Impeller (Bronze) will be provided by the firm as spare for any emergency failure of pump during sea tasking.</p> <p>k. Pump should be cleaned/ serviced/ painted before reinstallation onboard.</p> <p>l. All in way accessories be removed by firm and fitted back.</p> <p>m. Growth work will be solely responsibility of firm.</p> <p>n. Any other leakage observed during dismantling/installation work will be responsibility of firm.</p>									
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a	b	c											
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required											
Overhauling of Seawater Pump No 1&2.	See Para No 12	See Para No 12											
14.	Technical Specs	As per technical Specs/ Manual.											
15.	Eligibilities	Reputable local contractor having relevant working experience onboard HINGOL class ships.											
16.	EDC	07 x Days											
17.	Warranty	01 x Year											
18.	Acceptance Criteria	<p>a. OEM Certified spares should be used only</p> <p>b. Satisfactory operation of Chiller seawater pumps in presence of MEO/ SS.</p> <p>c. Satisfactory operation without leakage.</p> <p>d. Any damage during work is responsibility of contractor.</p>											
19.	Any other relevant info	visit ship for clear understanding scope of work											

FABRICATION REPLACEMENT OF EXHAUST EXPANSION ELBOW OF MAIN ENGINE NO 01 - PMSS DASHT

S No	Details				
1.	Ships Name	PMSS DASHT			
2.	Parent Equipment	Main Engine No 1			
3.	OEM	MTU			
4.	Model	16V4000M73L			
5.	Origin	Germany			
6.	Sub Equipment	Exhaust System			
7.	Assembly Component	Exhaust Elbow			
8.	Quantity	01			
9.	Source of Availability	MTU			
10.	Justification for Work	Seawater leakage observed from exhaust elbow due to deterioration during normal operation at sea undermining exhaust performance.			
11.	Work Required	a	b	c	
		Defect/ Routine List	Repair Work Required	Services Required	d Spares Required
		NA	Fabrication/ Replacement of Exhaust Expansion Elbow Main Engine No 1	a. Fabrication/ replacement of Exhaust Expansion Elbow. b. Dismantling of previous fitted elbow by the firm. c. Installation of Exhaust Expansion Elbow by the firm.	Exhaust Expansion Elbow
12.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Fabrication/ Replacement of Exhaust Expansion Elbow Main Engine No 1	a. Fabrication/ replacement of Exhaust Expansion Elbow. b. Dismantling of previous fitted elbow by the firm. c. Installation of Exhaust Expansion Elbow by the firm.	Exhaust Expansion Elbow	
13.	Technical Specs	01 X Main Engine Exhaust Expansion Bellow Stainless Steel (Grade 316-L) with following dimensions is to be repaired/fabricated: <u>ENGINE SPECIFICATIONS:</u>			

		Power: 2880 kW Speed: 2050 rpm No. of cylinders: 16 Bore/stroke: 170/190 mm Fuel consumption at rated power: 657 L/Hr <u>EXHAUST EXPANSION BELLOW</u> Length of Inner diameter 765 mm Length of Outer diameter 810 mm Thickness 35 mm Flange 08 Pitch Circle Diameter 800 mm Flange outside total length 475 mm No. of Flange holes 40 Diameter of holes 44 mm Rated
14.	Eligibilities	a. Any registered and security wise cleared local contractor having good experience in above mentioned scope of work b. Firm must visit site for understanding exact nature of defect/hindrances involved in job prior quoting to avoid^ inconvenience on later stage after reward of Work Order. Firm is to quote for growth work by visiting ship in commercial quotation prior award of work order. HQ PMSA/Ship will not accept growth work changes on later stages at all
15.	EDC	07 x Days
16.	Warranty	01 x Year warranty with any type of welding work required in warranty period related to MEs Exhaust Bellow
17.	Acceptance Criteria	a. Pressure test of exhaust bellow at 3 Bar to be conducted before installation. b. No seawater leakage to be observed during normal operation at sea. c. No exhaust gas leakage to be observed from elbow at max power of Main Engine i.e. 2050 RPMs d. Satisfactory fabrication, installation and operation of exhaust expansion bellow of Main Engine No 2
18.	Any other relevant info	Visit ship for any query

PROCUREMENT OF PAINTS - 93 PMSA SQN

S No	Details				
1.	Ship's Name	93 PMSA SQN			
2.	Parent Equipment	Paints			
3.	Sub Equipment	Paints			
4.	Store Required	S No	Patt No	Description	Qty
		a.	0442-50-220-2024	Paint White Finishing for Weather Work (Packing 20 Ltr)	160 Ltr
		b.	0442-50-442-0039	Paint Enamel (Signal Red) (Packing 04 Ltr)	120 Ltr
		c.	8010-70-100-3147	Paint Weather Work Light Grey (Packing 20 Ltr)	120 Ltr
		d.	0442-50-910-6645	Paint Priming Red Oxide of Iron Zinc Chrome (Packing 04 Ltr)	40 Ltr
		e.	0442-50-942-9126	Paint Oil Finishing Yellow	80 Ltr
		f.	0442-50-910-7001	Paint Finishing General Service Black	80 Ltr
		g.	0442-50-442-0070	Thinner for Paint (Packing 20Ltr)	40 Ltr
		h.	0442-50-442-0051	Paint Finishing Sky Blue	40 Ltr
		j.	0442-50-442-0051	Paint Finishing Green	80 Ltr
5.	Justification for Work	Paints are essentially required for Customized Workup Programme for general upkeep of Squadron.			
6.	Eligibilities	Any registered and security wise cleared local contractor having good experience in above mentioned scope of work.			
7.	EDC	07 Days after award of Contract/LPO.			
8.	Warranty	01 Year			
9.	Acceptance Criteria!	a.	OEM Certified item.		
		b.	Import documents along with production certificate by OEM be provide.		

