

SEPARATE QUOTATIONS REQUIRED FOR ATTACHED 78 X IT SPECIFICATIONS

SINGLE STAGE TWO ENVELOPE

INSTRUCTIONS FOR BIDDERS (SINGLE-STAGE, TWO-ENVELOPE 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-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 a single outer sealed envelope.

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, supported by documentary evidence
3. Details of sourcing arrangements for goods and/or services proposed for the assignment
4. Proposed methodology, work plan, and approach for successful and timely completion of the work
5. Copies of relevant documents, including but not limited to:
 - Company profile.
 - Registration certificates
 - NTN / STRN (where applicable)
 - Past performance certificates or client references
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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

PURCHASE OF STATIONERY STORE ITEMS FOR ALL PMSA UNITS

S No	Details					
1.	Ships Name	PMSS INDUS/WAREHOUSE				
2.	Parent Equipment	Stationery Stores				
3.	OEM	Pakistan/Local				
4.	Model	As Per Sample				
5.	Origin	Pakistan				
6.	Sub Equipment	Naval Stores				
7.	Quantity	See attached list				
8.	Source of Availability	Local Market				
9.	Justification for Work	Purchase of Stationery Stores items for all PMSA Units/Ships				
10.	Work Required	a	b	c	d	
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required	
		-	-	Purchase of Stores (See attached list (Page 1 & 2))	See over leaf	
11.	Detailed scope of work	a	b	c		
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required		
		N/A	N/A	N/A		
12.	Eligibilities	a. The firm should be NTN/GST registered. b. The firm should be registered with HQ PMSA				
13.	EDC	15 Days after Issuance of order				
14.	Warranty	06 Months after delivery				
15.	Acceptance Criteria	Accepted by Warehouse Staff				

LIST OF ITEMS

S.NO	DESCRIPTION	MAKE	MODEL	DEN	QTY
1.	BALL POINT BLUE	DOLLAR	BP-3	NOS	1800
2.	BALL POINT BLACK	DOLLAR		NOS	1200
3.	BALL POINT RED	DOLLAR		NOS	500
4.	DRY ERASE BOARD MARKER BLUE	DOLLAR	Round Tip 2mm	NOS	240
5.	DRY ERASE BOARD MARKER BLACK	DOLLAR		NOS	240
6.	DRY ERASE BOARD MARKER RED	DOLLAR		NOS	240
7.	DRY ERASE BOARD MARKER GREEN	DOLLAR		NOS	240
8.	GEL PEN BLUE	UNI BALL	SIGNO 0.7 MM	NOS	360
9.	GEL PEN BLACK			NOS	360
10.	GEL PEN RED			NOS	360
11.	ROLLER BALL PEN BLUE	UNI BALL	EYE MICRO UB 150	NOS	360
12.	ROLLER BALL PEN BLACK			NOS	360
13.	ROLLER BALL PEN RED			NOS	360
14.	ROLLER BALL PEN BLUE	UNI BALL	VISION ELITE	NOS	360
15.	ROLLER BALL PEN BLACK			NOS	360
16.	ROLLER BALL PEN RED			NOS	360
17.	ROLLER BALL PEN TOURQUIS			NOS	60
18.	CD R	MAXELL	700 MB	NOS	100
19.	CD RW		700 MB	NOS	300
20.	DVD R		4.7 GB	NOS	100
21.	DVD RW		4.7 GB	NOS	200
22.	FLAG ARROW	POST IT	PFA 1	PKT	600
23.	BLANCO CORRECTION PEN	PELIKAN	933D	NOS	240

