

SEPARATE QUOTATIONS REQUIRED FOR ATTACHED 38 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

**FABRICATION OF ARM BADGES AND ACCESSORIES (PMSA DISTINCTIVE UNIFORM) -
PMSS INDUS/ WAREHOUSE**

S No	Details			
1.	Ship's Name	PMSS INDUS		
2.	Parent Equipment	PMSA Distinctive Uniform		
3.	OEM	Pakistan/ Local		
4.	Quantity	S.NO	DESCRIPTION	DEN
		a.	Anchor POs	No
		b.	Anchor Leading	No
5.	Justification for work	Fabrication of Arm Badges and Accessories for All PMSA Personnel		
6.	Work Requires	Fabrication of Arm Badges and Accessories for All PMSA Personnel		
7.	Eligibilities	Reputable local firm having working experience with PMSA		
8.	EDC	30 Days after Issuance of order		
9.	Warranty	01 Year after delivery		
10.	Acceptance Criteria	Accepted by Warehouse Staff		

PROCUREMENT/ PURCHASE OF AUXILIARY PUMPS & ITEMS - PMSS ZHOB

S No	Details				
1.	Ships Name	PMSSZHOB			
2.	Parent Equipment	Auxiliary Sea Water Pumps			
3.	Sub Equipment	Pumps (Auxiliary sea water cooling pumps)			
4.	Assembly Component	Auxiliary sea water cooling pump Impeller Mechanical Seal Shaft key Pump shaft Motor bearing Motor shaft Pump bearing			
5.	Part No. of Assembly Component	Auxiliary sea water cooling pump Impeller Mechanical Seal Shaft key Pump shaft Motor bearing Motor shaft Pump bearing	Part No: 80CLZ-5A Part No: 466ZH-CLZ-10-03 Part No: ZH3-35 Part No: NA Part No: 466ZH-CLZ-04-15 Part No: GB/T276-1994/6309 Part No: Y160L-2H-07 Part No: GB/T276-1994/6308		
6.	Quantity	Auxiliary sea water cooling pump Impeller Mechanical Seal Shaft key Pump shaft Motor bearing Motor shaft Pump bearing	1 x No 4 x No 10xNo 10xNo 2 x No 8 x No 2 x No 8 x No		
7.	Justification for Work	Auxiliary pumps and auxiliary items are required to meet the emergency at sea and harbour for shafts astern seals, refrigeration plants and fin-stabilizers cooling system.			
8.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		NA	Procurement/ purchase of Auxiliary sea water cooling pump and auxiliary items as spares for smooth operation of machinery through OEM/ local sources.	See S No 9	See S No 9

9.	Detailed scope of work	a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
		Procurement/ purchase of Auxiliary sea water cooling pump and auxiliary items as spares for smooth operation of machinery through OEM/ local sources.	Procurement/ purchase of Auxiliary sea water cooling pump and auxiliary items as spares for smooth operation of machinery through OEM/ local sources.	Auxiliary sea water cooling pump Part No: 80CLZ-5A Impeller Part No: 466ZH-CLZ-10-03 Mechanical Seal Part No: ZH3-35 Shaft key Part No: NA Pump shaft Part No: 466ZH-CLZ-04-15 Motor bearing Part No: GB/T276-1994/6309 Motor shaft Part No: Y160L-2H-07 Pump bearing Part No: GB/T276-1994/6308
10.	Technical Specs	As per OEM Manual/ Specs		
11.	Eligibilities	OEM recommended spares		
12.	EDC	30 Days		
13.	Warranty	02 year		
14.	Acceptance Criteria	a. OEM recommended spares/ parts. b. Certified spares to be used for avoiding damage to system and ship.		
15.	Any other relevant info	Contactor may contact SS/ visit onboard ship to resolve any query.		

CONDUCT OF 2A MMS ROUTINES OF SSDGs EXHAUST MANIFOLD - PMSS SABQAT

S No	Details				
1.	Ships Name	PMSS SABQAT			
2.	Parent Equipment	SSDG			
3.	OEM	Caterpillar			
4.	Model	3304			
5.	Origin	USA			
6.	Sub Equipment	Exhaust Manifold			
7.	Quantity	02 IN NO			
8.	OEM Details	<u>Address</u> Caterpillar Inc. 5205 N. 0 Connor Blvd, Suite 100 Irving, Texas + 1 309-675-1000			
9.	Alternate Source	<u>Alternate Source</u> Allied Engineering & Services Pvt Ltd 21/3, Sector No. 22 Korangi Industrial Area, Karachi, 74900			
10.	Justification for Work	Conduct of 2A MMS routine of SSDG Exhaust Manifold.			
11.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Conduct of 2A MMS routine of SSDG Exhaust Manifold	Conduct of 2A MMS routine of SSDG Exhaust Manifold	See S No. 16 Para b	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
		Conduct of 2A MMS routine of SSDG Exhaust Manifold.	a. Conduct of 2A MMS routine of SSDG Exhaust Manifold. b. Remove the lagging from the exhaust manifold. c. Inspect / Trace the exhaust/ Trunking with help of TIC from turbo charger up to funnel end. d. Repair / replacement of any defect / leakage while inspection. e. Replace all fittings including lagging.		All material, spares, tools, special equipment/ tools, accessories etc required for said work are to arrange oy the contractor
			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.	
13.	Technical Specs	As per OEM Manual/Specs		
14.	Eligibilities	FBR register supplier.		
15.	EDC	30 working days.		
16.	Warranty	1 year		
17.	Acceptance Criteria	a. Success trials by end user..		

PROCUREMENT OF FILTERS OF SSDGs & MDES - PMSS RAFAQAT

S No	Details					
1.	Ships Name	PMSS RAFAQAT				
2.	Parent Equipment	Fuel Filter SSDG, Lub Oil Filter SSDG, Fuel Filter (secondary) MDE, Air Filter MDE, Air Filter SSDG and Fuel Water separator (Primary) MDE				
3.	OEM	Caterpillar USA				
4.	Model	Caterpillar 3516 Caterpillar 3304				
5.	Serial No	SMJ 00029 (Stbd) SMJ 00024 (Port)				
6.	Origin	USA				
7.	Sub Equipment	Lub Oil System, Fuel System, Air System				
8.	Assembly Component	Port and Stbd MDEs Port and Stbd SSDGs				
9.	Part No. of Assembly Component	MDEs: (1R-0755, 61-3137, SF-1912-30) SSDGs: (1R-0750, 1R-0749, P-554004, 4L-9851, SF-1912-30)				
10.	Quantity	S No	Part No	Item Description	Den	Qty Req
		a.	1 R-0750	Fuel Filter SSDG	No	06
		b.	1R-0739	Lub Oil Filter SSDG	No	06
		c.	1R-0755	Fuel Filter (secondary) MDE	No	08
		d.	4L-9851	Air Filter SSDG	No	04
		e.	61-3137	Air Filter MDE	No	08
		f.	134-6307	Fuel Water separator MDE and SSDG	No	20
		g.	2752604	Lub Oil Filter MDE	No	08
11.	Source of Availability	USA				
12.	Justification for Work	Requirement of Lub Oil filter, Fuel Filter and Air filters for MDEs and SSDGs for 400 Hrs and 250 Hrs PMS routine through recommendation OEM				
13.	Work Required	Procurement of new MDEs and SSDGs FILTERS				
14.	Detailed scope of work	Requirement of Lub Oil filter, Fuel Filter and Air filters for MDEs and SSDGs for 400 Hrs and 250 Hrs PMS routine.				
15.	Technical Specs	As Per OEM manual				
16.	Eligibilities	Reputable firm having working experience of related activity.				
17.	EDC	30 days.				
18.	Warranty	1 year				
19.	Acceptance Criteria	a. Recommended/ OEM spares. b. Successful trails by end user				
20.	Any other relevant info	Contractor should visit on-board ship to inspect and to understand scope of work				

PROCUREMENT OF ITEMS FOR WATCH TOWER - PMSS INDUS/ SECURITY OFFICE

S No	Details		
1.	Ship's Name	PMSS INDUS	
2.	Parent Equipment	Procurement of items for watch tower	
3.	Origin	Pakistan	
4.	Sources of Availability	As per procedure in vogue	
5.	OEM Details	Local Market	
6.	Justification for work	Procurement of items for operationalization of security watch tower.	
7.	Defect list	Structural Cracks	
8.	Work Required	Procurement of following items for watch tower as per attached drawing: a. Steel reinforcement = 2 ton b. Cement Bag SRC = 300 c. Crush = 300 CFT d. Sand = 150 CFT e. UPVC Door with Chokat 2 ft x 7 ft = 2 f. Weather shield paint = 50 Ltr g. LED lights 24 watts = 4 h. MS spiral stair case as per design = 1 j. Cement blocks 6 inch = 1000	
9.	Known Prices	Unknown	
10.	Technical Specs	a. Steel reinforcement = 2 ton b. Cement Bag SRC = 300 c. Crush = 300 CFT d. Sand = 150 CFT e. UPVC Door with Chokat 2 ft x 7 ft = 2 f. Weather shield paint = 50 Ltr g. LED lights 24 watts = 4 h. MS spiral stair case as per design = 1 j. Cement blocks 6 inch = 1000	
11.	Eligibilities	All registered firms	
12.	EDC	ASAP	
13.	Warranty	01 x year	
14.	Acceptance criteria	Inspection by end user	

DEFECT RECTIFICATION OF MARINE CHILL LIGHT WATER CHILLER PMSS HINGOL

S No	Details				
1.	Ships Name	PMSS HINGOL			
2.	Parent Equipment	Marine Light Water Chiller.			
3.	OEM	JIANGSU JOSUN AIR CONDITIONER CO.,LTD			
4.	Model	CLH65-65-5.5(Z)			
5.	Origin	CHINA			
6.	Sub Equipment	Chiller Module No 1, 2, & 4			
7.	Assembly Component	Chiller Module No 1 & 4 Compressors			
8.	Part No. of Assembly Component	Hermetically Sealed Compressor (Part No 06.01.057).			
9.	Quantity	02x Compressors & 04 x expansion valves.			
10.	OEM Details	<u>Address</u> GJJM+9x4, Jiang Du Qu, Yang Zhou Shi, Jiang Su Sheng, China,255266 <u>Contact Phone</u> Not specified <u>Contact Email</u> Not Specified			
11.	Alternate Source	Local Engineering and Manufacturing Houses			
12.	Justification for Work	Marine light water chiller module no 1 & 4 compressors degraded and performance observe low, Chill water flow sensors and expansion valves of module no 1,2,3&4 found defective, complete wiring circuit including PLC, contactors, over loads and compressors cable found degraded.			
13.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Marine light water chiller module no 1 & 4 compressors degraded and performance observe low, Chill water flow sensors and expansion valves of module no 1,2,3 & 4 found defective, complete wiring circuit including PLC, contactors, over loads and compressors cable found degraded.	a. Replacement of chiller module no 1 & 4 compressors with new compressors. b. Replacement of 04 x chill water flow sensors. c. Replacement of 04 x expansion valves. d. Replacement and securing of complete wiring circuit including PLC, contactors, over loads and compressors cable with new. e. Removal/ installation in way assembly and component will be responsibility of firm. f. Refrigerant charging of module no	a. Replacement of chiller module no 1 & 4 compressors with new compressors. b. Replacement of 04 x chill water flow sensors. c. Replacement of 04 x expansion valves. d. Replacement and securing of complete wiring circuit including PLC, contactors, over loads and compressors cable with new. e. Removal/ installation in way assembly and component will be responsibility of firm. f. Refrigerant charging of module no	02 x compressor (Hermetically Sealed Compressor). 42 kg refrigerant (R404A). Complete wiring circuit cable. 01 x PLC. 04 x Contactor. 04 x Over load. 04 x Chill water flow