**REPAIR/ MAINTENANCE OF ACCOMODATION CONTAINERS ROOF OF GWADAR JETTY
PICKET - PMSA BASE GWADAR**

S No	Details																							
1.	Ships Name	PMSS NAZIM/ PMSA Base Gwadar																						
2.	Parent Equipment	CPOs/ Sailor accommodation containers																						
3.	Quantity	04																						
4.	Justification for Work	Presently 04 x containers held at PMSA Base Gwadar for accommodation of CPOs/ sailors at Jetty Picket. However, with the passage of time, prevailing saline condition and harsh marine environment in AoR, the condition of containers roof became deteriorated resulting into water leakage inside containers during heavy rainfall. Therefore, repair and maintenance of same are essentially required.																						
5.	Work Required	Same work as mentioned at Para No 14 and same are required for repair/ maintenance.																						
		<table border="1"><thead><tr><th>S No</th><th>Description</th><th>Qty</th></tr></thead><tbody><tr><td>a.</td><td>R/M of containers roof</td><td>04</td></tr></tbody></table>	S No	Description	Qty	a.	R/M of containers roof	04																
S No	Description	Qty																						
a.	R/M of containers roof	04																						
6.	Detailed scope of work	Firm is to visit and physically inspect the containers.																						
7.	Technical Specs	<table border="1"><thead><tr><th>S No</th><th>Description</th><th>Length</th><th>Width</th></tr></thead><tbody><tr><td>a.</td><td>Containers-1</td><td>18ft</td><td>16ft</td></tr><tr><td>b.</td><td>Containers-2</td><td>20 ft</td><td>8ft</td></tr><tr><td>c.</td><td>Containers-3</td><td>20 ft</td><td>8ft</td></tr><tr><td>d.</td><td>Containers-4</td><td>20 ft</td><td>8ft</td></tr></tbody></table>	S No	Description	Length	Width	a.	Containers-1	18ft	16ft	b.	Containers-2	20 ft	8ft	c.	Containers-3	20 ft	8ft	d.	Containers-4	20 ft	8ft		
		S No	Description	Length	Width																			
		a.	Containers-1	18ft	16ft																			
		b.	Containers-2	20 ft	8ft																			
		c.	Containers-3	20 ft	8ft																			
d.	Containers-4	20 ft	8ft																					
8.	Eligibilities	Any local / international well reputed firm having experience for repair/ maintenance of containers.																						
9.	EDC	30 days																						
10.	Warranty	01 year																						
11.	Acceptance Criteria	Inspection by end user and successful completion of work																						
12.	Any other relevant info	POC: Lt Ali Abbas PN (OI/C Gwadar Base) Phone # 0309-6076840																						

PROCUREMENT OF TILES AND SANITARY ACCESSORIES - PMSS REHMAT

S No	Details		
1.	Ships Name	PMSS REHMAT	
2.	Parent Equipment	Ship's Galley, Officer's and CPO's/ Sailors washroom	
3.	Origin	Pakistan	
4.	Sub Equipment	Tiles and sanitary accessories	
5.	Quantity	01 x Ship's galley 04 x Washroom	
6.	Source of Availability	Local Market	
7.	Justification for Work	Procurement of Ship's Galley, Officer's and CPO's/ Sailors washroom tiles/sanitary accessories. Moreover, renovation of tiles will also enhance the overall appearance of the Ship's galley and washrooms	
8.	Work Required	a	B
		Defect List	Services Required
		04 x Washroom tiles 01 x Ship's galley tiles 04 x Washroom sanitary accessories become deteriorated due FWT and passage of time	a. Removal of: 04 x washroom GRP sheet and Deck epoxy 01 x Ship's Galley deck epoxy 04 x washroom, gaily and pantry Sanitary accessories/ drain piping b. Installation of: 04 x washroom tiles 01 x Ship's Galley tiles 04 x washroom Sanitary accessories/ drain piping
	c	Spares Required	
		Installation of 1,050 Sq Feet tiles are required for 04 x washroom 01 x Ship's galley 04 x washroom Sanitary accessories and drain piping (140 x feet, size 2 5" material SS)	
9.	Detailed scope of work	a	b
		Detail of Repair Work Required	Detail of Services Required
		04 x Washroom tiles 01 x Ship's galley tiles 04 x Washroom sanitary accessories become deteriorated due FWT and passage of time	a. Removal of: 04 x washroom GRP sheet and Deck epoxy 01 x Ship's Galley deck epoxy 04 x washroom, gaily and pantry Sanitary accessories/ drain piping b. Installation of: 04 x washroom tiles 01 x Ship's Galley tiles 04 x washroom Sanitary accessories/ drain piping
	c	Detail of Spares Required	
		Installation of 1,050 Sq Feet tiles are required for 04 x washroom 01 x Ship's galley 04 x washroom Sanitary accessories and drain piping (140 x feet, size 2 5" material SS)	
10.	Eligibilities	Reputable Local Contractor having working experience in PMSA	
11.	EDC	30 x days after issuance of work order	
12.	Warranty	01 x Year to be started after completion of work.	