24.	ENVELOP SE-5	As per Sample (Can be obtained from P&CC Dte)	NOS	2500
25.	ENVELOP SE-5 WHTIE		NOS	1000
26.	ENVELOP SE-6		NOS	1500
27.	ENVELOP SE-6A		NOS	800
28.	ENVELOP SE-6 WHITE		NOS	1500
29.	ENVELOP SE-6A WHITE		NOS	1000
30.	ENVELOP SE-8		NOS	500
31.	ENVELOP SE-8A		NOS	500
32.	ERASER SOFT	PELIKAN	AL20	NOS 420
33.	FILE COVER WHITE WITH CLIP PMSA DESIGN	As per Sample	NOS	500
34.	FILE COVER WHITE WITHOUT CLIP PMSA DESIGN		NOS	500
35.	BOX FILE BLUE	ELEGANT	N009BL	NOS 200
36.	BOX FILE WHITE D RING		NOS	150
37.	GLUE STICK 40 GRAMS	UHU	190	NOS 300
38.	GUM 1000ML	ADX	ARG1000	BTL 150
39.	HIGHLIGHTER NEON	DOLLAR	HL-625	NOS 400
40.	STAMP PAD INK 30ML	NAFEES	930 INK	NOS 50
41.	FILE FLAPPER REXINE	COSMO	As per Sample	NOS 100
42.	MAIL FOLDER A TO Z		NOS	61
43.	COPIER PRINTING PAPER LEGAL F4	PAPER ONE	PC70-F4	REAM 50
44.	COPIER PRINTING PAPER A4		PC70-A4	REAM 1000
45.	PAPER CUTTER BLADE	SDI	1404C	PKT 60
46.	PAPER CUTTER 18 MM	SDI	426	NOS 300
47.	PAPER CLIP 33MM COLOR	DELI	39716	PKT 600
48.	PROTECTOR SHEET A4	POLO	6-C	PKT 100
49.	PIN REMOVER POLO	KW	508	NOS 100
50.	PIN STAPLING 24/6	DOLLAR		PKT 500
51.	STICKY NOTE 3X 3 SMALL	PELIKAN	As per Sample	PAD 400
52.	STICKY NOTE 3X 4 MEDIUM			PAD 400
53.	STICKY NOTE 3X 5 LARGE			PAD 300
54.	STICKY NOTE 3X 5 MULTI COLOR LARGE			PAD 100
55.	PUNCHING MACHINE	DLI	DL-8250	NOS 80
56.	REGISTER COVER PMSA MONOGRAM (01,02 & 04 QR)	As per Sample (Can be obtained from P&CC Dte)		
			NOS	500
57.	SCALE STEEL12 " A PLUS		A+	NOS 150
58.	SCISSORS	SUNWOOD	91126	NOS 70
59.	SHARPENER ROTARY MACHINE	OPAL	YF-9106	NOS 32
60.	SHARPENER CHROME	DUX	DUX 501	NOS 350
61.	SOFT PENCIL (MY PENCIL WOW)	DOLLAR	PT-222	NOS 2000
62.	STAMP PAD BLUE 7 X 11	CRYSTAL	SP02	NOS 100
63.	STAPLER HALF STRIP	DELI	326	NOS 120
64.	FILE TAG COTTON 6" THREAD TYPE	As per Sample (Can be obtained from P&CC Dte)	BNDL	100
65.	FILE TAG COTTON 12" THREAD TYPE		BNDL	100
66.	FILE TAG COTTON 24" THREAD TYPE		BNDL	100
67.	COLOR PUSH PIN	DELI	E0021	PKT 200
68.	CLIP FILE A4	DELI	TTA4	NOS 250
69.	FILE SEPARATOR PVC (A TO Z/ 1 TO 20)	CHINA	FSA4	PKT 200
70.	BINDER CLIP 51 MM	DELI	E38561	PKT 30
71.	BINDER CLIP 41 MM		38562	PKT 20
72.	MINUTE SHEET 80 GRM GREEN	As per Sample (Can be obtained from P&CC Dte)	PAD	300
73.	FILE COVER BLUE PMSA		NO	3000
74.	PMSA SHORT HAND DIARY SMALL		PAD	500
75.	PMSA SHORT HAND DIARY MEDIUM		PAD	500
76.	PMSA EXECUTIVE DIARY		PAD	100
77.	PERMANENT MARKER BLUE	MERCURY	3014	NOS 240
78.	PERMANENT MARKER BLACK		NOS	240
79.	PERMANENT MARKER RED		NOS	120

IT NO: IT/81/02/2025-26
PURCHASE OF NAVAL STORE ITEMS FOR ALL PMSA UNITS

S No	Details			
1.	Ships Name	PMSS INDUS/ WAREHOUSE		
2.	Parent Equipment	Naval Stores		
3.	OEM	Pakistan/Local		
4.	Model	As Per Sample		
5.	Origin	Pakistan		
6.	Sub Equipment	Naval Stores		
7.	Quantity	See attached list (Page 1 & 2)		
8.	Source of Availability	Local Market		
9.	Justification for Work	Purchase of Naval Stores items for all PMSA Units/Ships		
10.	Work Required	a	b	c
		Defect/ Routine List	Repair Work Required	Services Required
		-	Purchase of Stores (See attached list Page 1 & 2)	See over leaf
11.	Eligibilities	a. The firm should be NTN/GST registered. b. The firm should be registered with HQ PMSA		
12.	EDC	15 Days after Issuance of order		
13.	Warranty	06 Months after delivery		
14.	Acceptance Criteria	Accepted by Warehouse Staff		