			1,2,3& 4 after vacuum test g. Any other leakage observed during dismantling/ installation work will be responsibility of firm. h. All tools, test equipment's and spares will arrange by firm.	1,2,3& 4 after vacuum test g. Any other leakage observed during dismantling/ installation work will be responsibility of firm. h. All tools, test equipment's and spares will arrange by firm.	sensor. 04 x expansion valve. Compressors cable complete.								
14.	Detailed scope of work	<table><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><tr><td>a. Replacement of chiller module no 1 & 4 compressors with new compressors. b. Replacement of 04 x chill water flow sensors. c. Replacement of 04 x expansion valves. d. Replacement and securing of complete wiring circuit including PLC, contactors, over loads and compressors cable with new. e. Removal/ installation in way assembly and component will be responsibility of firm. f. Refrigerant charging of module no 1,2,3& 4 after vacuum test g. Any other leakage observed during dismantling/ installation work will be responsibility of firm. h. All tools, test equipment's and spares will arrange by firm.</td><td>a. Replacement of chiller module no 1 & 4 compressors with new compressors. b. Replacement of 04 x chill water flow sensors. c. Replacement of 04 x expansion valves. d. Replacement and securing of complete wiring circuit including PLC, contactors, over loads and compressors cable with new. e. Removal/ installation in way assembly and component will be responsibility of firm. f. Refrigerant charging of module no 1,2,3& 4 after vacuum test g. Any other leakage observed during dismantling/ installation work will be responsibility of firm. h. All tools, test equipment's and spares will arrange by firm.</td><td>02 x compressor (Hermetically Sealed Compressor). 42 kg refrigerant (R404A). Complete wiring circuit cable. 01 x PLC. 04 x Contactor. 04 x Over load. 04 x Chill water flow sensor. 04 x expansion valve. Compressors cable complete.</td></tr></table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	a. Replacement of chiller module no 1 & 4 compressors with new compressors. b. Replacement of 04 x chill water flow sensors. c. Replacement of 04 x expansion valves. d. Replacement and securing of complete wiring circuit including PLC, contactors, over loads and compressors cable with new. e. Removal/ installation in way assembly and component will be responsibility of firm. f. Refrigerant charging of module no 1,2,3& 4 after vacuum test g. Any other leakage observed during dismantling/ installation work will be responsibility of firm. h. All tools, test equipment's and spares will arrange by firm.	a. Replacement of chiller module no 1 & 4 compressors with new compressors. b. Replacement of 04 x chill water flow sensors. c. Replacement of 04 x expansion valves. d. Replacement and securing of complete wiring circuit including PLC, contactors, over loads and compressors cable with new. e. Removal/ installation in way assembly and component will be responsibility of firm. f. Refrigerant charging of module no 1,2,3& 4 after vacuum test g. Any other leakage observed during dismantling/ installation work will be responsibility of firm. h. All tools, test equipment's and spares will arrange by firm.	02 x compressor (Hermetically Sealed Compressor). 42 kg refrigerant (R404A). Complete wiring circuit cable. 01 x PLC. 04 x Contactor. 04 x Over load. 04 x Chill water flow sensor. 04 x expansion valve. Compressors cable complete.		
a	b	c											
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required											
a. Replacement of chiller module no 1 & 4 compressors with new compressors. b. Replacement of 04 x chill water flow sensors. c. Replacement of 04 x expansion valves. d. Replacement and securing of complete wiring circuit including PLC, contactors, over loads and compressors cable with new. e. Removal/ installation in way assembly and component will be responsibility of firm. f. Refrigerant charging of module no 1,2,3& 4 after vacuum test g. Any other leakage observed during dismantling/ installation work will be responsibility of firm. h. All tools, test equipment's and spares will arrange by firm.	a. Replacement of chiller module no 1 & 4 compressors with new compressors. b. Replacement of 04 x chill water flow sensors. c. Replacement of 04 x expansion valves. d. Replacement and securing of complete wiring circuit including PLC, contactors, over loads and compressors cable with new. e. Removal/ installation in way assembly and component will be responsibility of firm. f. Refrigerant charging of module no 1,2,3& 4 after vacuum test g. Any other leakage observed during dismantling/ installation work will be responsibility of firm. h. All tools, test equipment's and spares will arrange by firm.	02 x compressor (Hermetically Sealed Compressor). 42 kg refrigerant (R404A). Complete wiring circuit cable. 01 x PLC. 04 x Contactor. 04 x Over load. 04 x Chill water flow sensor. 04 x expansion valve. Compressors cable complete.											
15.	Technical Specs	As per OEM manual.											
16.	Eligibilities	Security wise clear firm having working experience of marine light water chiller on board HINGOL CLASS MPVs of PMSA.											
17.	EDC	07 Days											
18.	Warranty	One year warranty after satisfactory test / trails w.r.t: a. Onboard test and trails of Main AC return temperature of 10C. b. Satisfactory and smooth operation of chiller module no 1 & 4 compressors without abnormal noise and vibration. c. Satisfactory operation of all expansion valves and chill water flow sensors. d. Satisfactory operation of complete wiring circuit including PLC, contactors, over loads and compressors cable. e. Only OEM recommended compressors and spares will acceptable. f. If any abnormality observe in operation of chiller module no 1 & 4 compressors, complete wiring circuit including PLC, contactors, over loads and compressors cable will be rectified/ replace by the firm during warranty											

		period.
19.	Acceptance Criteria	a. Onboard test and trails of Main AC return temperature of 10C. b. Satisfactory and smooth operation of chiller module no 1 & 4 compressors without abnormal noise and vibration. c. Satisfactory operation of all expansion valves and chill water flow sensors. d. Satisfactory operation of complete wiring circuit including PLC, contactors, over loads- bid compressors cable. e. Only OEM recommended compressors and spares will acceptable.

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.			
		S No	Description	Qty	
		a.	R/M of containers roof	04	
6.	Technical Specs	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
7.	Eligibilities	Any local / international well reputed firm having experience for repair/ maintenance of containers.			
8.	EDC	30 days			
9.	Warranty	01 year			
10.	Acceptance Criteria	Inspection by end user and successful completion of work			
11.	Any other relevant info	POC: Lt Ali Abbas PN (OI/C Gwadar Base) Phone # 0309-6076840 through DPCC			

**INSPECTION/ SERVICING OF ELECTRIC PANEL OF KFWA, FRESH WATER & DAILY
BILGES PUMPS - PMSS BASOL**

S No	Details			
1.	Ships Name	PMSS BASOL		
2.	Parent Equipment	KAFWA pump, 02 x Fresh Water Pump, 01 x Daily Bilges Pump		
3.	OEM/ Origin	China		
4.	Sub Equipment	KAFWA pump, 02 x fresh water pump, 01x daily bilges pump		
5.	Assembly Component	KAFWA pump, 02 x fresh water pump, 01 x daily bilges pump		
6.	Part No. of Assembly Component	S No	Part No	Description Qty
		a.	AX09-30-10	Magnetic contractor ABB 2
		b.	MS116	Breaker 2
		c.	P285Q45-134- 00	Limit switch 8
		d.	P285Q45-134- 04-18	Auxiliary contact module 8
		e.	P285Q45-134- 04-02	Circuit breaker 8
		f.	P285Q45-134- 04-19	Transformer 380 to 220 2
		g.	OMS80	Electric Motor 1
		h.	NS80H-MA 50A	Breaker 1
		j.	C32N4A/2P	Middle breaker 3
		k.	LC1- D50AM7C+LADN22C	AC contactor 1
		l.	JBK3-400/TH	Transformer 1
		m.	Input 380VAC, output 24VDC.3A	Power switch 1
		n.	ALH-0.66 50A/5A	Current transformer 1
7.	Quantity	As Per Para 7		
8.	Source of Availability	Local Market		
9.	OEM Details	China		
10.	Justification for Work	Servicing/ inspection of Auxiliary pump no 1 and 2 starters FO transfer pump starters, boiler pump starter		
11.	Work Required	a	b	c d
		Defect/ Routine List	Repair Work Required	Services Required Spares Required
		Servicing/ Inspection KAFWA pump, 02 x fresh water pump, 01 x daily bilges pump,	Servicing/ Inspection KAFWA pump, 02 x fresh water pump, 01x daily bilges pump,	Servicing/ Inspection KAFWA pump, 02 x fresh water pump, 01 x daily bilges pump, As per serial No 7
12.	Detailed scope of work	As per S No.12		
13.	Technical Specs	As per sample provided by SS.		
14.	Eligibilities	a. Any registered and security wise elected local contractor who has working experience on lighting system of HINOL Class MPVs. b. Firm must visit site for understanding the exact nature of defect/hindrances involved in job prior quoting to avoid inconvenience on later stage after award of Work Order.		
15.	EDC	07 Days		

16.	Warranty	One year warranty.
17.	Acceptance Criteria	a. Onboard successful test and trails onboard ship b. OEM certified spares to be used. c. All technical documents will be provided with the item

REPAIR/ OVERHAULING OF 03 X AFT ENGINE ROOM SUPPLY, EXHAUST FANS & MOTORS - PMSS BASOL

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	AFT ENGINE ROOM SUPPLY AND EXHAUST FANS AND MOTORS			
3.	OEM/ Origin	China			
4.	Sub Equipment	Exhaust and supply fan			
5.	Assembly Component	Motor, fan, body and mash			
6.	Part No. of Assembly Component	S No	Part No	Description	Qty
		a.	NA	Supply fan	01
		b.	NA	Exhaust fan	01
		c.	NA	Combine fan	01
		d.	NA	Lagging Of Fans	02
7.	Quantity	03 in No			
8.	Source of Availability	Local Market			
9.	OEM Details	China			
10.	Alternate Source	Local Source			
11.	Justification for Work	Repair/ overhauling of 03 x AFT Engine Room Supply And Exhaust Fans And Motors			
12.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Repair/ overhauling of 03 x Engine room axial fans and motors	Repair/ overhauling of 03 x Engine room axial fans and motors	Repair/ overhauling of 03 x Engine room axial fans and motors	As per serial No 6
13.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Repair/ overhauling of 03 x Engine room axial fans and motors	Repair/ overhauling of 03 x Engine room axial fans and motors	As per serial No 6	
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 c. Use tested tools			

REPLACEMENT OF BARREL COOLING SYSTEM 37MM GUN - PMSS NUSRAT

S No	Details			
1.	Ships Name	PMSS NUSRAT		
2.	Parent Equipment	37MM GUN		
3.	OEM/ Origin	China		
4.	Sub Equipment	37MM GUN Barrel cooling system		
5.	Assembly Component	Pipes/ Joints/ flexible pipes/control valve		
6.	Quantity	S No	Description	Qty
		a.	Control Valves	04
		b.	Flexible Pipes	04
		c.	Hose	50 meter
		d.	Jubilee Clamps	12
		e.	Insulation Tape	
7.	Justification for Work	Flexible pipes and control vales observed deteriorated due to FWT. Replacement of same is required for smooth operation of barrel cooling system		
8.	Work Required	a	b	c
		Defect/ Routine List	Repair Work Required	Services Required
		Cooling system deteriorated due to FWT	Repair/ replacement of 37MM GUN Barrel cooling system	As per Serial 9
9.	Detailed scope of work	Defect Analyzed	a	b
			Detail of Repair Work Required	Detail of Services Required
		Flexible pipes and control vales observed deteriorated/ degraded due FWT. Same has been observed leaky and required to be replaced	Replacement of 37MM Gun Barrel cooling system	a. Replacement of flexible pipes/ house of 37mm gun barrel cooling system b. Replacement of control valves c. Successful operation of barrel cooling system. d. All special tools and spare are to be arrange by the firm for said work. e. The firm will be responsible to undertake any work not covered above to ensure good quality of work. f. The firm will be responsible for welding/cutting if
				As per requirement

				required g. The firm will be responsible for requirement of external services. h. The firm will be responsible for all removal, transportation and installation work during warranty/ guarantee period claim and in case of any re-work.		
10.	Technical Specs	a. Flexible hoses should be branded. b. Joints and clamps must be of SS material. c. Control valves should be branded/ SS.				
11.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/ inspection to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN/GST registered.				
12.	EDC	03 weeks after issuance of work order				
13.	Warranty	01 Year or OEM Warranty				
14.	Acceptance Criteria	a. Satisfactory work done by the firm b. Practical acceptance by SS				
15.	Any other relevant info	SS may be contacted for any query/ requirement				