13.	Acceptance Criteria	a. Material will be reported if deformity or wears is developed during warranty period. b. Acceptance by SS.
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IT NO: IT/91/51/2025-26

PROCUREMENT AND INSTALLATION OF STEERING RUDDER CONTROL SYSTEM - PMSS BASOL

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	Steering system			
3.	OEM	Wuhan Mekand Equipment Co Ltd			
4.	Model	SCAN 160-100S			
5.	Origin	China			
6.	Sub Equipment	Electronic Steering Control System			
7.	Assembly Component	Electronic Steering control system (Follow Up and Non- follow up mode)			
8.	Part No. of Assembly Component	S No	NSN/ Part No	Model Description	Qty
		a.	6615PV3010014/ MKD- J01-08	FU module	01
		b.	6615PV3010012/ MKD- J01-06	Rudder angle repeater	01
		c.	6615PV3010009/ MKD-J01-03	Compass repeating module	01
9.	Quantity	As per S No 8			
10.	Source of Availability	Wuhan Mekand Equipment Co Ltd			
11.	Justification for Work	Steering is not available at follow up mode of Pump No 2. .Same may be rectified for defect rectification			
12.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		As per requirement	Repair/ replacement of steering rudder control system includes following aspects: a. Replace/ inspect autopilot module. Replace simple steering handle of control module. Replace overriding module. b. Replace follow-up pilot wheel. (FU) module Replace power switch module. c. Inspect/ overhaul or replace rudder angle repeater. Replace alarm indicator of alarm box unit. d. Replace contactor if required. Inspect and replace rudder angle limit switches. Replace/ inspect S7-200 series	As per requirement mentioned at S No 8	

		<p>PLC if required.</p> <p>e. Replace magnetic valve driver board.</p> <p>f. Replace heat protector.</p> <p>g. All in way accessories be removed by firm and fitted back.</p> <p>h. Any other damage to pipelines observed during dismantling/installation work will be responsibility of firm. Follow all the aspects mentioned in technical manual and JICs.</p> <p>j. Conduct of HATs/SATs</p>	
13.	Technical Specs	As per technical manual	
14.	Eligibilities	Reputable local contractor having working experience of steering system	
15.	EDC	01 week	
16.	Warranty	01 year	
17.	Acceptance Criteria	<p>a. Satisfactory operation of steering system devices along with displayed parameters at MCR, Bridge and tunnel compartment.</p> <p>b. Contractor would be responsible for any damage to assembly components</p> <p>c. Successful HATs and SATs trials by end user.</p> <p>d. QA/QC certificate issuance by QA/QC Deptt</p>	
18.	Any other relevant info	<p>a. Contactor may contact SS/ Visit onboard ship to resolve any query.</p> <p>b. Growth Work, Damage/ defect occurred during work is responsible of contractor</p>	