LIST OF ITEMS

S No	DESCRIPTION	BRAND	MODEL	DEN	QTY REQ
1.	ACID	LOCAL	LOCAL	LTR	200
2.	AIR WICK REFILL	AIR WICK	SANDAL WOOD	NOS	24
			TURQUOISE OASIS	NOS	24
			SUMMER DELIGHT	NOS	24
			CRISP LINEN & LILAC	NOS	12
			WINTER WALKS	NOS	24
			PINK SWEET PEA	NOS	12
			SMOOTH SATIN & MOON LILY	NOS	12
			WHITE FLOWER	NOS	24
			VANILA FLAVOUR	NOS	24
			MEDITERRANEAN SUN	NOS	12
			AQUA	NOS	24
			ICE	NOS	24
3.	AIR FRESHENER	PERFECT	MUSK	NOS	60
			2ZONE2	NOS	60
			AZZURA	NOS	48
			MAN	NOS	48
			COOL	NOS	48
			99	NOS	48
			BLOOM	NOS	60
			BAKHOOR	NOS	60
			DREAM	NOS	60
			HEAVEN	NOS	60
			TEA ROSE	NOS	60
			ASLEE	NOS	60
			JEANS	NOS	60
			MUBARAK	NOS	60
			GENTLE MAN	NOS	48
			LAVENDER	NOS	60
4.	BAG POLYTHENE 18X24	WIPES	18X24	ROLL	240
5.	BAG POLYTHENE 24 X 36	WIPES	24 X 36	ROLL	170
6.	BAG POLYTHENE 30 X 50	WIPES	30X50	ROLL	300
7.	CAR POLISH 450ML	FLAMINGO	OUD	NOS	48
			LEMON	NOS	36
			STRAWBERRY	NOS	36
8.	CHLORINE TABLETS	HI-CLEAN	100 TABLETS	BOX	03
9.	COOPEX POWDER	MORTINE	100 GMS	NOS	100
10.	COUNTRY BROOM	LOCAL	500 GMS	NOS	600
11.	COUNTRY BROOM (PHOOL JHARO)	LOCAL	400 GMS	NOS	100
12.	DUST BIN WITH COVER	PHEONIX	PEDDLE BIN	NOS	40
13.	DUST PICKER	PLASTIC	FINE QUALITY	NOS	60
14.	DUSTER	FINE QUALITY	FINE QUALITY (18X24)	PKT	150
15.	VEHICLE CLEANING TOWEL LARGE	SOGO	TOWEL TYPE	NOS	100

16.	COSMIC POLISH FOR V6 & V8 (FOR DG TPT)	KANGROO	KANGROO	NOS	12
17.	FURNITURE POLISH 450ML	FLAMINGO	LEMON ZEST	NOS	48
			FRESH FLOWER	NOS	48
			CITRUS MINT	NOS	24
18.	GLINT	GLINT	500 ML	NOS	300
19.	HAND WASH (FOR DG OFFICE) 500 ML	DOVE	LEVANDER	NOS	30
20.	HANDWASH 500 ML	LIFE BUOY	AELOVERA	NOS	100
			MINT	NOS	100
21.	HAND BRUSH	LOCAL	FINE QUALITY	NOS	100
22.	HARD BRUSH WITH HANDLE	LOCAL	FINE QUALITY	NOS	100
23.	INSULATION TAPE	OSAKA	BLACK	ROLL	60
24.	TAPE ADHESIVE BLACK 2 INCH	JHONSON	02 INCHES BLUE	ROLL	200
25.	TAPE ADHESIVE BLUE 2 INCH	JHONSON	02 INCHES BLACK	ROLL	200
26.	LEMON MAX DISH WASH BAR (FOR DG OFFICE) 475ML	LEMON MAX	LEMON (475ML)	NOS	120
27.	LIQUID SOAP 10 LTR PACKING	LOCAL	FINE QUALITY	LTR	1000
28.	LOTA PLASTIC	LOCAL	FINE QUALITY	NOS	48
29.	METAL POLISH/ BRASSO	KIWI	200 ML	NOS	24
30.	MOP (FLAT) FOR SHIP SIDE (LARGE)	SPONTEX	45CM BASE	NOS	30
31.	MORTIEN SPRAY FLYING INSECTS KILLER	MORTINE	550 ML	NOS	300
32.	MOSQUITO KILLER MACHINE	MORTINE	SMART PLUS	NO	30
33.	MOSQUITO KILLER MACHINE REFILL	MORTINE	SMART PLUS	NO	50
34.	NAPTHELENE BALL	LOCAL	FINE QUALITY	KG	50
35.	PAINT TRAY	LOCAL	FINE QUALITY	NOS	20
36.	EXTENSION BOARD FINE QUALITY	CAMELION	CE-EB-4S	NOS	30
37.	REFILL PAINT ROLLER PENCIL ROLLER	UNIVERSAL	4 INCH	NOS	50
38.	ROBIN BLEACH	ROBIN	500 ML	BTL	48
39.	ROOMI 12'S	ROOMI	JASMINE	BOX	100
40.	SCOTCH BRITE	3M	FOAM TYPE	NOS	700
41.	SCOTCH BRITE ULTRA WIPE (3's)	3M	12 INCH	PKT	60
42.	SCRRAPER FINE QUALITY	UNIVERSAL	12 X 12 CM	NOS	60
43.	SODA CAUSTIC	LOCAL	FINE QUALITY	KG	100
44.	SOFT BRUSH WITH HANDLE	LOCAL	FINE QUALITY	NOS	80
45.	SURF	SURF EXCEL	500 G PACKING	KG	1000