REPAIR/ OVERHAULING OF 03 X ELEVATED PUMPS IN FWD ENGINE - PMSS BASOL

S No	Details			
1.	Ships Name	PMSS BASOL		
2.	Parent Equipment	OF 03X ELEVATED PUMPS IN FWD ENGINE		
3.	OEM	JIANGSU ZHENHUA PUMP INDYSTRY CO, LTD		
4.	Origin	China		
5.	Sub Equipment	OF 03 X ELEVATED PUMPS IN FWD ENGINE		
6.	Assembly Component	OF 03 X ELEVATED PUMPS IN FWD ENGINE		
7.	Part No. of Assembly Component	S No	Part No	Description
		a.	NA	Pump body
		b.	NA	Impeller
		c.	NA	Mechanical seal
		d.	NA	Bearings
		e.	NA	Guage with adaptor
		f.	NA	Adaptor
		g.	NA	Shaft
		h.	NA	lines
8.	Quantity	As per S No 7		
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	Repair/ overcalling 03 X Elevated Pumps in FWD Engine		
13.	Work Required	a	b	c
		Defect/ Routine List	Repair Work Required	Services Required
		Elevated pump and lines 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	Elevated pump and lines found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops
14.	Detailed scope of work	d		
		Spares Required		
		As per serial No 14		
		a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
		Fabrication of new pump body, mechanical seal, impeller. Servicing of motor. Alignment of	Elevated pump and lines found degraded. Mechanical seal leaky and abnormal noise observed, overhauling of pump is to be required for sat ops	As per serial No 14

		pump			
15.	Technical Specs	As per sample			
16.	Eligibilities	Local and international contractor registered with FBR and having working experience with PMSA			
17.	EDC	07 Days			
18.	Warranty	01 Year			
19.	Acceptance Criteria	a. OEM certified items b. All BER items is to be replaced with new. c. Use tested tools			

REPAIR/ REPLACEMENT OF MAIN ENGINES CONTROL SYSTEM - PMSS BASOL

S No	Details		
1.	Ships Name	PMSS BASOL	
2.	Parent Equipment	Bridge and Engine Room Central Control System	
3.	OEM	Jinzhou Hangxing Ship Technology Co. Ltd.	
4.	Model	Bridge and Engine Room Central Control system	
5.	Origin	China	
6.	Sub Equipment	Bridge and Engine Room Central Control system	
7.	Assembly Component	Bridge and Engine Room Central Control system including SAB cards, PPS Card, PIM, MPU-27 and base.	
8.	Part No. of Assembly Component	S No	Description
		h.	PIM Base
		i.	SAB Cards
		j.	MPU-27
		k.	AIB Card
		l.	Cable joints/ lugs 2
9.	Quantity	As mentioned in S No 8	
10.	Source of Availability	China	
11.	Justification for Work	Defect rectification of control system	
12.	Work Required	a	b
		Defect/ Routine List	Repair Work Required
		Nil	Yes
		c	d
		Services Required	Spares Required
		Yes	Yes
13.	Detailed scope of work	a	b
		Detail of Repair Work Required	Detail of Services Required
		As per requirements	Complete overhaul of Bridge and Engine Room Central Control System including following aspects: a. Complete Overhauling with repair and replacement of components/ parts and cards as required. b. Check the input and output voltages of system to see if they are in the standard value. Clean system equipment. Check grounding. Check up the terminal labels inside the console to see if they are in good condition and whether the device labels are clear with all rectification of defects. c. Internal overhaul of ECC and
			c Detail of Spares Required As per S No 9

			BCC as per the relevant drawings and power on for adjustment to make sure the operation requirements of ECC and BCC are met. d. Defect' rectification of any anomaly in communication between Bridge, MCR and LOP of Main Engines. e. Satisfactory operation (Start/stop) of all Main Engines from Bridge, Engine Room and Local. f. Satisfactory operation of all parameters on gauges of Main Engines at Bridge, Engine Room and Local.	
14.	Technical Specs	As per OEM/ Technical Manual		
15.	Eligibilities	OEM authorized rep having experience of MTU control console		
16.	EDC	ASAP (15 Days)		
17.	Warranty	01 Year		
18.	Acceptance Criteria	d. Work will be carried out by/ through OEM rep. e. Satisfactory trials of Main Engines from Bridge, Engine Room and Local.		

PROCUREMENT OF FILTERS OF SSDGs & MDES - PMSS SABQAT

S No	Details					
1.	Ships Name	PMSS RAFAQAT				
2.	Parent Equipment	Fuel Filter SSDG, Lub Oil Filter SSDG, Fuel Filter (secondary) MDE, Air Filter MDE, Air Filter SSDG and Fuel Water separator (Primary) MDE				
3.	OEM	Caterpillar USA				
4.	Model	Caterpillar 3516 Caterpillar 3304				
5.	Serial No	5MJ 00029 (Stbd) 5MJ 00024 (Port)				
6.	Origin	USA				
7.	Sub Equipment	Lub Oil System, Fuel System, Air System				
8.	Assembly Component	Port and Stbd MDEs Port and Stbd SSDGs				
9.	Part No. of Assembly Component	MDEs: (1R-0755, 61-3137, SF-1912-30) SSDGs: (1R-0750, 1R-0749, P-554004, 4L-9851, SF-1912-30)				
10.	Quantity	S No	Part No	Item Description	Den	Qty Req
		m.	1R-0750	Fuel Filter SSDG	No	06
		n.	P-554004	Lub Oil Filter SSDG	No	06
		o.	1R-0755	Fuel Filter (secondary) MDE	No	08
		p.	4L-9851	Air Filter SSDG	No	04
		q.	61-3137	Air Filter MDE	No	08
		r.	SF-1912-30	Fuel Water separator MDE and SSDG	No	20
11.	Justification for Work	Requirement of Lub Oil filter, Fuel filter and Air filters for MDEs and SSDGs for 400Hrs PMS routine through recommendation OEM				
12.	Technical Specs	As per OEM manual				
13.	Eligibilities	Reputable firm having working experience of related activity.				
14.	EDC	15 Days				
15.	Warranty	1 Year				
16.	Acceptance Criteria	a. Recommended/ OEM spares b. Successful trails by end user				
17.	Any other relevant info	Contractor should visit onboard ship to inspect and to understand scope of work.				

REPAIR/ REPLACEMENT OF EXHAUST FANS AND MUSHROOM HEADS - PMSS BARKAT

S No	Details				
1.	Ships Name	PMSS BARKAT			
2.	Parent Equipment	Ventilation System			
3.	OEM	Local Vender			
4.	Sub Equipment	Exhaust Fan, mushroom head			
5.	Assembly Component	Electric motor, fan body, fins, mushroom head valve & disc plate, 220V socket			
6.	Quantity	As per detail scope of work			
7.	Source of Availability	Local Market			
8.	Justification for Work	Ship is under DED. Above mentioned equipment observed degraded over the period of time and due FWT. Inspection, and necessary repair/ replacement is required for safe and smooth operation of the systems			
9.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Above mentioned equipment observed degraded over the period of time and due FWT.	Inspection, and necessary repair/ replacement is required for safe and smooth operation of the systems	As per Serial 10	As per Serial 10

10.	Detailed scope of work	a		b	c
		Detail of Repair Work Required		Detail of Services Required	Detail of Spares Required
		i.	Round shaped mushroom head of MS material for supply & exhaust fans	Mushroom heads are to be inspected, repaired/overhauled (or replaced if necessary) with all accessories	04 x mushroom heads Dia: 26 inch
		ii.	Round shaped mushroom head of SS material for supply & exhaust fans	Mushroom heads are to be inspected, repaired/overhauled (or replaced if necessary) with all accessories	09 x mushroom heads Dia: 16 inch
		iii.	Exhaust fans	Overhauling of electric motor and fan body with associated fittings	05 x Exhaust fans of 0.5 KW
		iv.	220V sockets	Replacement of 220V marine version sockets on upper decks	14 x sockets
		v.	Group starter panel in MCR	Servicing of group starter panel and necessary replacement of cable lugs, perished wires and overload relays	09 x Group starter panels
		vi.	Split AC supply cable	Replacement of degraded power supply cable of split ACs from AC DB-2 (FER) to: • Captain Cabin • WEO & MEO Cabin • Sailor dining hall • Ship's office and from AC DB-1 (AC Compartment) to: • Wardroom • Bridge	6mm x 2 core cable Length: 260 meters for mentioned ACs
		vii.	Donkey pumps	Overhauling of donkey pumps	02 x donkey pumps of 1 HP
		viii.	Anti-condensation insulation on split ACs gas pipe lines	Replacement of anti-condensation insulation on split ACs gas pipe lines	200 feet
		ix.	All re-fittings are to be carried out with SS nuts & bolts		
		x.	All electrical connections must be tightened properly		
		xi.	The firm will be responsible of welding/ cutting and external services if required		
		xii.	All spares must be genuine/marine version, tools special equipment /accessories required for said Repair/ Maintenance are to be arranged by the firm		
		xiii.	The firm will be responsible for all removal, transportation and installation work during warranty/ grantee periods claims in case of any rework		
11.	Technical	As per detail scope of work			

	Specs	
12.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/ inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN /GST registered.
13.	EDC	30 x days after issuance of work/ confirmation order
14.	Warranty	02 Year
15.	Acceptance Criteria	a. Successful completion and acceptance by the end user b. Satisfactory HATS/SATS
16.	Any other relevant info	Quality material is to be used

PROCUREMENT OF DC&FF PORTABLE EQUIPMENT - PMSS KOLACHI

S No	Details			
1.	Ships Name	PMSS KOLACHI		
2.	Parent Equipment	DC & FF Portable Equipment		
3.	Sub Equipment	Damage control portable equipment Firefighting portable equipment		
4.	Assembly Component	15 Tons/hr portable Eductor Ramfan with 2 x hoses and hose coupling Pipe repair Kit Adjustable steel shore 1m extended upto 1.68m Adjustable steel shore 1.75m extended upto 3.1m Cement rapid Hardening Electrician tool kit Containment tool kit Inline Eductor FBU5X Sound power Field Telephone Surcoat (Yellow) Surcoat (Red, with a white stripe) Surcoat (Red) Surcoat (Green) Surcoat (Brown) AFFF Foam Drums 20 Ltrs Torches/ headlight for support party safety helmet		
5.	Part No. of Assembly Component	S No	NSN No/ Part No	Item Description
		1)	4730-99-525-3798	15 Tons/hr portable Eductor
		2)	NSN not held	Torches/ headlight for support party safety helmet
		3)	4140-99-051-5733	Ramfan with 2 x hoses and hose coupling
		4)	5610-99-224-2641	Cement rapid Hardening
		5)	4730-01-435-5106	Pipe repair Kit
		6)	NSN not held	Adjustable steel shore 1m extended upto 1.68m
		7)	NSN not held	Adjustable steel shore 1.75m extended upto 3.1m
		8)	0276-99-014-9309	Electrician tool kit
		9)	NSN not held	Containment tool kit
		10)	NSN not held	Inline inductor FBU5X
		11)	4210-99-224-8369	AFFF Foam Drums 20 Ltrs
		12)	0558-79-923-2102	Sound power Field Telephone
		13)	8415-70-510-2557	Surcoat (Yellow)
		14)	8415-99-124-1960	Surcoat (Red, with a white
		15)	8415-59-516-0249	Surcoat (Red)
		16)	8415-99-869-6935	Surcoat (Green)
		17)	8415-99-869-6934	Surcoat (Brown)
6.	Quantity	As per S No 5		
7.	Source of Availability	Local Market		
8.	Justification	DC & FF portable equipment required as per <u>approved allowance.</u>		

	for Work				
9.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Shortage of DC & FF equipment w.r.t approved allowance.	DC & FF equipment urgently required to meet any emergency regarding damage control and firefighting.	DC & FF equipment urgently required to meet any emergency regarding damage control and firefighting.	As per S No 9 & 10.
10.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		DC & FF equipment urgently required to meet any emergency regarding damage control and firefighting.	DC & FF equipment urgently required to meet any emergency regarding damage control and firefighting.	As per S No 9 & 10.	
11.	Technical Specs	As per S No 9 & 10.			
12.	Eligibilities	Reputable local/ international contractor having working experience with PMSA.			
13.	EDC	15 Days after award of contract			
14.	Warranty	2 Years			
15.	Acceptance Criteria	a. OEM Certified item b. QA/ QC certificate issuance by QA/ QC department			
16.	Any other relevant info	Vist Ships thorough DPCC for Clear understanding Scope of Works			