IT NO: IT/91/52/2025-26

FABRICATION OF CEREMONIAL FLAG STAND FOR GANGWAY - PMSS KASHMIR

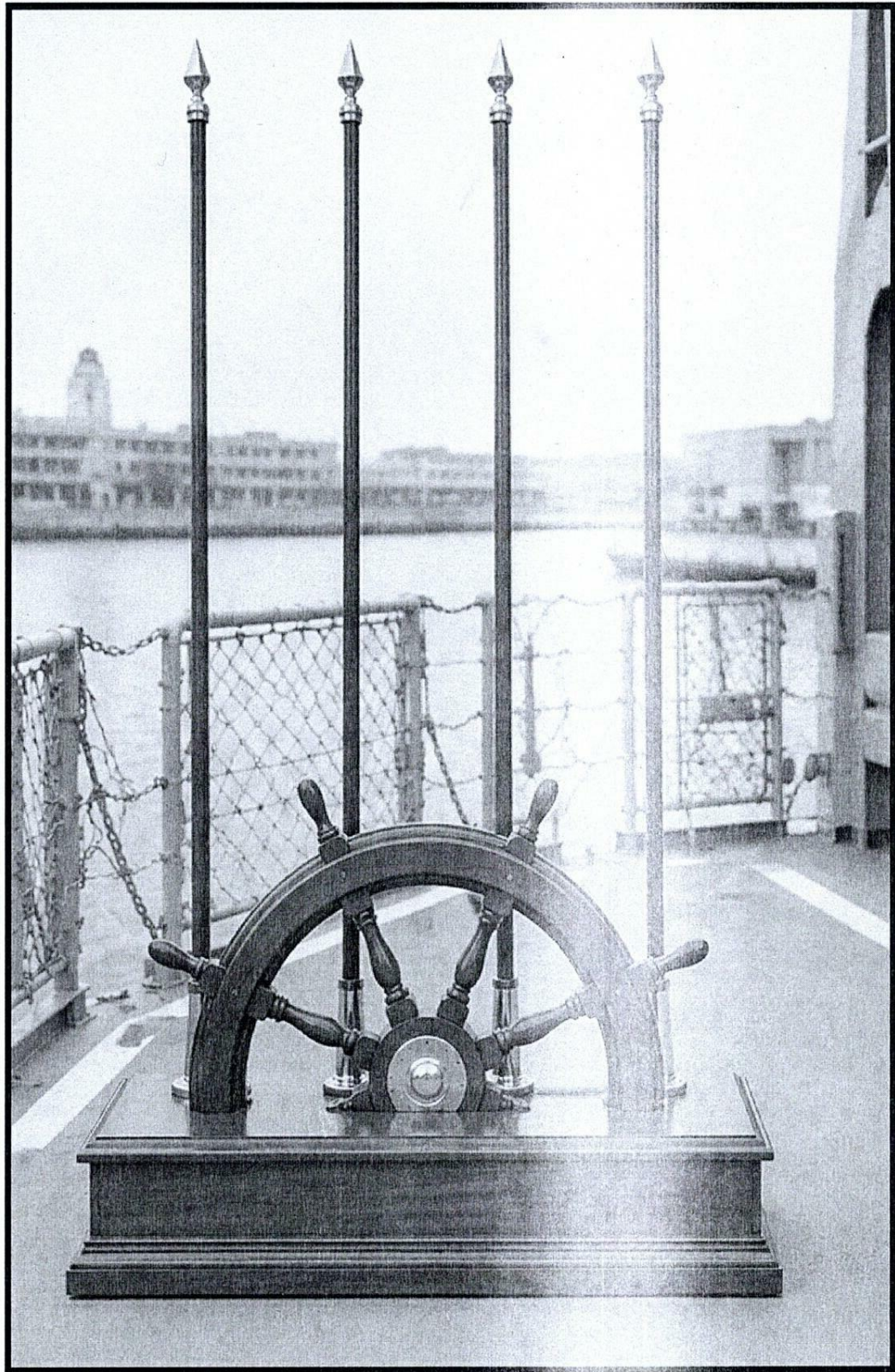
S No	Details	
1.	Ships Name	PMSS KASHMIR
2.	Parent Equipment	Fabrication of Ceremonial Flag (Wooden) Stand for Gangway
3.	Origin	Pakistan
4.	Sub Equipment	Fabrication of Ceremonial Flag (Wooden) Stand for Gangway
5.	Assembly Component	Fabrication of Ceremonial Flag (Wooden) Stand for Gangway
6.	Quantity	1 x in No (With 4 x Flag hoisting Stands)
7.	Source of Availability	Through Local Contractor
8.	Justification for Work	Fabrication of Ceremonial Flag (Wooden) Stand for Gangway

		a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
9.	Work Required	Fabrication of Ceremonial Flag (Wooden) Stand for Gangway (Pictures enclosed alongwith dimensions)	Fabrication of Ceremonial Flag (Wooden) Stand for Gangway (Pictures enclosed alongwith dimensions)	Fabrication of Ceremonial Flag (Wooden) Stand for Gangway (Pictures enclosed alongwith dimensions)	Material Composition Solid Teak Wood/ Seasonal Hardwood
10.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Fabrication of Ceremonial Flag (Wooden) Stand for Gangway (Pictures enclosed alongwith dimensions)	Fabrication of Ceremonial Flag (Wooden) Stand for Gangway (Pictures enclosed alongwith dimensions)	Material Composition Solid Teak Wood/ Seasonal Hardwood	
11.	Technical Specs	As prescribed by SS			
12.	Eligibilities	As prescribed by SS			
13.	EDC	10 x days upon receipt of work order			
14.	Warranty	a. 3 x year warranty after delivery b. Material will be reported if deformity or wear is developed during warranty period			
15.	Acceptance Criteria	Satisfactory work as per provided sample			
16.	Any other relevant info	a. Contact SS/ visit onboard for clear understanding of scope of work b. Damage/ defect occurred is responsibility of contractor.			