46.	SURFACE CLEANER DETTOL (ORIGINAL)	DETTOL	LAVANDER	BTL	200
47.	SWEEP RED	SAY'S	500 ML	BTL	300
48.	TAPE TRANSPARENT	JOHNSON	01 INCH	ROLL	150
49.	TAPE TRANSPARENT	JOHNSON	03 INCH	ROLL	150
50.	TISSUE BOX	ROSE PETAL	POP-UP	NOS	1000
51.	TISSUE BOX	ROSE PETAL	LUXUARY 3 PLY	NOS	1000
52.	TISSUE ROLL	ROSE PETAL	MAXOB	NOS	2000
53.	TOILET BRUSH	LOCAL	FINE QUALITY	NOS	60
54.	TOILET SOAP	LUX	130 GMS	NOS	600
55.	TYFON SPRAY	TYFON	1000 ML PACKING	LTR	100
56.	VIM POWDER	VIM	500 GMS	KG	50
57.	WATER FILTER ALL TYPE	SO-SAFE	5 MICRON POLYPROPYLENE YARN	NOS	06
			SPUN POLYPROPYLENE PPF-5	NOS	06
			CBC 205 R	NOS	06
			01 MICRON LONG & THICK	NOS	06
			SPUN POLYPROPYLENE LONG & THIN	NOS	06
58.	WIPER	UNIVERSAL	FINE QUALITY	NOS	100
59.	WIRE BRUSH STAINLEES STEEL	UNIVERSAL	06 INCH	NOS	80
60.	WIRE WOOL	3M	SCOTCH BRIGHT	NOS	300
61.	WHISTLE	LOCAL	STEEL	NOS	10
62.	PHENYLE LIQUID ORIGINAL	FINIS	2.75 LTR PACKING	LTR	800
63.	MOSPEL	ABBOT	45 ML	NOS	448
64.	MOP WITH HANDLE SIZE 7	UNIVERSAL	PREIMIUM QUALITY	NOS	120
65.	CELL AA SIZE	TOSHIBA	R6UG SP-4TGTE (GREEN)	NOS	1000
66.	CELL AAA SIZE	TOSHIBA	R03UG SP-2TFTE (GREEN)	NOS	1000
67.	LIQUID VIM	VIM	500 ML	BTL	96
68.	PAINT ROLLER 6 INCH	UNIVERSAL	06 INCH	NO	120
69.	COTTON RAG	LOCAL	FINE QUALITY	KG	2000
70.	HARPIC	RECKITT BANCKISER	500 ML	BTL	360
71.	RECHARGEABLE CELL AA	CAMELION	800 mAh	NOS	30
72.	RECHARGEABLE CELL AAA	CAMELION	1000 mAh	NOS	20
73.	DOOR BELL	CLOPAL	WIRE LESS	NOS	20
74.	ELFY	GMSA	20 MG	NOS	12
75.	UHU ADHESIVE TUBE	UHU	33 ML	NOS	24
76.	SAMAD BOND TUBE	BOSTIK PAK	40 GMS	NOS	24
77.	CELL A-23 SIZE	CAMELION	A-23	NOS	24

IT NO: IT/81/03/2025-26
PROCUREMENT OF REVERSE OSMOSIS PLANT

S No	Details											
1.	Ships Name	PMSS HINGOL										
2.	Parent Equipment	Reverse Osmosis S.W Desalination Plant										
3.	OEM	Romer Environmental Protection (SHENZHEN) Co, Ltd										
4.	Model	RR-FSHB3										
5.	Origin	CHINA										
6.	Assembly Component	Water intake Pump, HP Pump, safety filters, pre filter tank, lines, membranes, valves, gauges, all safeties and complete control system.										
7.	Part No. of Assembly Component	As Provided by OEM.										
8.	Quantity	01										
9.	Source of Availability	Local Engineering Houses.										
10.	Justification for Work	Aft reverse osmosis plant performance degraded, procurement and installation of new reverse osmosis plant is to be required.										
11.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td> (1) Removal of defective reverse osmosis plant along with fittings (2) Procurement and Installation of new reverse osmosis plant along with fittings as recommended by OEM. (3) All tools and test equipment or any spare required to conduct said work will be arranged by firm/ contractor and no growth work will be acceptable. (4) Any other defect occurred during dismantling/ installation work will be responsibility of firm. (5) Dismantling/ assembling/ installation and in way removal work is responsibility of contractor. </td><td> (1) Removal of defective reverse osmosis plant along with fittings, procurement and Installation of new reverse osmosis plant along with fittings as recommended by OEM. (2) All tools and test equipment or any spare required to conduct said work will be arranged by firm/ contractor and no growth work will be acceptable. (3) Dismantling/ assembling/ installation and in way removal work is responsibility of contractor. </td><td> Procurement of complete reverse osmosis plant along with fittings </td></tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	(1) Removal of defective reverse osmosis plant along with fittings (2) Procurement and Installation of new reverse osmosis plant along with fittings as recommended by OEM. (3) All tools and test equipment or any spare required to conduct said work will be arranged by firm/ contractor and no growth work will be acceptable. (4) Any other defect occurred during dismantling/ installation work will be responsibility of firm. (5) Dismantling/ assembling/ installation and in way removal work is responsibility of contractor.	(1) Removal of defective reverse osmosis plant along with fittings, procurement and Installation of new reverse osmosis plant along with fittings as recommended by OEM. (2) All tools and test equipment or any spare required to conduct said work will be arranged by firm/ contractor and no growth work will be acceptable. (3) Dismantling/ assembling/ installation and in way removal work is responsibility of contractor.	Procurement of complete reverse osmosis plant along with fittings	
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12.	Eligibilities	a Security wise clear firm having working experience on reverse osmosis S.W desalination plant onboard HINGOL CLASS MPVs of PMSA. 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.										
13.	EDC	07 Days										
14.	Warranty	One year warranty after satisfactory test / trials w.r.t: a. Satisfactory operation of RO Plant without any leakage/ seepage of water from lines, connectors, pumps and membranes. b. Satisfactory operation of RO Plant up to maximum production output as										