REQUIREMENT OF INSPECTION/ PRESSURE TESTING AND REPLACEMENT OF FUEL & MISC LINES - PMSS BARKAT

S No	Details																																																																												
1.	Ships Name	PMSS BARKAT																																																																											
2.	Parent Equipment	Main Machinery Fuel System, Fresh Water System																																																																											
3.	Assembly Component	Fuel and Fresh Water Lines																																																																											
4.	Quantity	As per detail scope of work																																																																											
5.	Source of Availability	Local Market																																																																											
6.	Justification for Work	Ship is under DED. Fuel/ fresh water systems lines observed degraded. Inspection, testing and necessary replacement is required for safe and smooth operation of main machinery and systems																																																																											
7.	Work Required	<table><tr><td colspan="2">a</td><td colspan="2">b</td><td>c</td><td>d</td></tr><tr><td colspan="2">Defect/ Routine List</td><td colspan="2">Repair Work Required</td><td>Services Required</td><td>Spares Required</td></tr><tr><td colspan="2">Fuel/ fresh water systems lines observed degraded.</td><td colspan="2">Inspection, testing and necessary replacement is required for safe and smooth operation of main machinery and systems</td><td>As per Serial 8</td><td>As per Serial 8</td></tr></table>				a		b		c	d	Defect/ Routine List		Repair Work Required		Services Required	Spares Required	Fuel/ fresh water systems lines observed degraded.		Inspection, testing and necessary replacement is required for safe and smooth operation of main machinery and systems		As per Serial 8	As per Serial 8																																																						
a		b		c	d																																																																								
Defect/ Routine List		Repair Work Required		Services Required	Spares Required																																																																								
Fuel/ fresh water systems lines observed degraded.		Inspection, testing and necessary replacement is required for safe and smooth operation of main machinery and systems		As per Serial 8	As per Serial 8																																																																								
8.	Detailed scope of work	<table><tr><td colspan="3">a</td><td colspan="2">b</td><td>c</td></tr><tr><td colspan="3">Detail of Repair Work Required</td><td colspan="2">Detail of Services Required</td><td>Detail of Spares Required</td></tr><tr><td>xiv.</td><td>FER main fuel supply line</td><td></td><td colspan="2">Line is to be removed, tested and replaced if required</td><td>Length 10 feet, Dia: 2.5 inch</td></tr><tr><td>xv.</td><td>AER main fuel supply line</td><td></td><td colspan="2">Line is to be removed, tested and replaced if required</td><td>Length 21 feet, Dia: 1.5 inch</td></tr><tr><td>xvi.</td><td>SSDG-1 fuel return line</td><td></td><td colspan="2">Line is to be removed, tested and replaced if required</td><td>Length 03 feet, Dia: 1 inch</td></tr><tr><td>xvii.</td><td>SSDG-1 fuel supply line</td><td></td><td colspan="2">Line is to be removed, tested and replaced if required</td><td>Length 27 feet, Dia: 1 inch</td></tr><tr><td>viii.</td><td>SSDG-2 fuel return line</td><td></td><td colspan="2">Line is to be removed, tested and replaced if required</td><td>Length 32 feet, Dia: 1 inch</td></tr><tr><td>xix.</td><td>SSDG-2 fuel supply line</td><td></td><td colspan="2">• Line is to be removed, tested and replaced if required</td><td>Length 13 feet, Dia: 1 inch</td></tr><tr><td>xx.</td><td>SSDG-3 fuel supply line</td><td></td><td colspan="2">Line is to be removed, tested and replaced if required</td><td>Length 07 feet, Dia: 1 inch</td></tr><tr><td>xxi.</td><td>SSDG-3 fuel return line</td><td></td><td colspan="2">Line is to be removed, tested and replaced if required</td><td>Length 25 feet, Dia: 1 inch</td></tr><tr><td>xxii.</td><td>FSME fuel supply line</td><td></td><td colspan="2">Line is to be removed, tested and replaced if required</td><td>Length 11 feet, Dia: 1 inch</td></tr><tr><td>xiii.</td><td>FSME fuel return line</td><td></td><td colspan="2">Line is to be removed, tested and replaced if required</td><td>Length 30 feet, Dia: 1 inch</td></tr></table>				a			b		c	Detail of Repair Work Required			Detail of Services Required		Detail of Spares Required	xiv.	FER main fuel supply line		Line is to be removed, tested and replaced if required		Length 10 feet, Dia: 2.5 inch	xv.	AER main fuel supply line		Line is to be removed, tested and replaced if required		Length 21 feet, Dia: 1.5 inch	xvi.	SSDG-1 fuel return line		Line is to be removed, tested and replaced if required		Length 03 feet, Dia: 1 inch	xvii.	SSDG-1 fuel supply line		Line is to be removed, tested and replaced if required		Length 27 feet, Dia: 1 inch	viii.	SSDG-2 fuel return line		Line is to be removed, tested and replaced if required		Length 32 feet, Dia: 1 inch	xix.	SSDG-2 fuel supply line		• Line is to be removed, tested and replaced if required		Length 13 feet, Dia: 1 inch	xx.	SSDG-3 fuel supply line		Line is to be removed, tested and replaced if required		Length 07 feet, Dia: 1 inch	xxi.	SSDG-3 fuel return line		Line is to be removed, tested and replaced if required		Length 25 feet, Dia: 1 inch	xxii.	FSME fuel supply line		Line is to be removed, tested and replaced if required		Length 11 feet, Dia: 1 inch	xiii.	FSME fuel return line		Line is to be removed, tested and replaced if required		Length 30 feet, Dia: 1 inch
a			b		c																																																																								
Detail of Repair Work Required			Detail of Services Required		Detail of Spares Required																																																																								
xiv.	FER main fuel supply line		Line is to be removed, tested and replaced if required		Length 10 feet, Dia: 2.5 inch																																																																								
xv.	AER main fuel supply line		Line is to be removed, tested and replaced if required		Length 21 feet, Dia: 1.5 inch																																																																								
xvi.	SSDG-1 fuel return line		Line is to be removed, tested and replaced if required		Length 03 feet, Dia: 1 inch																																																																								
xvii.	SSDG-1 fuel supply line		Line is to be removed, tested and replaced if required		Length 27 feet, Dia: 1 inch																																																																								
viii.	SSDG-2 fuel return line		Line is to be removed, tested and replaced if required		Length 32 feet, Dia: 1 inch																																																																								
xix.	SSDG-2 fuel supply line		• Line is to be removed, tested and replaced if required		Length 13 feet, Dia: 1 inch																																																																								
xx.	SSDG-3 fuel supply line		Line is to be removed, tested and replaced if required		Length 07 feet, Dia: 1 inch																																																																								
xxi.	SSDG-3 fuel return line		Line is to be removed, tested and replaced if required		Length 25 feet, Dia: 1 inch																																																																								
xxii.	FSME fuel supply line		Line is to be removed, tested and replaced if required		Length 11 feet, Dia: 1 inch																																																																								
xiii.	FSME fuel return line		Line is to be removed, tested and replaced if required		Length 30 feet, Dia: 1 inch																																																																								

		xiv.	FPME fuel return line	Line is to be removed, tested and replaced if required	Length 30 feet, Dia: 1 inch
		xxv.	FPME fuel supply line	Line is to be removed, tested and replaced if required	Length 18 feet, Dia: 1 inch
		xvi.	ASME fuel supply line	Line is to be removed, tested and replaced if required	Length 11 feet, Dia: 1 inch
		xvii.	ASME fuel return line	Line is to be removed, tested and replaced if required	Length 18 feet, Dia: 1 inch
		viii.	APME fuel return line	Line is to be removed, tested and replaced if required	Length 18 feet, ' Dia: 1 inch
		xix.	APME fuel supply line	Line is to be removed, tested and replaced if required	Length 11 feet, Dia: 1 inch
		xx.	Main tanks fuel filling line	Line is to be removed, tested and replaced if required	Length 20 feet, Dia: 2.5 inch
		xxi.	Main engine duplex filter housing	Repair/ replacement of 04 x main engine duplex filter housing	04 x filter housing
		xxii.	Main engines flexible hoses	Flexible hoses are to be removed, tested and replaced if required	Length 03 feet, Dia: 1.5 inch
		xiii.	Fresh water lines	Replacement of 04 x fresh water lines in CPO/ sailor and officer washrooms	Length 15 feet, Dia: 1 inch
		xiv.	Fire main lines	Lines are to be removed, tested and replaced if required	04 x lines length: 10 feet Dia: 3.5 inch
		xxv.	Split AC drain pipes	PVC pipes are to be replaced	Length: 450 feet, 1 Inch Dia: 1 Inch Elbows: 30 in no T joints: 30 in no
		xvi.	Internal scaling is to be removed by suitable method of all lines		
		xvii.	All lines are to be tested up to 5 bar		
		viii.	Flanges of fuel lines are to be made new and fitting of lines is to be carried out by using SS nuts & bolts		
		xix.	All fuel and fresh water system should be leakage free		
		xl.	The firm will be responsible of welding/ cutting and external services if required		
		xli.	All spares must be genuine/marine version, tools special equipment /accessories required for said Repair/ Maintenance are to be arranged by the firm		
		xlii.	The firm will be responsible for all removal, transportation and installation work during warranty/ grantee periods claims in case of any rework		
9.	Technical Specs	As per detail scope of work			
10.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/ inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and			

		experienced. c. The firm should be NTN /GST registered.
11.	EDC	30 x days after issuance of work/ confirmation order
12.	Warranty	02 Year
13.	Acceptance Criteria	a. Successful completion and acceptance by the end user. b. Satisfactory HATS/SATS
14.	Any other relevant info	Quality material is to be used

COMPLETE REFURBISHMENT OF GYRO ROOM AND MRO - PMSS NUSRAT

S No	Details			
1.	Ships Name	PMSS NUSRAT		
2.	Parent Equipment	Complete Refurbishment of Gyro Room and MRO		
3.	Origin	Pakistan		
4.	Quantity	02		
5.	Justification for Work	Compartment cabinets/ racks, ceiling and furniture deteriorated/degraded over the period of time. Refurbishment of MRO and Gyro room is required		
6.	Work Required	a	b	c
		Defect/ Routine List	Repair Work Required	Services Required
		Compartment s deteriorated due to FWT	Complete refurbishment of Gyro Room and MRO is required	As per Serial 7 Colum b.
7.	Detailed scope of work	d	c	d
		Spares Required	Detail of Services Required	Detail of Spares Required
		As per requirement	As per requirement	As per requirement
7.	Detailed scope of work	a	b	c
		Defect Analyzed	Detail of Repair Work Required	Detail of Services Required
		Compartment cabinets/ racks, ceiling and furniture deteriorated/ degraded over the period of time	Complete refurbishment of Gyro Room and MRO	a. Gyro room ceiling, cabinets and furniture deteriorated and refurbishment of same required. b. MRO ceiling, cabinets, furniture and deck deteriorated, refurbishment required. c. All cabinets and lighting system is to be renewed with LED warm light. d. Electrical wiring is to be renewed. e. The firm will be responsible for welding/cutting if required. f. The firm will be responsible for requirement of external services.

				g. The firm will be responsible for all removal, transportation and installation work during warranty/ guarantee period claim and in case of any re-work.		
8.	Technical Specs	As per IT specs				
9.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/ inspection to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN/GST registered.				
10.	EDC	03 weeks after issuance of work order				
11.	Warranty	01 Year or OEM Warranty				
12.	Acceptance Criteria	a. Satisfactory work done by the firm. b. Practical acceptance by SS				
13.	Any other relevant info	SS may be contacted through DPCC for any query/ requirement				

REQUIREMENT OF BATTERIES FOR ELT (KANNAD 406AP) AND RED BOX (RBL 4000) - 93
PMSA SQN

S No	Details			
1.	Ships Name	93 PMSA SQN		
2.	Parent Equipment	Defender BN-2T Aircraft		
3.	OEM	M/s Britten Norman (BN2T)		
4.	Origin	UK/ USA/ AS PER OEM COUNTRY		
5.	Sub Equipment	Batteries of ELT (KANNAD 406AP) and RED BOX (RBL-4000)		
6.	Assembly Component	Batteries of ELT (KANNAD 406AP) and RED BOX (RBL-4000)		
7.	Part No. of Assembly Component	S No	Part No	Description
		a.	S1820516-99	ELT BATTERY (KIT BAT 300)
		b.	RBB0/1100	RED BOX BATTERY
8.	Quantity	As mentioned against each in S No 7		
9.	Source of Availability	OEM or OEM authorized aviation vendors		
10.	Justification for Work	Batteries required for replacement due service life expiry and insufficient charge capacity respectively.		
11.	Detailed scope of work	a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
		-	Batteries replacement of ELT and RED BOX	As per S No 7 above
12.	Technical Specs	-		
13.	Eligibilities	a. Required items are to be delivered in New 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 year of their firm. c. Firms must have at least 2 years' experience of procurement/repair of Aviation components/ spare parts. Experience certificate of Aviation related contracts by contracting agency in Pakistan is mandatory. d. Firms need to include freight/ insurance charges and custom duties/ taxes, etc (as applicable) in quotation. e. Firms need to get import/ export licenses from respective abroad firms/ agencies where applicable. In case of failure to meet acceptance criteria or any defect during physical/ operational testing of items post installation/ utilization on aircraft, firm is liable to get the items replaced on FoC basis in shortest possible time.		
14.	EDC	10 x weeks after award of contract		
15.	Warranty	1 Year		
16.	Acceptance Criteria	a. Satisfactory physical condition and operational check of items (where Applicable). b. Items part numbers should be identical. Alternatively, OEM letter for change in Part No/ certificate of conformance may also be provided. c. Provision of OEM certification from EASA/ FAA (if applicable). d. Provision of import documents.		