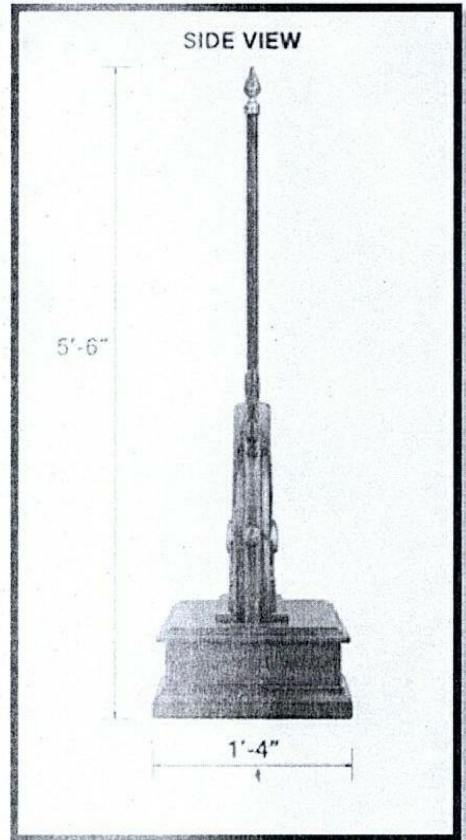
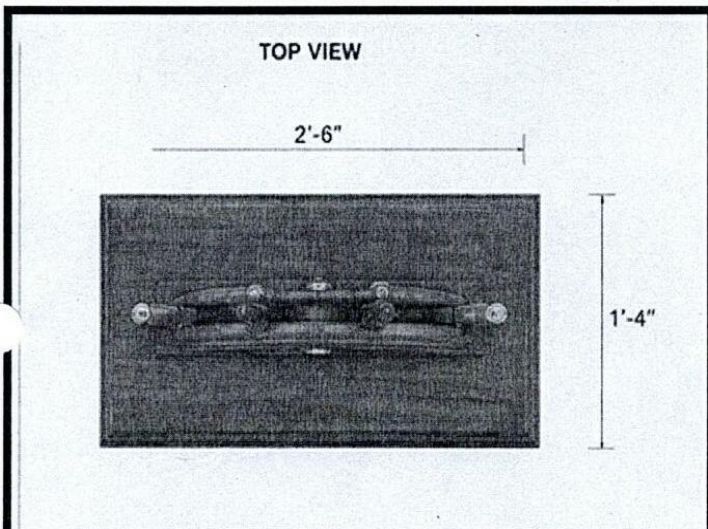
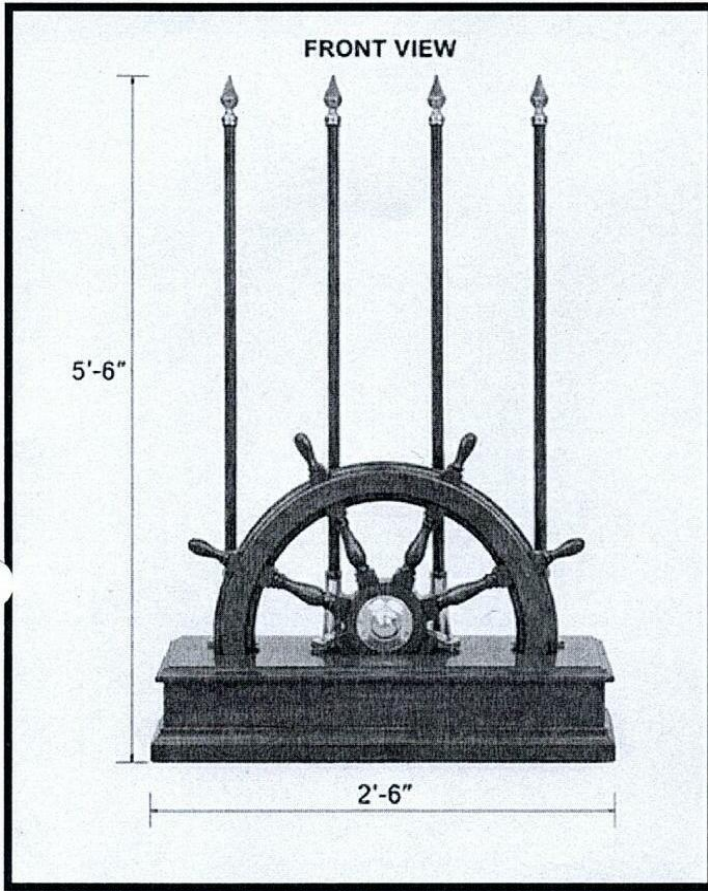
S No	Specification	Details
Base Structure		
1.	Material	Solid Teak Wood/ Seasonal Hardwood
2.	Shape	Rectangular Heavy Base
3.	Size	Approx 2.5 ft (L) x 1.2 ft (W)
4.	Thickness	8-10 inches (for stability)
5.	Finish	Marine Varnish (Weather Resistant)
Ship Helm Wheel Features		
6.	Type	Half Ships Steering Wheel (Decorative Front Arc only)
7.	Material	Hardwood (Same as Base)
8.	Diameter	Approx 1.5 to 2 ft Arc Section
9.	Spokes	5-7 Wooden Spokes (fixed, Non rotating)
10.	Position	Front Centre of Base, Raised Slightly above base surface