		<p>recommended by OEM.</p> <p>c. Satisfactory operation of RO Plant at Auto and manual modes.</p> <p>d. Satisfactory operation of all safeties during running at auto and manual modes.</p> <p>e. Satisfactory operation of all safeties at recommended ranges by OEM.</p> <p>f. Any Leakage/ seepage of water everywhere from the system will be repaired by the firm during warranty period.</p> <p>g. Any abnormality in operation at any mode of control will be repaired by the firm during warranty period.</p> <p>h. Any degradation in RO Plant performance during warranty period will be repaired by the firm.</p>
15.	Acceptance Criteria	<p>a. Satisfactory operation of RO Plant without any leakage/ seepage of water everywhere from the system</p> <p>b. Satisfactory operation of RO Plant up to maximum production output as recommended by OEM.</p> <p>c. Satisfactory operation of RO Plant at Auto and manual modes.</p> <p>d. Satisfactory operation of all safeties during running at auto and manual modes.</p> <p>e. Satisfactory operation of all safeties at recommended ranges by OEM.</p>

**ADDITIONAL COMPONENTS AND SPARES REQUIRED AS BACKUP INVENTORY DEFENDER
AIRCRAFT PMSA 93 SQN**

S No	Details																																																																																																																																																				
1.	Ships Name	93 PMSA SQN																																																																																																																																																			
2.	Parent Equipment	Defender BN-2T Aircraft																																																																																																																																																			
3.	OEM	Britten Norman (BN2T)																																																																																																																																																			
4.	Origin	UK/ USA/AS PER OEM COUNTRY																																																																																																																																																			
5.	Sub Equipment	Defender BN-2T Aircraft components/ spares																																																																																																																																																			
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		nn.	NB-57-ND-2369	PIPE ASSY FUEL	2												
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		qq.	A113-1/2C	BOLT	200												
		rr.	B471365	CABLE	50m												
		ss.	B471363	CONDUIT ASSY	50m												
		tt.	SP90C6	SPLIT PIN	100												
		uu.	RBB0/1100	RED BOX BATTERY	2												
8.	Quantity	As mentioned against each															
9.	Source of Availability	OEM or OEM authorized aviation vendors															
10.	Justification for Work	Spares required for replacement on Defender BN2T aircraft against scheduled/ unscheduled maintenance.															
11.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Consumable/ once used items</td> <td>-</td> <td>Spares required for Defender BN-2T aircraft as per para 9a-ss</td> <td>As per para 9a-uu</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Consumable/ once used items	-	Spares required for Defender BN-2T aircraft as per para 9a-ss	As per para 9a-uu			
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13.	Technical Specs	Islander Illustrated Parts Catalogue Publication Reference No. PC/ 4 Volume-1 & Rolls-Royce 250-B17 Series Illustrated Parts Catalogue															
14.	Eligibilities	<p>a. Replacement of items are to be delivered in New Condition only, from OEM or OEM authorized aviation vendors</p> <p>b. Firms have to provide authorization letter of their principal firms and bank statement of last 01 year of their firm</p> <p>c. Firms must have at least 02 years' experience of procurement/repair of Aviation components/ spare parts. Experience certificate of Aviation related contracts by contracting agency in Pakistan is mandatory.</p> <p>d. Firms need to include freight/ insurance charges and custom duties/ taxes, etc (as applicable) in quotation.</p> <p>e. Firms need to get import/ export licenses from respective abroad firms/ agencies where applicable.</p> <p>f. In case of failure to meet acceptance criteria or any defect during physical/ operational testing of items post installation on aircraft, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time</p>															
15.	EDC	08 weeks after award of contract															
16.	Warranty	1 Year															
17.	Acceptance Criteria	<p>a. Satisfactory physical condition and operational check of items (where Applicable).</p> <p>b. Items part numbers should be identical to the part numbers mentioned against each item in IT Specification. Alternatively, OEM letter for change in Part No may also be provided.</p> <p>c. Provision of OEM certification from EASA/ FAA (if applicable).</p> <p>d. Provision of import documents (if required).</p> <p>e. Items having shelf life/ expiry date should be within 6-8 weeks from date of manufacturing.</p>															