		Shelf life/ expiry dates of batteries should be within 6-8 weeks from date of manufacturing.
17.	Any other relevant info	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

REPAIR/ OVERHAULING OF FIRE MAN PUMPS & FUEL TANK SUCTION AND FILLING VALVE & MAIN BILGES PUMPS VALVES - PMSS BASOL

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	Fire Man Pumps & Fuel Tank Suction and Filling Valve & Main Bilges Pumps valves			
3.	OEM/ Origin	China			
4.	Sub Equipment	Fire Man Pumps & Fuel Tank Suction and Filling Valve & Main Bilges Pumps valves			
5.	Assembly Component	Fire Man Pumps & Fuel Tank Suction and Filling Valve & Main Bilges Pumps valves			
6.	Part No. of Assembly Component	DN100, DN25, DN50			
7.	Quantity	15 in No			
8.	Source of Availability	Local Market			
9.	Justification for Work	Repair/ overhauling of Fire Man Pumps & Fuel Tank Suction and Filling Valve & Main Bilges Pumps Valves			
10.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Repair/ overhauling of Fire Man Pumps & Fuel Tank Suction and Filling Valve & Main Bilges Pumps Valves	Repair/ overhauling of Fire Man Pumps & Fuel Tank Suction and Filling Valve & Main Bilges Pumps Valves	Repair/ overhauling of Fire Man Pumps & Fuel Tank Suction and Filling Valve & Main Bilges Pumps Valves	As per S No 11 above
11.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Repair/ overhauling of Fire Man Pumps & Fuel Tank Suction and Filling Valve & Main Bilges Pumps Valves	Repair/ overhauling of Fire Man Pumps & Fuel Tank Suction and Filling Valve & Main Bilges Pumps Valves	As per S No 11	
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	a. OEM certified items b. All BER items is to be replaced with new c. Use tested tools			

MAINTENANCE SERVICING OF 01 X FIFI & 02 X ELEVATED PUMP STATERS - PMSS BASOL

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	01 X FIFI STATERS AND 02 X ELEVATED PUMP STATERS			
3.	OEM/ Origin	China			
4.	Sub Equipment	01 X FIFI STATERS AND 02 X ELEVATED PUMP STATERS			
5.	Assembly Component	01 X FIFI STATERS AND 02 X ELEVATED PUMP STATERS			
6.	Part No. of Assembly Component	S No	Part No	Description	Qty
		s.	AX09-30-10	Magnetic contractor ABB	2
		t.	MS116	Breaker	2
		u.	P285Q45-134- 00	Limit switch	8
		v.	P285Q45-134- 04-18	Auxiliary contact module	8
		w.	P285Q45-134- 04-02	Circuit breaker	8
		x.	P285Q45-134- 04-19	Transformer 380 to 220	2
		y.	NS80H-MA 50A	Breaker	1
		z.	C32N4A/2P	Middle breaker	3
		j.	LC1- D50AM7C+LAD N22C	AC contactor	1
		k.	JBK3-400/TH	Transformer	1
		l.	Input 380VAC, output 24VDC.3A	Power switch	1
		m.	ALH-0.66 50A/5A	Current transformer	1
7.	Quantity	As mentioned in S No 6			
8.	Source of Availability	China			
9.	Alternate Source	Local Source			
10.	Justification for Work	Servicing/inspection 01 X FIFI STATERS and 02 X ELEVATED PUMP STATERS			
11.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		01 X FIFI STATERS and 02 X ELEVATED PUMP STATERS	01 X FIFI STATERS and 02 X ELEVATED PUMP STATERS	01 X FIFI STATERS and 02 X ELEVATED PUMP STATERS	As per S No 9
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	a. OEM certified items. b. All BER items is to be replaced with new. c. Use tested tools			

INSPECTION/ SERVICING OF FIREMAN PUMP, 01 X GS PUMP, 01 X FLUSHING PUMP & AUXILIARY STARTER PANELS - PMSS BASOL

S No	Details				
1.	Ships Name	PMSS BASOL			
2.	Parent Equipment	Fire main Pump, 01x GS Pump, 01x Flushing Pump			
3.	OEM/ Origin	China			
4.	Sub Equipment	Fire main Pump, 01x GS Pump, 01x Flushing Pump			
5.	Assembly Component	Fire main Pump, 01x GS Pump, 01x Flushing Pump			
6.	Part No. of Assembly Component	S No	Part No	Description	Qty
		aa.	AX09-30-10	Magnetic contractor ABB	2
		bb.	MS116	Breaker	2
		cc.	P285Q45-134-00	Limit switch	8
		dd.	P285Q45-134- 04-18	Auxiliary contact module	8
		ee.	P285Q45-134- 04-02	Circuit breaker	8
		ff.	P285Q45-134- 04-19	Transformer 380 to 220	2
		gg.	OMS80	Electric Motor	1
		hh.	NS80H-MA 50A	Breaker	1
		n.	C32N4A/2P	Middle breaker	3
		o.	LC1-D50AM7C+LAD N22C	AC contactor	1
		p.	JBK3-400/TH	Transformer	1
		q.	Input 380VAC, output 24VDC.3A	Power switch	1
		r.	ALH-0.66 50A/5A	Current transformer	1
7.	Quantity	As mentioned in S No 6			
8.	Source of Availability	China			
9.	Alternate Source	Local Source			
10.	Justification for Work	Servicing/ inspection of Auxiliary Pump no 1 and 2 Starters, FO Transfer pump Starters, Boiler Pump starter			
11.	Detailed scope of work	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Fire main Pump, 01 x GS Pump, 01 x Flushing Pump	Fire main Pump, 01 x GS Pump, 01 x Flushing Pump	Fire main Pump, 01 x GS Pump, 01 x Flushing Pump	As per S No 6
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	d. OEM certified items. e. All BER items is to be replaced with new f. Use tested tools			

REPAIR/ REPLACEMENT OF PROPULSION & AUXILIARY MACHINERIES FILTERS –
PMSS KASHMIR

S No	Details					
1.	Ships Name	PMSS KASHMIR				
2.	Parent Equipment	Propulsion & Auxiliary Machineries 'Filters				
3.	Origin	China				
4.	Sub Equipment	Main Engines. SSDGs. HPAC RO Plant and Steering System				
5.	Part No. of Assembly Component	S No	NSN/ Part No	Description	System	Qty
		a.	3090042	Air Filter Assembly	SSDG	06
		b.	3315844	Lub Oil Filter Element (FS1212)		06
		c.	3889311	Lub Oil Filter 2 (LF777)		06
		d.	3315843	Fuel Filter		06
		e.	3889310	Filter (LF670)		06
		f.	3103262	Air Filter	Emergency DG	02
		g.	3401544	Lub Oil Filter (LF9009)		02
		h.	4058965	Water Filter (WF 2076)		02
		j.	3315847	Fuel Filter	Main Engine	02
		k.	6357734	Fuel Filter Cartridge (VOKES)		04
		l.	4713047	Lub Oil filter centrifugal (FM600DS)	RO Plant	04
		m.	4620PV1040020 (Part No GL- SW5C-14)	Cartridge filter		04
		n.	2030PV1050017 (Part No. S80-01-17)	Returned Oil Filter Cartridge	Steering System	02
		p.	2030PV1050018 (Part No S80-01-18)	High Pressure Filter Cartridge		02
		q.	140517050	Oil filter (Perkins)	HPAC	02
		r.	4310PV5060044 (Part No N 15839)	Lubrication Oil Filter		02
		s.	4310PV5060223 (Part No N3029)	Inlet filter element		02
		t.	4610PV1030016	Ultraviolet Lamp 40 watt	Fresh Water System	02
6.	Quantity	As per S No 5				
7.	Source of Availability	Authorized Local Firm				
8.	OEM Details	Misc				
9.	Alternate	Item can be procured through any local reputable vendor				

	Source	
10.	Justification for Work	PMS Routine/ Condition based Replacement
11.	Work Required	Repair/ Replacement of propulsion and auxiliary machineries filters
12.	Technical Specs	As per TPI and originally installed filters
13.	Eligibilities	Reputable local registered with FBR and having working experience with PMSA.
14.	EDC	30 days after award of contract
15.	Warranty	02 Year shelf life and 03 months running life
16.	Acceptance Criteria	Upon scrutiny of items and product must be OEM certified
17.	RFI	Yes

IT NO: IT/96/23/2026-27

PROCUREMENT AND PELICAN HOOK - PMSS ZHOB

S No	Details	
1.	Ships Name	PMSSZHOB
2.	Parent Equipment	Pelican Hook
3.	Sub Equipment	Pelican Hook
4.	Assembly Component	Pelican Hook
5.	Quantity	08 (02 for all MPVs except PMSS Kashmir & PMSS DASHT)
6.	Source of Availability	Local Contractor
7.	Justification for Work	Demand for Pelican Hook (08 in Nos)
8.	Work Required	Pelican Hook (08 in Nos) required
9.	Detailed scope of work	08 x Pelican Hooks (02 for all MPVs except PMSS KASHMIR & PMSS DASHT)
10.	Eligibilities	Reputable local contractor/ firm
11.	EDC	20 x days
12.	Warranty	3 year
13.	Acceptance Criteria	Satisfactory/ reliable item acceptable
14.	Any other relevant info	a. Firm to visit onboard for clear understanding of scope of work. b. Damage/ defect occurred is responsibility of contractor. c. Dismantling/ assembling/ installation and in way removal work is responsibility of contractor

CONDUCT OF PMS ROUTINE OF 04 X ELECTRICAL MOTORS - PMSS BASOL

S No	Details			
1.	Ships Name	PMSS BASOL		
2.	Parent Equipment	ELECTRICAL MOTORS		
3.	OEM/ Origin	China		
4.	Sub Equipment	04 X ELECTRICAL MOTORS		
5.	Assembly Component	MOTORS		
6.	Part No. of Assembly Component	S No	Description	Qty
		a.	SEAWATER PUMP NO 1	1
		b.	SEA WATER PUMP NO 2	1
		c.	CHILL WATER NO 1	1
		d.	CHILL WATER NO 2	1
7.	Quantity	As per S No 6		
8.	Source of Availability	Local Market		
9.	Justification for Work	To conduct PMS Routine of ELECTRICAL MOTORS (PMS No 5-3101-0000) (MOP-007) (Desperation Overhaul the electrical motor)		
10.	Work Required	Overhauling of 04 electrical motors Replacement of motor baring Renewal of connection box Renewal of motor body paint Renewal of motor varnish Renewal of motor Barings		
11.	Detailed scope of work	Overhauling of 04 electrical motors Replacement of motor baring Renewal of connection box Renewal of motor body paint Renewal of motor varnish Renewal of motor Barings		
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	a. OEM certified items b. All BER items is to be replaced with new. c. Use tested tools		

**OVERHAULING OF LOW PRESSURE AIR COMPRESSOR (LPAC) AND LP AIR SYSTEM –
PMSS NUSRAT**

S No	Details					
1.	Ships Name	PMSS NUSRAT				
2.	Parent Equipment	LPAC and LP Air System				
3.	OEM	Tanabe				
4.	Model	LSHC-30-A				
5.	Sub Equipment	LPAC, LP Air Bottle and associated valves & reducers				
6.	Assembly Component	LPAC, LP Air Bottle and associated valves & reducers				
7.	Quantity	See S No 13 column b				
8.	Justification for Work	Performance of LPAC has been degraded over the period of time and to conduct PMS routine PMS NO 3-3101-0000 MOP NO 01				
9.	Work Required	a	b	c	d	
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required	
		Performance of LPAC has been degraded over the period of time and to conduct PMS routine PMS NO 3-3101-0000 MOP NO 011	Complete Servicing/overhauling of compressor is required for sat ops	As per Serial 10	As per Serial 10	

		a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
10.	Detailed scope of work	Complete Servicing/ overhauling of compressor is required for sat ops	a. Removal of compressor from the system, servicing and overhauling of compressor. Replacement of degraded/ defective components and re-installation of compressor with the system. b. Calibration of 07 x pressure gauges and replace if degraded/ defective c. Replacement of 02 x degraded drain valves. d. Servicing/ overhauling of relief valves and testing of relief valves on following limits - i HP relief valve 30 Bar - ii LP relief valve 5 Bar e. Pressure testing, rumbling cleaning and NDT of LP air bottle & relief valve. f. Bottle is to be dismantled and fitted back after pressure testing, rumbling cleaning and NDT. g. Pressure test of 05 x LP air reducer, for satisfactory operation (Dia 1" pressure 10 MPa). h. Reducers are fitted back. j. Repair/ maintenance of LP air system 08 x valves Dia 1.5" fitted on distribution panel on FM-200. k. Special tools and spares are to be arrange by the firm for said work. l. The firm will be responsible to undertake any work not covered above to ensure good quality of work. m. The firm will be responsible for welding/ cutting, if required. n. The firm will be responsible for requirement of external services. p. The firm will be responsible for all removal, transportation and installation work during warranty/ guarantee period claims and in case of any re-work. q. Any damage/ defect/ wear tear occurred during course of repair and replacement of system / equipment will be repaired by the firm. r. There will be no growth of work.	As per requirement
11.	Technical	As per scope of work		