11.	Fitting	Brass Hub at Centre for premium PN/ PMSA Look
Flag Poles (4 x in No)		
12.	Material	Teak Wood/ Polished Hardwood/ Stainless Steel Core (Optional)
13.	Height	Approx 5.5 - 6 Ft from Base
14.	Diameter	1-1.5 inches
15.	Top Fitting	Brass Spear/ Final Caps
16.	Arrangements	4 x Poles mounted behind Wheel (Rear side of Base) a. Equal Spacing (Symmetrical Alignment) b. Fixed Vertical mounted with internal metal sockets
Aesthetic/ Finishing		
17.	Color	Dark Teak/ Mahogany Polish
18.	Brass Accents	Hub and Pole Tops
19.	Style	Naval Ceremonial. Polished Premium Look
20.	Weather Protection	Salt Water Resistant Coating

PICTORIAL REPRESENTATION OF CEREMONIAL FLAG STAND
PMSS KASHMIR



DETAILED DIMENSIONS OF CEREMONIAL FLAG STAND
PMSS KASHMIR



NOTES:

- All measurements are approximate
- Wood: Teak/Mahogany (seasoned)
- Finish: Marine varnish
- Flag poles diameter: 1.5" (approx.)
- Brass fittings and finials

IT NO: IT/PM/91/53/2025-26

MAJOR OVERHAUL (MOH)/ CORE EXCHANGE OF ENGINE S.NO CAE-880787 - 93 PMSA SQN

S No	Details				
1	Ships Name	93 PMSA SON			
2.	Parent Equipment	BN-2T Defender Aircraft			
3.	OEM	Rolls Royce (USA)			
4.	Model	Allison 250-B17C Turboprop Engine (Part No 23038150)			
5.	Serial No	CAE-880787			
6.	Origin	USA			
7.	Sub Equipment	Allison 250-B17C Turboprop Engine			
8.	Assembly Component	Self			
9.	Part No. of Assembly Component	23038150			
10.	Quantity	1			
11.	Source of availability	OEM or OEM Authorized Maintenance Centre (AMC)			
12.	Justification for Work	Major Overhaul of Engine has become due on hourly basis.			
13.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Major Overhaul of Engine has become due on hourly basis	a. Major Overhaul (MoH) of Allison 250-B17C Turboprop Engine as per details mentioned in Para 14 b. Core Exchange of Allison 250-B17C Turboprop Engine as per details mentioned in Para 15	Major Overhaul/ Core exchange of Allison 250-B17C Turboprop Engine CAE-880787	As per standard

a. Major Overhaul (MoH) of Engine and components are to be undertaken by OEM or OEM Authorized Maintenance Centre (AMC). Engine Lifting Data as per Log Book is appended below:

S No	Component Description	S No	Life consumed (Hrs)/ Cycles
1)	Engine	CAE-880787	3468:40
2)	Accessory Gear Box	CAG-80909	3468:40
3)	Compressor CAC81493		
4)	1 st Stage Wheel	KRL107756	3468:40
5)	2-3 Stage Wheel	KR109527	3468:40
6)	4 Stage Wheel	E81792	3468:40
7)	5 Stage Wheel	KR108676	3468:40
8)	6 Stage Wheel	KR107431	3468:40
9)	Impeller	KR111467	3468:40
10)	Spur Adaptor	UG21782	3468:40
11)	Tie Bolt	UG20418	3468:40
12)	Turbine CAT80924		
13)	1 st Stage Wheel	X614353	1761:50
14)	2 nd Stage Wheel	X622445	1761:50
15)	3 rd Stage Wheel	X547317	3468:40
16)	4 th Stage Wheel	X548400	3468:40
17)	Tie Bolt	NM88499	3468:40
18)	2 nd Stage Nozzle Diaphragm	MA228687	3468:40
19)	Engine Accessories	Part No	Hours Consume since OH & Remarks
20)	Over speed Governor	23032241	2976:05 (Overhaul Required)
21)	Combined Governor	6875708	1952:05 (Due for Overhaul)
22)	Fuel Control Unit	23070603	1992:00 (Due for Overhaul)
23)	Fuel Pump	6899253	2965:50 (Due for Overhaul)
24)	Fuel Nozzle	M250-10603	2269:15 (Due for Overhaul)
25)	Bleed Valve	23053176	434:10 (Bleed valve fails to close above 94% citer RPM) Unserviceable
26)	Tachometer Generator	3422016	Unserviceable (Hard to rotate and internal winding insulation low along with overhaul)
27)	Dry Air Pump	AA3216CW	Unserviceable (Shaft and Internal Mechanism broken)

b. General Engine (Following maintenance work including standard maintenance work package for Engine Major Overhaul is to be undertaken as per approved OEM MOH work scope).

(1) Standard Work	(a) Disassembling engine modules, cleaning of all parts, NDT, detail inspection of all main build kits/ accessories including PC filter, anti-icing valve, mountings, piping, turbine and brackets for chaffing, cracks or breaking. Inspection of control cables, harness assembly/ wirings
	(b) Reassembling of engine (Include labor only)
	(c) Test Cell Run (Include induction and final test cell run)

14.