S No	Details	
1.	Ships Name	PMSSZHOB
2.	Parent Equipment	Antiskid paint
3.	Model/ Make	OSTS
4.	Origin	Local
5.	Quantity	6,170 sq. ft
6.	Source of Availability	Any local/ international registered firm with good reputation.
7.	Justification for Work	Antiskid paint of Fox'l, boat deck, bridge top, Bridge Port/ STBD wings, Port/ STBD Alleyways and cannon deck observed degraded.
8.	Work Required	Antiskid paint on Fox'l (1,464 sq. ft.), boat deck (1,372 sq. ft), bridge top (900 sq. ft.), Bridge Port/ STBD wings (454 sq. ft.), Port/ STBD Alleyways (576 sq. ft.) and cannon deck (1,404 sq. ft.)
9.	Detailed scope of work	<ul style="list-style-type: none"> a. Removal of previously applied deteriorated paint by mechanical chipping/ scrapping. b. Grit blasting using approved mixture of copper slag and silica to achieve proper surface profile. c. Application of GP-3 epoxy primer (3 coats). d. Application of grey epoxy base coat. e. Uniform sprinkling/ broadcasting of approved antiskid grains to achieve required slip resistance. f. Application of dark grey epoxy top coat (2 coat) to seal the antiskid surface
10.	Technical Specs	As per OEM manual.
11.	Eligibilities	Any Firm having prior experience of marine painting/ deck coating works with PMSA
12.	EDC	2 weeks
13.	Warranty	2 years against peeling, blistering and premature coating failure under normal operation conditions.
14.	Acceptance Criteria	<ul style="list-style-type: none"> a. Visual inspection of coated surfaces for uniformity, adhesion and texture. b. Submission of relevant product data sheet, certificates and warranty documents.
15.	Any other relevant info	The supplier/ contractor must visit the ship prior to execution to fully understand the scope of work and site conditions.

**PROCUREMENT OF MODULATOR, MOTOR DRIVE & POWER SUPPLY PCBs OF TRANSAS NR-4000
NAVIGATIONAL RADAR - PMSS BASOL**

S No	Details			
1.	Ships Name	PMSS BASOL		
2.	Parent Equipment	TRANSAS NR 4000 RADAR		
3.	OEM	JRC/ WARTSILA		
4.	Model	NR 4000 Navigational Radar		
5.	Origin	Wartsila Finland		
6.	Sub Equipment	Scanner Unit		
7.	Assembly Component	Power Supply, Motor Drive & Modulator PCB		
8.	Part No. of Assembly Component	Power Supply 65825816-5 Motor Drive 65801811-9 Modulator PCB 65810812-6		
9.	Quantity	1 x PCB each		
10.	Source of Availability	Local Engineering Houses.		
11.	Justification for Work	Repair/ replacement of power Supply. Motor Drive & Modulator PCBs		
12.	Work Required	a	b	c
		Defect/ Routine List	Repair Work Required	Services Required
	N/A	Repair/ replacement of Power Supply, Motor Drive & Modulator PCB	SAT trials post installation of Power Supply, Motor Drive & Modulator PCB	As per S No 8
13.	Detailed scope of work	a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
	Repair/ replacement of Power Supply, Motor Drive & Modulator PCB	SAT trials post installation of Power Supply, Motor Drive & Modulator PCB	As per S No 8	
14.	Technical Specs	As per technical manual		
15.	Eligibilities	Any registered and security wise cleared firm having good experience in above mentioned scope of work		
16.	EDC	ASAP		
17.	Warranty	1 Year		
18.	Acceptance Criteria	a. OEM certified item b. Technical specifications to be provided c. Items will be accepted after satisfactory test/ trials		
19.	Any other relevant info	SS may be contacted for any further query/ requirement		

**IT SPECIFICATION FOR FABRICATION/ REPLACEMENT OF 03 X MAIN ENGINES EXHAUST BELLOW -
PMSS BASOL**

S No.	Description					
1.	Ship's Name	PMSS BASOL				
2.	Parent Equipment	Main Engine				
3.	OEM	MTU Germany				
4.	Model	16V4000M73L DIESEL ENGINE				
6.	Origin	Germany				
7.	Sub Equipment	Exhaust System				
8.	Assembly Components	Exhaust bellow				
9.	Part No. of Assembly Component	As per sample and technical specs mentioned at S No. 22				
10.	Quantity	03 x Exhaust bellow				
14.	Justification for work	Exhaust/ smoke observed from exhaust bellow due to deterioration during normal operation undermining exhaust performance				
15.	Work Required	A	b	c	d	
	Defect List	Repair Work Required	Services Required	Spares Required		
	Degraded	Yes	Yes	Yes		
16.	Detail scope of work	Details of Serial 15 Coluhrin a, b & c				
	A	b			c	
	Detail of Repair Work Required	Details of Services Required			Details of Spares Required	
	Fabrication and replacement	a. Removal of cladding lagging and heat protective sheets from both elbows by the firm. b. Removal of exhaust elbows by the firm. c. Repair/ Replacement of exhaust elbows by the firm with mild steel material. d. The pressure test of exhaust expansion bellows be undertaken at 5 bar. e. Exhaust elbow be installed back with insulating gaskets on both exhaust elbows. f. Elbow to be welded with bulkhead from inside and outside during installation. g. The mild steel studs/ Nut blots on both elbow flanges for installation. h. After installation of exhaust elbow successful onboard trials on running engine by the firm. i. Arrangements of all tools and test equipment - required during dismantling/ assembling by the firm. j. Sole responsibility of firm in case of growth work			03 x Exhaust bellow as per sample	