	Specs	
12.	Eligibilities	a. The firm should visit onboard and carry out inspection to establish the extent of required work and spares b. The firm should have good experience of the same kind of work required onboard. c. The firm should be NTN/GTN registered
13.	EDC	14 x days after issuance of work/ confirmation order
14.	Warranty	01 year from the date of acceptance
15.	Acceptance Criteria	a. Satisfactory work done by the firm. b. Practical acceptance by SS

REFURBISHMENT OF METALLIC STAIRS - PMSS NUSRAT

S No	Details			
1.	Ships Name	PMSS NUSRAT		
2.	Parent Equipment	Metallic stairs		
3.	Quantity	03 x No		
4.	Justification for Work	Metallic stairs are deteriorated due to FWT with passage of time		
5.	Work Required	a	b	c
		Defect/ Routine List	Repair Work Required	Services Required
		Metallic stairs are deteriorated due to FWT with passage of time	Refurbishment of metallic stairs for sat ops	As per Serial 6
6.	Detailed scope of work	a	b	d
		Detail of Repair Work Required	Detail of Services Required	Spares Required
		Refurbishment of metallic stairs for sat ops	a. Under mentioned stairs are to be refurbished: i. Q/deck ii. Evac compartment iii. signal deck b. Replacement of hand rails. c. Replacement aluminum plates. d. Replacement of securing eyes/ bases including nuts & bolts with new. e. Replacement of base plates with new. f. Buffing work if required g. All Special tools and spares are to be arrange by the firm for said work. h. The firm will be responsible to undertake any work not covered above to ensure good quality of work. j. The firm will be responsible for welding/ cutting, if required. k. The firm will be responsible for requirement of external services. l. The firm will be responsible for all removal, transportation and installation work during warranty/ guarantee period claims and in case of any re-work. m. There will be no growth work	As per requirement
7.	Technical Specs	As per scope of work		
8.	Eligibilities	a. The firm should visit onboard and carry out inspection to establish		

		the extent of required work and item b. The firm should be having good experience of the same kind of work required onboard. c. The firm should be NTN/GTN registered
9.	EDC	03 week after issuance of work/ confirmation order
10.	Warranty	01 year from the date of acceptance
11.	Acceptance Criteria	a. Satisfactory work done by the firm. b. Practical acceptance by SS

REPAIR/ MAINTENANCE OF WASHROOMS - PMSS INDUS/ EXO

S No	Details													
1.	Ships Name	PMSS INDUS												
2.	Quantity	03 x Washroom												
3.	Source of Availability	Local Market												
4.	Justification for Work	Repair and maintenance of the water supply, drainage and sewerage UPVC piping systems associated with various washrooms of PMSS INDUS is urgently required to stop leakage/ seepage, prevent further deterioration of the building infrastructure and avoid damage to adjoining offices, rooms and accommodation areas. The areas identified for repair/maintenance are as follows: <table><tr><th>S No</th><th>Washrooms</th><th>Affected Areas</th></tr><tr><td>a.</td><td>Washroom in the Parking ramp</td><td>EXO BMG office</td></tr><tr><td>b.</td><td>Sailor's Washroom at 1st Floor (Left side)</td><td>Sickbay (Officer Detention Room)</td></tr><tr><td>c.</td><td>Sailor's Washroom at 1st Floor (Right side)</td><td>Sailor's Accommodation (Room No 10)</td></tr></table>	S No	Washrooms	Affected Areas	a.	Washroom in the Parking ramp	EXO BMG office	b.	Sailor's Washroom at 1 st Floor (Left side)	Sickbay (Officer Detention Room)	c.	Sailor's Washroom at 1 st Floor (Right side)	Sailor's Accommodation (Room No 10)
S No	Washrooms	Affected Areas												
a.	Washroom in the Parking ramp	EXO BMG office												
b.	Sailor's Washroom at 1 st Floor (Left side)	Sickbay (Officer Detention Room)												
c.	Sailor's Washroom at 1 st Floor (Right side)	Sailor's Accommodation (Room No 10)												
5.	Work Required	The contractor shall carry out all necessary repair and maintenance works at the identified locations, including but not limited to the following: a. Detailed inspection of existing water supply, drainage and sewerage lines, UPVC pipes, joints, fittings, valves, traps and associated sanitary installations to identify leakage, blockage, damaged components and other defects. b. Removal and replacement of defective/damaged UPVC pipes, joints, bends, tees, sockets, traps, valves, connectors and other associated fittings, wherever required. c. Opening of walls, floors, ceilings or other surfaces, where necessary, for access to concealed pipelines and subsequent reinstatement/finishing of the affected surfaces after completion of repair work. d. Complete testing of repaired/replaced water supply and sewerage lines to ensure that the system is leak-free, properly aligned, adequately supported and functioning satisfactorily. e. All works shall be carried out in a proper, professional and workmanlike manner using suitable quality materials and fittings.												

		<table><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></table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
		a	b	c				
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required						
6.	Detailed scope of work	<table><tr><td> a. Identification, tracing and rectification of all sources of leakage, seepage and water ingress in existing water supply, drainage and sewerage pipelines, including concealed and exposed pipework. b. Careful removal and dismantling of damaged, cracked, deteriorated, corroded, deformed or leaking UPVC pipes and fittings, as identified at site. c. Supply and installation of new UPVC pipes, joints, bends, tees, sockets, reducers and other associated fittings of appropriate size, type and specification, complete in all respects, wherever replacement is required. d. Repair or replacement of defective valves, traps, connectors, sanitary fittings and other plumbing components, wherever found necessary, to ensure proper functioning and leak-free operation of the system. e. Dismantling and proper rejoining of improperly fitted, loose, defective or leaking pipe connections. All joints shall be properly aligned, secured and sealed using suitable materials and approved installation practices. f. Removal of all defective/existing materials, broken pipework, fittings, construction waste and debris generated during the repair works, followed by proper disposal at a location approved by the Engineer-in-Charge/competent authority. g. Careful opening, chasing, dismantling or removal of affected portions of walls, floors, ceilings, masonry, plaster, tiles or other civil works, wherever required to gain access to concealed or embedded pipelines. Such work shall be carried out without causing unnecessary damage to adjoining structures or finishes. h. Complete reinstatement of all walls, floors, ceilings, plaster, tiles and other surfaces disturbed or damaged during execution of the plumbing works. Reinstatement shall be carried out to match the existing surface and finish, complete in all respects. j. Proper sealing, waterproofing and finishing of all repaired joints, penetrations, chases and affected areas using suitable and approved materials to ensure a durable repair and minimize the possibility of recurrence of leakage or seepage. k. Upon completion of the repair works, all repaired water supply, drainage and sewerage systems shall be thoroughly tested for leakage, seepage, proper flow, pressure and satisfactory operation, as applicable. l. Any defects, deficiencies or leakages identified during testing shall be rectified by the contractor at no additional cost until the system is found satisfactory and accepted by the end user. m. All works shall be executed in a proper and workmanlike manner, using good-quality materials and approved workmanship, and shall include all labour, tools, equipment, consumables, transportation, dismantling, disposal and incidental works necessary for satisfactory completion of the job. </td><td> All required materials shall be provided by the contractor unless otherwise specified by the procuring agency. Materials may include, as applicable: a. UPVC pipes of suitable diameter and pressure rating. b. UPVC elbows, bends, tees, sockets, reducers and couplers. c. UPVC unions and other pipe fittings. d. Traps, valves and connectors. e. Pipe clamps, supports and fixing accessories. f. Solvent cement, sealants and jointing materials. g. Sanitary fittings and associated accessories, wherever required. h. Cement, sand, mortar and other materials required for civil reinstatement. j. Paint/finishing materials required for restoration of disturbed surfaces. Exact quantities and sizes shall be determined after site inspection and shall be as per actual requirement. </td></tr></table>	a. Identification, tracing and rectification of all sources of leakage, seepage and water ingress in existing water supply, drainage and sewerage pipelines, including concealed and exposed pipework. b. Careful removal and dismantling of damaged, cracked, deteriorated, corroded, deformed or leaking UPVC pipes and fittings, as identified at site. c. Supply and installation of new UPVC pipes, joints, bends, tees, sockets, reducers and other associated fittings of appropriate size, type and specification, complete in all respects, wherever replacement is required. d. Repair or replacement of defective valves, traps, connectors, sanitary fittings and other plumbing components, wherever found necessary, to ensure proper functioning and leak-free operation of the system. e. Dismantling and proper rejoining of improperly fitted, loose, defective or leaking pipe connections. All joints shall be properly aligned, secured and sealed using suitable materials and approved installation practices. f. Removal of all defective/existing materials, broken pipework, fittings, construction waste and debris generated during the repair works, followed by proper disposal at a location approved by the Engineer-in-Charge/competent authority. g. Careful opening, chasing, dismantling or removal of affected portions of walls, floors, ceilings, masonry, plaster, tiles or other civil works, wherever required to gain access to concealed or embedded pipelines. Such work shall be carried out without causing unnecessary damage to adjoining structures or finishes. h. Complete reinstatement of all walls, floors, ceilings, plaster, tiles and other surfaces disturbed or damaged during execution of the plumbing works. Reinstatement shall be carried out to match the existing surface and finish, complete in all respects. j. Proper sealing, waterproofing and finishing of all repaired joints, penetrations, chases and affected areas using suitable and approved materials to ensure a durable repair and minimize the possibility of recurrence of leakage or seepage. k. Upon completion of the repair works, all repaired water supply, drainage and sewerage systems shall be thoroughly tested for leakage, seepage, proper flow, pressure and satisfactory operation, as applicable. l. Any defects, deficiencies or leakages identified during testing shall be rectified by the contractor at no additional cost until the system is found satisfactory and accepted by the end user. m. All works shall be executed in a proper and workmanlike manner, using good-quality materials and approved workmanship, and shall include all labour, tools, equipment, consumables, transportation, dismantling, disposal and incidental works necessary for satisfactory completion of the job.	All required materials shall be provided by the contractor unless otherwise specified by the procuring agency. Materials may include, as applicable: a. UPVC pipes of suitable diameter and pressure rating. b. UPVC elbows, bends, tees, sockets, reducers and couplers. c. UPVC unions and other pipe fittings. d. Traps, valves and connectors. e. Pipe clamps, supports and fixing accessories. f. Solvent cement, sealants and jointing materials. g. Sanitary fittings and associated accessories, wherever required. h. Cement, sand, mortar and other materials required for civil reinstatement. j. Paint/finishing materials required for restoration of disturbed surfaces. Exact quantities and sizes shall be determined after site inspection and shall be as per actual requirement.				
a. Identification, tracing and rectification of all sources of leakage, seepage and water ingress in existing water supply, drainage and sewerage pipelines, including concealed and exposed pipework. b. Careful removal and dismantling of damaged, cracked, deteriorated, corroded, deformed or leaking UPVC pipes and fittings, as identified at site. c. Supply and installation of new UPVC pipes, joints, bends, tees, sockets, reducers and other associated fittings of appropriate size, type and specification, complete in all respects, wherever replacement is required. d. Repair or replacement of defective valves, traps, connectors, sanitary fittings and other plumbing components, wherever found necessary, to ensure proper functioning and leak-free operation of the system. e. Dismantling and proper rejoining of improperly fitted, loose, defective or leaking pipe connections. All joints shall be properly aligned, secured and sealed using suitable materials and approved installation practices. f. Removal of all defective/existing materials, broken pipework, fittings, construction waste and debris generated during the repair works, followed by proper disposal at a location approved by the Engineer-in-Charge/competent authority. g. Careful opening, chasing, dismantling or removal of affected portions of walls, floors, ceilings, masonry, plaster, tiles or other civil works, wherever required to gain access to concealed or embedded pipelines. Such work shall be carried out without causing unnecessary damage to adjoining structures or finishes. h. Complete reinstatement of all walls, floors, ceilings, plaster, tiles and other surfaces disturbed or damaged during execution of the plumbing works. Reinstatement shall be carried out to match the existing surface and finish, complete in all respects. j. Proper sealing, waterproofing and finishing of all repaired joints, penetrations, chases and affected areas using suitable and approved materials to ensure a durable repair and minimize the possibility of recurrence of leakage or seepage. k. Upon completion of the repair works, all repaired water supply, drainage and sewerage systems shall be thoroughly tested for leakage, seepage, proper flow, pressure and satisfactory operation, as applicable. l. Any defects, deficiencies or leakages identified during testing shall be rectified by the contractor at no additional cost until the system is found satisfactory and accepted by the end user. m. All works shall be executed in a proper and workmanlike manner, using good-quality materials and approved workmanship, and shall include all labour, tools, equipment, consumables, transportation, dismantling, disposal and incidental works necessary for satisfactory completion of the job.	All required materials shall be provided by the contractor unless otherwise specified by the procuring agency. Materials may include, as applicable: a. UPVC pipes of suitable diameter and pressure rating. b. UPVC elbows, bends, tees, sockets, reducers and couplers. c. UPVC unions and other pipe fittings. d. Traps, valves and connectors. e. Pipe clamps, supports and fixing accessories. f. Solvent cement, sealants and jointing materials. g. Sanitary fittings and associated accessories, wherever required. h. Cement, sand, mortar and other materials required for civil reinstatement. j. Paint/finishing materials required for restoration of disturbed surfaces. Exact quantities and sizes shall be determined after site inspection and shall be as per actual requirement.							
7.	Eligibilities	<table><tr><td> a. Firm must have qualified and experienced technical staff, including certified plumbers, electricians and tile installers. b. Firms have to provide authorization letter of their principal firms and bank </td><td></td></tr></table>	a. Firm must have qualified and experienced technical staff, including certified plumbers, electricians and tile installers. b. Firms have to provide authorization letter of their principal firms and bank					
a. Firm must have qualified and experienced technical staff, including certified plumbers, electricians and tile installers. b. Firms have to provide authorization letter of their principal firms and bank								