Major Overhaul (MoH)

	(2) New Replacement	(a) Main build kit	
		(b) Final finish kit (include all consumable and 100% replacement parts required to re-assemble engine)	
		(c) Fire Over Detector element Part No 3001-47-450/190C-3M	
	c. Compressor Module		
	(1) Standard Work	Disassembling, cleaning, NDT, detailed inspection and reassembly	
	(2) Standard Replacement	Compressor 100% build kit: compressor casing, Impeller, Spur Adaptor Gear Shaft and Coupling Adaptor	
	(3) Standard Rework	Standard rework of Front Shroud, Rear Support, Diffuser Vane, Diffuser Scroll and Compressor Wheel coating	
	d. Accessory Gear Box Module		
	(1) Standard Work	Disassembling, cleaning, NDT, detailed inspection and reassembly	
	(2) Standard Replacement	Standard 100% Main build kit	
	(3) Standard Rework	Standard rework of Gear Box Cover and Housing	
	e. Turbine Module		
	(1) Standard Work	Disassembling, cleaning, NDT, detailed inspection – and reassembly	
	(2) Standard Replacement	(a) Turbine 100% build kit	
		(b) Stage 1 turbine wheel	
		(c) Stage 2 turbine wheel	“
		(d) Stage 3 turbine wheel	CEB-1345 not to be complied
		(e) Stage 4 turbine wheel	
		(f) Tie Bolt (TP CEB 1319A R2)	
		(g) Stage 1 Nozzle Shield (TP CEB A 1318)	
		(h) Stage 1 and 2 Nozzle (TP CEB A 1212)	
		(j) Energy observing ring (TP CEB A 1214)	
	(3) Standard Rework	(a) Paint Treatment inner and outer shaft	
		(b) GP support	
		(c) Paint Treatment support	
		(d) Sump cover (TP CEB 1342)	
		(e) Exhaust collector	
(f) Tie bolt (TP CEB 1319A R2 already complied)			
(g) Stage 2 Nozzle			
f. All applicable mandatory inspections/ CEBs/ CSLs/ ADs and modifications regarding engine modules are to be accomplished			
g. Any other customer optional CEBs/ CSLs/ ADs and modifications apart from scope of MoH which needs to be accomplished may be undertaken only after, seeking approval from PMSA			
h. All requisite, Documents i.e. Airworthiness Certificate, Certificate of Conformity along with detail of work accomplished on Engine duly signed and stamped would be required			
j. FAA/ EASA or equivalent certification of the firm is to be provided.			
k. Itemized cost of MoH and overhauling of components (item wise) are to be quoted separately			
l. Firms have to provide authorization letter of their principal firms and bank statement of last 01 year of their firm			

		<p>m. Firms must have at least 02 years' experience of procurement/ repair/ overhaul of Aviation components/ spare parts. Experience certificate of Aviation related contracts by contracting agency in Pakistan is mandatory</p> <p>n. Firms need to include freight charges/ insurance for transportation of the engine</p> <p>p. Firms need to get import/ export licenses from respective abroad firms/ agencies</p> <p>q. Engine must be cleared for service till its HMI becomes due or next 1750 Hrs</p> <p>r. Firm need to ensure shipment of engine to MRO within 7 x days after award of contract</p> <p>s. Firms need to provide assurance that the item shall be received from 93 PMSA SQN and will be transported to MRO for overhaul at their own responsibility. Same will also be delivered back at 93 PMSA SQN after requisite rectification at their responsibility</p> <p>t. Firm need to ensure that initial Test run will be conducted within 2 x weeks post receipt of Engine at MRO</p> <p>u. In case of failure to meet acceptance criteria or defect during physical/ operational inspection of items, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time</p> <p>v. During initial disassembling/ striping phase and final test cell running phase, 03 x PMSA reps are to be invited on-site for evaluation/ monitoring work extent/ material review and to monitor satisfactory performance (Final test run), respectively. During stay of PMSA reps, complete boarding/lodging will be responsibility of firm (both visits)</p> <p>w. Firm need to ensure issuance of letter of invitation for para 16a (w) covering the whole expected timeline of engine stay at MRO facility to nominated 3 x PMSA reps within 1 x week of award of contract.</p> <p>x. Offered quotes are to be firm and final. No adjustments against Foreign Exchange, rate variations will be accommodated</p> <p>y. Firm may quote Custom duties/ taxes (as applicable) for transportation of the engine. However, final decision for responsibility of customs/ transportation (PMSA or supplier) will be finalized prior contract</p> <p>z. Any additional work/ replacement required due to findings of Induction test cell run, inventory check, stripping of Engine or Inspection may not be undertaken until approved by HQ PMSA</p> <p>aa. Firm is bound to provide Inspection report and ensure conduct of MRB within 12 weeks of receipt of engine</p> <p>bb. The firm is to provide detailed MRB report covering details of Labor/ Man Hours along with itemized rework detail. This should be supported by financial estimation</p> <p>cc. The firm is to confirm availability of 3rd and 4th stage turbine wheels pre-CEB 1345.- Replacement of said wheels with post CEB 1345 wheels is not acceptable.</p>
15.	Core Exchange	<p>a. A Core Exchange Engine may be offered to PMSA (copy of complete Log Book should be provided with offer) and same will be accepted by PMSA after Test Cell Run (TCR) at firm premises</p> <p>b. 03 x PMSA reps are to be invited on-site for evaluation/ monitoring satisfactory performance (TCR) of Engine. During stay of PMSA reps, complete boarding/ lodging will be responsibility of firm</p> <p>c. Firm need to be ensure issuance of letter of invitation for para 16b (b) to 3 x PMSA reps within 1 x week of award of contract</p> <p>d. Post TCR, engine will be shipped to PMSA within 2 x week and it will be installed on aircraft. Final acceptance will be forwarded after successful flight</p>