17.	Technical Specs	<p>03 x Main Engine exhaust expansion bellow stainless steel (Grade 316-L) with following dimensions is to be repaired/fabricated:</p> <p>ENGINE SPECIFICATIONS:</p> <p>Power: 2880 kW Speed: 2050 rpm No. of cylinders: 16 Bore/stroke: 170/190 mm Fuel consumption at rated power: 657 L/Hr</p> <p>EXHAUST EXPANSION BELLOW</p> <table> <tbody> <tr> <td>a. Length of Inner diameter</td><td>765 mm</td></tr> <tr> <td>b. Length of Outer diameter</td><td>810 mm</td></tr> <tr> <td>c. Thickness</td><td>35 mm</td></tr> <tr> <td>d. Flange</td><td>08</td></tr> <tr> <td>e. Pitch Circle Diameter</td><td>800 mm</td></tr> <tr> <td>f. Flange outside total length</td><td>475 mm</td></tr> <tr> <td>g. No. of Flange holes</td><td>40</td></tr> <tr> <td>h. Diameter of holes</td><td>44 mm Rated</td></tr> </tbody> </table>	a. Length of Inner diameter	765 mm	b. Length of Outer diameter	810 mm	c. Thickness	35 mm	d. Flange	08	e. Pitch Circle Diameter	800 mm	f. Flange outside total length	475 mm	g. No. of Flange holes	40	h. Diameter of holes	44 mm Rated
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18	Eligibilities	OEM authorized Rep having experience of MTU Main Engines fitted onboard HINGOL class MPVs.																
19.	EDC	ASAP (07 days)																
20.	Warranty	1 year																
21.	Acceptance Criteria	<ul style="list-style-type: none"> a. Pressure test of exhaust bellow at 3 Bar to be conducted before installation. b. No seawater leakage to be observed during normal operation at sea. c. No exhaust gas leakage to be observed from elbow at max power of Main Engine i.e. 2050 RPMs d. Satisfactory fabrication, installation and operation of exhaust expansion bellow of Main Engines 																

IT SPECIFICATIONS - FABRICATION & INSTALLATION OF GUARD RAIL (PORT SIDE) AT QUARTER DECK - PMSS KASHMIR

IT SPECS FOR SERVICING / OVERHAULING OF APME STARTER MOTOR - PMSS
BARKAT

S No	IT SPECIFICATION					
1.	Ship's Name	PMSS BARKAT				
2.	Parent equipment	Aft Port Main Engine (APME)				
3.	OEM	MTU				
4.	Model	16V396TB93				
5.	Serial No	5590546				
6.	Origin	Germany				
7.	Sub equipment	Main Engine Starting System				
8.	Assembly components	Starter Motor (ET 18/159-1)				
9.	Part No. of Assembly Component	ET 18/159-1				
10.	Quantity	01 X Starter (ET 18/159-1)				
11.	Justification for Work	Aft Port Main Engine (APME) failed to start during Normal operation. Fault diagnosing carried out, starter motor found malfunctioning.				
12.	Work Required					
	a	b	c	d		
	Defect List	Repair Work Required	Services Required	Spares Required		
	Aft Port Main Engine (APME) failed to start during normal operation, starter motor found malfunctioning.	Starter motor defect to be rectified by servicing/ overhauling the starter motor for SAT operation of the main engine	-	-		
13.	Detail scope of work					
	Details of Serial 12 Column a, b and c.					
	a.	b.				
	Detail of repair/ Replacement work required	Details of Services Required	Details of Spares Required			
	i. Servicing/ overhauling of starter motor	Removal of starter motor for repairing of the starter motor for SAT operation of the main engine	01 X starter motor (ET 18/159-1)			
	ii. Wiring and terminal lugs of starter motor	Inspection of starter motor control wires/ terminal lugs and replace if necessary	As required while inspecting the wiring			
	iii. Requirement of external services, if required will be responsibility of firm					
	iv. All spares (must be genuine) tools special equipment /accessories required for said repair/ maintenance are to be arranged by the firm.					
14.	v.	Any damage / defect/ wear tear occurred during course of removal, repair and installation of system/ equipment will be met by firm				
15.	iv.	The firm will be responsible for all removal, transportation and installation work during warranty/ guarantee periods claims in case of any rework.				
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		7 x days after issuance of work/ confirmation order			
18.	Warranty		02 Years			
19.	Acceptance Criteria		a. Satisfactory work done by the firm. b. Successful completion and acceptance by the end user. c. Satisfactory Trials			