		statement of last 01 years of their firm c. Firms need to include freight/ insurance charges and custom duties/ taxes, etc (as applicable) in quotation. d. Firm Representative must visit site and understand the existing conditions before submitting tender e. In case of failure to meet acceptance criteria or any defect during physical testing of items installed during renovation, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time
8.	EDC	Within 30 days
9.	Acceptance Criteria	Satisfactory standard of entire renovation as requirement of Sqn

PROCUREMENT & INSTALLATION OF PCBS OF TRANSAS RADAR - PMSS BARKAT

S No	Details				
1.	Ships Name	PMSS BARKAT			
2.	Parent Equipment	TRANSAS RADAR			
3.	Model	NR-4000			
4.	Sub Equipment	SCANNER UNIT			
5.	Assembly Component	TRIGGER PCB & INPUT POWER PCB			
6.	Quantity	S No	Item Description		Quantity
		a.	TRIGGER PCB		01
		b.	INPUT POWER PCB		01
7.	Source of Availability	Local			
8.	Justification for Work	TRIGGER PCB & INPUT POWER PCB is malfunctioning during normal operations			
9.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		TRIGGER PCB & INPUT POWER PCB are malfunctioning during normal operations	Procurement & Installation of Trigger PCB & Input Power PCB along with services/spares as per technical specifications required	As per Serial 10	As per Serial 10
10.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		a. Procurement & Installation of TRIGGER RGB- & INPUT POWER PCB of TRANSAS NR-4000 Radar.	• Cleaning and inspection of Scanner Unit.	a. 01 x Dehumidifier (CROWN MD-395)	
		b. All connections must be tightened properly.	• Repair/ replacement of defective/ degraded connectors, electric wire etc.	b. 02 x 12V7AH Battery Backup with case	
		c. Requirement of external services, if required, will be responsibility of firm.	• Proper fitting of TRIGGER PCB & INPUT POWER PCB with rigging of cables		
		d. All spares (must be genuine), tools, special equipment /accessories, required for said repair/ maintenance are to be arranged by the firm.			

		e. Any damage/ defect/ wear or tear occurred during course of removal; repair and installation of system/ equipment will be repaired/ met by firm. f. The firm will be responsible for all removal, transportation and installation work during warranty/ guarantee periods claims in case of any rework. g. No growth work will be processed.			
11.	Technical Specs	Procurement & Installation of TRANSAS NR-4000 Radar Trigger & Input Power PCB			
12.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN /GST registered.			
13.	EDC	30 x days after issuance of work/ confirmation order			
14.	Warranty	01 Year or as per OEM standards (whichever is higher)			
15.	Acceptance Criteria	a. Satisfactory work done by the firm. b. Successful completion and acceptance by the end user. c. Satisfactory trials (HATs/ SATs).			
16.	Any other relevant info	OEM certified quality is required			

**PROCUREMENT AND APPLICATION OF ANTI SKID PAINT OF GUN DECK, SIGNAL DECK
AND BRIDGE TOP - PMSS NUSRAT**

S No	Details												
1.	Ships Name	PMSS NUSRAT											
2.	Parent Equipment	Anti-Skid paint on Gun deck, Signal deck & Bridge Top											
3.	Assembly Component	Gun deck, Signal deck & Bridge Top											
4.	Quantity	2500 Square Feet (Area)											
5.	Source of Availability	Local											
6.	Justification for Work	Fresh Anti Skid paint on Gun Deck, Signal Deck & Bridge Top is required in upcoming DED to ensure safety of men and material											
7.	Work Required	As detail scope of work											
8.	Detailed scope of work	<table><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><tr><td>a. Removal of previously applied paint chipping/scrapping b. Grit blasting using mixture of copper slag & silica c. Detergent De-Greasing d. Solvent De-Greasing e. Application of GP-3 primer (03 coats). f. Application of anti-skid paint g. Application of Dark Gray Epoxy coat (02 coats)</td><td></td><td>25 x Kits of LAPCO (Anti-skid Paint)</td></tr></table>			a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	a. Removal of previously applied paint chipping/scrapping b. Grit blasting using mixture of copper slag & silica c. Detergent De-Greasing d. Solvent De-Greasing e. Application of GP-3 primer (03 coats). f. Application of anti-skid paint g. Application of Dark Gray Epoxy coat (02 coats)		25 x Kits of LAPCO (Anti-skid Paint)
		a	b	c									
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required									
a. Removal of previously applied paint chipping/scrapping b. Grit blasting using mixture of copper slag & silica c. Detergent De-Greasing d. Solvent De-Greasing e. Application of GP-3 primer (03 coats). f. Application of anti-skid paint g. Application of Dark Gray Epoxy coat (02 coats)		25 x Kits of LAPCO (Anti-skid Paint)											
9.	Technical Specs	As per OEM Manual											
10.	Eligibilities	Reputable Firm having experience of carrying out anti-skid paint work											
11.	EDC	02 x Weeks after issuance of work/confirmation order.											
12.	Warranty	03 Year											
13.	Acceptance Criteria	a. Visual inspection. b. Provision of certificates & Documentation. c. Satisfactory work done by the firm. d. Successful completion of acceptance by the end user.											
14.	Any other relevant info	Quality material is to be used.											

**REPAIR/ REPLACEMENT OF ANTI SKID PAINT OF WEATHER DECK PORT & STBD
ALLEWAY - PMSS NUSRAT**

S No	Details			
1.	Ships Name	PMSS NUSRAT		
2.	Parent Equipment	Anti-Skid paint on Weather deck (Fox'l, Q deck, Port & Stbd alleyway)		
3.	Assembly Component	Fox'l, Q Deck, Port & Stbd alleyway		
4.	Quantity	2500 Square Feet (Area)		
5.	Source of Availability	Local		
6.	Justification for Work	DED of PMSS NUSRAT has been planned in near future. Therefore, excessive chipping & welding/cutting work including replacement of weather deck, Port & Stbd alleyway deck plates is planned in DED due which fresh anti-skid is critically required to be undertaken to ensure safety of men & material		
7.	Work Required	As detail scope of work		
8.	Detailed scope of work	a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
		e. Removal of previously applied paint chipping/scrapping f. Grit blasting using mixture of copper slag & silica g. Detergent De-Greasing h. Solvent De-Greasing h. Application of GP-3 primer (03 coats). i. Application of anti-skid paint. j. Application of Dark Gray Epoxy coat (02 coats)	-	25 x Kits of LAPCO (Anti-skid Paint)
9.	Technical Specs	As per OEM Manual		
10.	Eligibilities	Reputable Firm having experience of carrying out anti-skid paint work		
11.	EDC	02 x Weeks after issuance of work/confirmation order.		
12.	Warranty	03 Year		
13.	Acceptance Criteria	a. Visual inspection. b. Provision of certificates & Documentation. c. Satisfactory work done by the firm. d. Successful completion of acceptance by the end user.		
14.	Any other relevant info	Quality material is to be used.		

PROCUREMENT OF 04 X DIVING SETS WITH ACCESSORIES - PMSS HINGOL

S No	Details	
1.	Ships Name	PMSS HINGOL
2.	Parent Equipment	The diving equipment to be utilized for safe conduct of Diving ops requirements.
3.	Sub Equipment	A robust diving set with proven performance providing the diver with the confidence required to accomplish any diving operation. The equipment reliable and easy to operate/ maintain.
4.	Assembly Component	a. 02 x Diving Cylinder 9-11 Ltrs, Aluminum Alloy. b. 01 x Bouncy Compensator with HP Connector Hose. c. 01 x Diving Regulators 2 Stages Octopus Type With Depth Pressure & Compass Gauges Console. d. 01 x Regulator to cylinder Attachment Valves (Twin-J Valve) with Reserve. e. 01 x Regulator to cylinder Attachment Valves (Single-J Valve) with Reserve. f. 01 x Diver harness configurable for single or double cylinder operation. g. 01 x 3mm wet suit hood and boots. h. 01 x 5mm diver boots. j. 01 x Diver face mask. k. 01 x Diving fins. l. Complete documentation to include part catalogue operation and maintenance manuals along with software.
5.	Make	Draeger Safety AG & Co. Germany/ Aqua-Lung France or Equivalent
6.	Qty	04 In Sets
7.	Detailed scope of work	Procurement of open circuit diving set with complete accessories/ Technical details/ Literature/ Brocher.
8.	Technical Spec	A twin compressed air cylinder (02 x 10 Ltrs) with connectors and emergency air supply bailout bottle (with BC)
9.	Eligibility Criteria	a. Any Local/ International registered firm with good reputation. b. Having capability w.r.t experience/ expertise etc for said work.
10.	Warranty	02 Years
11.	Acceptance Criteria	a. Genuine OEM Certified Brand New Stores will only be acceptable. b. Inspection by end/ Specialist user and after successful trials.

PROCUREMENT OF H2O HYDROSTATIC RELEASE UNIT FOR LIFE RAFTS - PMSA SHIPS

S No	Details				
1.	Ships Name	PMSS BARKAT			
2.	Parent Equipment	H2O Hydrostatic Release Unit for life raft			
3.	OEM	Any suitable			
4.	Model	G91154/0902			
5.	Serial No	5199199			
6.	Origin	Any suitable			
7.	Sub Equipment	H2O Hydrostatic Release Unit			
8.	Part No. of Assembly Component	HAMMAR H2O			
9.	Quantity	S No	Ship	Qty Req	
		ii.	PMSS BARKAT	03	
		jj.	PMSS REHMAT	03	
		kk.	PMSS KASHMIR	04	
		ll.	PMSS KOLACHI	04	
		mm.	PMSS DASHT	03	
		nn.	PMSS NUSRAT	03	
		oo.	PMSS HINGOL	04	
		pp.	PMSS RAFAQAT	03	
		j.	PMSS SABQAT	04	
		k.	PMSS ZHOB	04	
		l.	PMSS BASOL	03	
		GRAND TOTAL		38	
10.	Source of Availability	Local			
11.	Justification for Work	Item required to fulfill SOLAS requirement of life rafts onboard ship			
12.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Provision 03 x H2O Hydrostatic Release Unit	Provision of H2O Hydrostatic Release Unit	As per Serial 13	As per Serial 13
13.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Provision of H2O Hydrostatic Release Unit	Procurement H2O Hydrostatic Release Unit	31 x H2O Hydrostatic Release Unit	
		All spares (must be genuine)			
		Special tools equipment /accessories required to be used for said Repair/ replacement work are to be arranged by the firm.			
		Firm will be responsible in case of any damage/defect/wear tear occurred during course of said work.			
		Transportation of equipment will be the responsibility of the firm			
		Requirement of external services, if required will be responsibility of firm			

14.	Technical Specs	As per IT Spec
15.	Eligibilities	a Have Past experience w.r.t procurement of items onboard PMSA Ships. b Local contractor must visit ship to understand exact requirement/ Scope of work. c The firm should be NTN /GST registered
16.	EDC	07 days after issuance of work/ confirmation order.
17.	Warranty	02 x Year (The Expiry date is 02 years from month of installation onboard)
18.	Acceptance Criteria	a. Satisfactory work done by the firm. b. Successful completion and acceptance by the end user. c. Satisfactory trials (HATs/ SATs).