		<p>e. Post final acceptance, Engine S No 880787 will be shipped to the firm</p> <p>f. No additional charges will be applicable after disassembly of 880787 and price will be firm and final</p> <p>g. Engine must be cleared for service till next HMI or 1750 Hrs</p> <p>h. All engine components/ accessories should have minimum 90-95% remaining hours/ life</p> <p>j. All requisite, Documents i.e Airworthiness Certificate, Certificate of Conformity along with detail of work accomplished on Engine duly signed and stamped required</p> <p>k. FAA/ EASA or equivalent certification of the firm is to be provided</p> <p>l. Firms have to provide authorization letter of their principal firms and bank statement of last 01 year of their firm</p> <p>m. Firms must have at least 02 years' experience of procurement/ repair/ overhaul of Aviation components/ spare parts. Experience certificate of Aviation related contracts by contracting agency in Pakistan is mandatory</p> <p>n. Firms need to include freight charges/ insurance charges for the transportation of engine</p> <p>p. Firms need to get import/ export licenses from respective abroad firms/ agencies ‘</p> <p>q. Firms need to provide assurance that Engine will be transported to 93 PMSA SQN after requisite rectification at their responsibility</p> <p>r. In case of failure to meet acceptance criteria or defect during physical/ operational inspection of items, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time</p> <p>s. Offered quote are to be firm and final. No adjustments against Foreign Exchange rate variations will be accommodated</p> <p>t. Firm is to quote Custom duties/ taxes (as applicable) for transportation of the engine. However, final decision for responsibility of customs/ transportation (PMSA or supplier) will be finalized prior contract</p>
16.	Defect/ repair History	Repair through M/s MTSS in Oct 2019 vide contract number PMSA/2017-18/ D (P&CC)/1734722 dated 12 December 2017
17.	Technical Specs	As per S No 9
18.	Eligibility	Firm is to qualify prerequisites for at least one proposal i.e. for MOH as per 16a and Core Exchange as per Para 15
19.	EDC	24 weeks after award of contract
20.	Warranty	At least 01 year or 500 Hrs (whichever is earlier)
21.	Acceptance Criteria	As per eligibilities mentioned at Para 14, 15, 18, 19 and 20 above
22.	Any other relevant information	Firms are requested to provide original quote of AMC (without price) along with their respective technical quote. Technical quote of firm will not be accepted without provisioning of AMC original quote

Note: 100% Payment after completion by CNA

Director General
Pakistan Maritime Security Agency
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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. SUMBISSION 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 alongwith the tender No and date on the envelope containing the technical offer.

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

c. **SPECIAL INSTRUCTIONS:** Tender documents and its conditions may please be read point to point and understood properly before quoting. All tender conditions should be responded properly. In case of any deviation due to non-acceptance of tender conditions, the same should be highlighted alongwith 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%:

S No	Description	Unit Price	Qty	Total GST @18% or SST @ 15%	Total Price
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Please prepare quotation in this format In case of without GST or SST:

S No	Description	Unit Price	Qty	Total	Total Price
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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. EARNEST MONEY:

All participating firms are to provide earnest money in form of pay order alongwith bids. **Registered firms 2% of complete value (inclusive of all prices and taxes). Non registered firms 5% of complete value (inclusive 5% of all prices and taxes).** Firms disqualifying in technical opening/ Commercial opening will be returned their earnest money upon award of work order/ LPO/ Contract to qualifying Firm.

9. TENDER FEE:

Each technical offer must be accompanied with Cash of **Rs 2,000/-** for single stage single envelope and **Rs 7500/-** for Single Stage Two Envelop nonrefundable as tender fee (In favor 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. For provision of stores/ repair or replacement work wherein Two Stage bidding i.e technical opening is required, Inspection of same will be carried out through reputed third party labs i.e SGS, PNCTA and TTI etc. For inspections carried out in two stage bidding, charges for inspection will be borne by supplying firm.

11. CONDITION OF STORES:

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

12. DOCUMENTS REQUIRED:

Following documents are required to be submitted alongwith the Bills for further processing of the same for payment:

- a. 10% of total amount of Contract, 5% of total amount of LPO/ Work Order.
- b. Certificate of Conformity (CoC) required.
- c. Survey Copy of unserviceable items duly verified/ signed by BSO PMSS INDUS.

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 and 5% of LPO/ Work Order (excluding taxes, duties / freight handling charges on a stamp paper of the value 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.