IT NO: IT/PM/96/33/2026-27

IT SPECIFICATIONS

PROCUREMENT OF LUGGAGE SCANNER MACHINE – D(SEcurity)

S No	Details					
1.	Ships Name	HQ PMSA				
2.	Parent Equipment	Luggage Scanner Machine				
3.	OEM	Dahua security				
4.	Model	DHI-ISC-M6550A				
5.	Origin	China				
6.	Sub Equipment	Luggage Scanner Machine				
7.	Quantity	S No	Description	Qty Req		
		a.	Luggage Scanner Machine DHI-ISC-M6550A	01 in No		
8.	Justification for Work	Said item is critically required for enhancing security of HQ PMSA.				
9.	EDC	FRB & SBR registered firm				
10.	Warranty	Year				
11.	Acceptance Criteria	Installation and Training is the responsibility of Firm Acceptance by End User				
12.	Any other relevant information	Upon inspection of items				

**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	CRRC China			
4.	Model	MKD-50/150			
5.	Origin	UK			
6.	Sub Equipment	Port & Stbd Engine			
7.	Part No. of Assembly Component	As per relevant JIC			
8.	Quantity	02 (Port & Stbd)			
9.	Source of Availability	OEM			
10.	Justification for Work	Conduct of 10000 Hrs PMS Routines of Main Engines			
11.	Work Required	a	b	c	d
		Defect List	Repair Work Required	Services Required	Spares Required
		PMS	Check crankcase depression	Yes	Yes Firm should work out all spares required to conduct the routine form relevant JICs
			Remove/ Recondition/ Install Cylinder Heads		
			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 with balancing		
			Check and repair forced circulation cooling water preheater		
			Motor overhaul		

			Clean examine and fest cooling water thermostatic valve		
			Check functional testing of all safeties (temp, pressure etc)		
			Clean, examine and test lub oil thermostatic valve		
			Remove/Recondition/reinstall		
			Fuel Pumps		
			Replace all safeties including temperature and pressures sensors		
			Repair & replacement of gear driven Lub Oil Pumps of both engine		
12.	Technical Specs	As per relevant technical manual			
13.	Eligibilities	OEM authorized rep Spares to be provided by firm			
14.	EDC	30 Days after award of contract			
15.	Warranty	01 Year			
16.	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 SPECIFICATIONS
INSTALLATION OF CCTV SYSTEM AT PMSA BASE ORMARA

S No	IT Specifications				
1.	Parent Equipment	CCTV System			
2.	Store Required	S. No	Item Description	Den	Qty
		1.	Top Fiber Cable 12 Core	Mtr	700
		2.	CAT 6 3M Original	Mtr	200
		3.	2MP 25 x Starlight IR Network PTZ Camera	No	2
		4.	4MP IR Vari-Focal Bullet WizSense Network Camera	No	4
		5.	POE Switch 4 Port with 5FP	No	6
		6.	5 Port Normal Switch	No	1
		7.	SFP Module China	Pair	6
		8.	SFP Switch 4 Port China	No	6
		9.	PVC Pipe ¾" Jaddah	Ft	300
		10.	HDPE Pipe Durable Light Weight HDPE Pipe One Inch 3MM PN 10	Mtr	700
		11.	Hard Disk 8TB	No	1
		12.	16CH 2HDD 1U Network Video Recorder	No	2
		13.	Baby Rack 2U	No	1
		14.	Rack 9U	No	1
		15.	Power Cable 3.029 Outdoor	Coil	9
		16.	Joystick Controller	No	1
		17.	Metal Box 10 x 12	No	5
		18.	RJ 45 Controller	No	20
		19.	Camera Box 4 x 6	No	5
		20.	Dupilex Sheet with Back Box	No	1
		21.	LED	No	2
		22.	3 KVA UPS with Standard Backup Time	No	1
		23.	Fiber Laying with PVC	Mtr	700
		24.	CAT 6 Laying with PVC	Mtr	250
		25.	Installation, Testing & Commissing of Above Items	Job	1
		26.	Fiber Splicing : Conecting Optical Fibers for Efficient Data Transmission	Job	1
		27.	Transportation Charges	Job	1
3.	Details scope of work	1. Items is to delivered at Door Step (HQ PMSA).			
4.	Eligibility Criteria	Acceptance by End-user			
5.	EDC	Within 30 Days			
6.	Warranty	01 x Year			
7.	Acceptance Criteria	Accepted by end user			

CONDUCT OF PMS ROUTINE (PMS NO 3-1101-0000 MOP 019) TESTING OF FUEL INJECTORS OF FSME AND ASME - PMSS BARKAT

S No	Details				
1.	Ships Name	PMSS BARKAT			
2.	Parent Equipment	Main Engines (FSME & ASME)			
3.	OEM	MTU			
4.	Model	16 7 396TB93			
5.	Serial No	5590545 and 5590547			
6.	Origin	Germany			
7.	Sub Equipment	Fuel System			
8.	Assembly Component	Fuel Injectors			
9.	Part No. of Assembly Component	550-200-0129			
10.	Quantity	16 x Injectors of Each Engine Total 32 in Nos			
11.	Source of Availability	Local			
12.	Justification for Work	Preventive Maintenance routine (PMS NO 3-1101-000 MOP 019)			
13.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		Conduct of PMS routine PMS No 3-1101-0000 MOP No 019	Re-furbishing/ servicing and set to work of fuel injectors	As per Serial 14	As per Serial 14

14.	Detailed scope of work	a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
		Conduct of PMS routine PMS No 3-1101-0000 MOP No 019	- Removal of fuel lines from injectors. - Removal of 32 x fuel injectors and pressure sleeves from main engines. - Removal of carbon deposits from the nozzles. - Replacement of all O-rings with new. - Replacement of all injector seals with new. - Testing and check for correct operation of injectors. - Installation of the injectors after testing. - Installation of fuel lines.	O rings and seals of injectors
		Testing certificate	Firm will provide pressure test certificate of all 32 x fuel injectors.	
		Inspection, testing and replacement of fuel injectors lines	Inspection and testing of fuel injectors lines is to be carried out and replace fuel injectors lines if necessary	32 in no fuel lines
		All fuel system must be leakage free.		
		All spares (must be genuine)		
		Special tools equipment /accessories required to be used for said Repair/ replacement work are to be arranged by the firm.		
		Firm will be responsible in case of any damage/defect/wear tear occurred during course of said work.		
		Transportation of equipment will be the responsibility of the firm		
		Requirement of external services, if required will be responsibility of firm.		
15.	Technical Specs	Standard procedures must be follow by using special tools. Firm is responsible to provide pressure test certificate.		
16.	Eligibilities	a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work. b. The firm must have sufficient experience of same kind of work and experienced. c. The firm should be NTN /GST registered		
17.	EDC	14 x days after issuance of work/confirmation order.		
18.	Warranty	02 Year		
19.	Acceptance Criteria	a. Satisfactory work done by the firm. b. Successful completion and acceptance by the end user. c. Satisfactory trials (HATs/SATs).		

PROCUREMENT OF 1040 LTRS LUB OIL FOR MDES PMS ROUTINE - PMSS RAFAQAT & PMSS SABQAT

S No	Details					
1.	Ships Name	PMSS RAFAQAT & PMSS SABQAT				
2.	Parent Equipment	Main Diesel Engine				
3.	OEM	Caterpillar USA				
4.	Model	Caterpillar 3516				
5.	Serial No	SMJ 00029 (Stbd) SMJ 00024 (Port)				
6.	Origin	USA				
7.	Sub Equipment	Lubrication System				
8.	Assembly Component	Port and Stbd MDEs				
9.	Part No. of Assembly Component	MDEs Caterpillar 3516				
10.	Quantity	S No	Part No	Description	Qty	Ship
		a.	3E9840 9150-70-519-7303	CAT DEO 15W40 LUB OIL	520 Ltrs	PMSS SABQAT
		b.	3E9840 9150-70-519-7303	LUB OIL	520 Ltrs	PMSS RAFAQAT
11.	Source of Availability	International/ Local Market				
12.	Justification for Work	Requirement of Lub Oil for MDEs for 400 hrs PMS rou recommendation OEM				
13.	Work Required	Requirement of Lub Oil CAT DEO 15W40				
14.	Detailed scope of work	Requirement of Lub Oil for MDEs for 400 hrs PMS routine recommendations by OEM				
15.	Technical Specs	As Per OEM manual				
16.	Eligibilities	Reputable firm having working experience of related activity.				
17.	EDC	30 days				
18.	Warranty	1 year				
19.	Acceptance Criteria	Recommended by OEM.				

PROCUREMENT OF STARTER AIR MOTOR (LEFT SIDE) FOR MAIN ENGINE NO 03 - PMSS ZHOB

S No	Details				
1.	Ships Name	PMSS ZHOB			
2.	Parent Equipment	Main Engine No 3			
3.	OEM	MTU			
4.	Model	16V4000M73L			
5.	Serial No	N/A			
6.	Origin	Germany			
7.	Sub Equipment	Main Engine No 3			
8.	Assembly Component	Starter Air Motor (Left Side)			
9.	Part No. of Assembly Component	X52617300001			
10.	Quantity	01			
11.	Source of Availability	Procurement of starter air motor (Left Side) for main Engine			
12.	Justification for Work	Procurement of starter air motor (Left Side) for main Engine			
13.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		N/A	Procurement of starter air motor (Left Side) for main Engine No 3 through OEM/ local engineering house.	Procurement of starter air motor (Left Side) for main Engine No 3 through OEM/ local engineering house.	Starter Air Motor (Left Side) Part No: X52617300001
14.	Detailed scope of work	a	b	c	
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
		Procurement of starter air motor (Left Side) for main Engine No 3 through OEM/ local engineering house.	Procurement of starter air motor (Left Side) for main Engine No 3 through OEM/ local engineering house.	Starter Air Motor (Left Side) Part No: X52617300001	
15.	Technical Specs	As per Technical Manual/ OEM.			
16.	Eligibilities	a. Must have relevant experience in procurement of said spares. b. Only OEM recommended spares must be used. c. Firm must visit site for understanding exact nature of defect/ hindrances involved in job prior quoting to avoid inconvenience on later stage after award of Work Order.			
17.	EDC	7 x Days			
18.	Warranty	2 x Years			
19.	Acceptance Criteria	a. OEM certified spares should be used. b. Technical specifications to be provided by Firm.			
20.	Any other relevant info	Contact SS/ MEO/ firm visit onboard to resolve any query.			

Note: 100% Payment after completion by CNA

Director General
Pakistan Maritime Security Agency
Plot No 34-A, Dockyard Road
KARACHI
Telephone 021-48509194
Fax 99214625
E-Mail dpcc@pmsa.gov.pk

INVITATION TO TENDER GENERAL INSTRUCTIONS

1. CONDITIONS GOVERNING CONTRACT:

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

2. SUBMISSION OF TENDER:

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

a. **TECHNICAL OFFER:** Should contain all relevant details and specifications as per the IT specifications. Literature / Brochure or any other relevant technical details may also be included in it. Technical offer should not contain the price. Indication of price in technical offer may render it null and void. The word “Technical Offer” should be clearly mentioned 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 is to be clearly mentioned. It should also contain a **pay order 2% in the shape of pay order of the offered value** as earnest money. Cross cheque or cash is not acceptable in this case. The offer received without earnest money will be rejected.

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

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

S No	Description	Unit Price	Qty	Total	Total Price
------	-------------	------------	-----	-------	-------------

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
------	-------------	-----	---------	---------------	-------------

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.