IT NO: IT/81/10/2025-26
IT SPECIFICATIONS

PROCUREMENT OF 32 CHANNEL NVR WITH ADDITIONAL IP CAMERA - PMSS DASHT

S.No	Description				
1.	Ship's Name	PMSS DASHT			
2	Parent Equipment	CCTV CAMERA			
3.	OEM	Hangzhou Hikvision Digital Technology CHINA			
4.	Model	a. DS-9632NXI-I32 32-CH 4k NVR b. DS-2CD2043G0-I (Fixed Bullet Camera I.R) c. DS-2CD1143G0-I (Fixed Dome Camera IR) d. DS-2DE4425IW-DE (PTZ Camera IR)			
6-	Origin	CHINA			
7.	Sub Equipment	a. 32-Ch 4k NVR with accessories b. 6TB SEAGATE HDD (04) c. 32 Port POE switch d. 610M CAT 6E cable e. 3KVA APC Marine Tower UPS f. 32 inch LED TV (TCL) g. 15 Meter 4k HDMI cable h. 15 Meter USB extension cable			
9	Part No of Assembly Components	a. DS-9632NXI-I32 32-CH 4k NVR b. DS-2CD2043G0-I (Fixed Bullet Camera IR) c. DS-2CD1143G0-I (Fixed Dome Camera IR) d. DS-2DE4425IW-DE (PTZ Camera IR)			
10.	Quantity	a. 32-Ch 4k NVR b. 07 X DS-2CD2043G0-I (Fixed Bullet Camera) c. 02 X DS-2CD1143G0-I (Fixed Dome Camera) d. 03 X DS-2DE4425IW-DE (PTZ Camera IR) e. 01 x LED TV f. 01 x 32 port POE Switch g. 15 Meter 4k HDMI cable h. 15 Meter USB extension cable j. 610M CAT 6E cable k. 01 x UPS			
15.	Work Required	(a)	(b)	(c)	(d)
		Defect List	Repair Work Required	Service Required	Spares Required
		N/A	Procurement/ On-board Installation STW of CCTV Cameras and accessories	Sea S.No 16 Para b	Sea. S.No 16 Para c
16.	Detail Scope of Work	(a)	(b)	(c)	
		Detail of Repair Work Required	Detail of Services Required	Détail of Spares Required	

	Procurement/onboard installation/STW of CCTV cameras and accessories	(1) Procurement of 32-Ch 4k NVR with accessories, 12 x Cameras, 6TB SEAGATE HDD (04), 32 Port POE switch, 610M CAT 6E cable, 3KVA APC Marine Tower UPS, 32 inch LED TV (TCL), 15 Meter 4k HDMI cable and 15 Meter USB extension cable. (2) Complete installation and STW onboard. (3) Onboard acceptance responsibility of Firm.	(I) Procurement of 32-Ch 4k NVR with accessories, 12 x Cameras, 6TB SEAGATE HDD (04), 32 Port POE switch, 610M CAT 6E cable, 3KVA APC Marine Tower UPS, 32 inch LED TV (TCL), 15 Meter 4k HDMI cable and 15 Meter USB extension cable.
23.	Eligibilities criteria	a. Any registered and security wise cleared local contractor having good experience in above mentioned scope of work. b. Firm must visit site for understanding exact nature of work involved in job prior quoting to avoid inconvenience on later stage after reward of Work Order. Firm is to quote for growth work by visiting ship in commercial quotation prior award of work order. HQ PMSA/ Ship will not accept growth work changes on later stages at all	
24.	EDD	01 Month	
25.	Warranty	01 Year warranty for all mentioned works.	
26.	Acceptance Criteria	a. OEM certified item b. Technical specification to be provided c. Upon scrutiny of items and provided documents i.e technical specification along with production certificates by OEM d. Items will be accepted after satisfactorily test and trials onboard e. OEM technical documents and warranty certificates of items required f. Items must be genuine and OEM packed. Aftermarket products and item will not be accepted g. Satisfactorily trials onboard ship	
27.	Any other relevant information	Firm must visit onboard for clarification of any query and better understanding of requirement	

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

S No	Description																																																							
1.	Ships Name PMSS KOLACHI																																																							
2.	Parent Equipment Main Engine Local Monitoring System																																																							
3.	OEM Shanghai Marine Diesel Engine Reserch Institute, Csic																																																							
4.	Model SAL-10 Type Main Engine Local Monitoring Box																																																							
5.	Serial No 781547-781550																																																							
6.	Origin China																																																							
7.	Sub Equipment Main Engine Local Monitoring Box																																																							
8.	Assembly Equipment LCP Main Engine IXT10A (HMI) SM1223 Module SM1231 Module AI8-13 Bit SM1231 Module 8 xRTD SM1231 Module 8 xTC SM1223 DI8/OQ8 Transformer 160VA, 220V AC/ 24V AC Frequency Conversion Module(PH61V6D) NPGL Module CMIIID 4-20mAmp one input two output Switching Power Supply 24V DC/ 24V DC																																																							
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		Repair/ replacement of both main engine LOPs required	Inspection/ Servicing of Main Engine Local Monitoring System required	As per S No 9 & 10	
12.	Technical Specs	Type of engine: DATE of manufacture Serial No: Speed: Power supply: Rated current	20RK270 September 2016 781547-781550 1000rpm DC 24 V ($\pm 20\%$) <u>5 A</u>		
13.	Eligibilities	Reputable local/ international contractor registered with FBR and having working experience with PMSA.			
14.	EDD/ EDC	30 Days after award of contract			
15.	Warranty	01 Year			
16.	Acceptance Criteria (if any)	<ol style="list-style-type: none"> a. OEM Certified item. b. Upon scrutiny of items and provided documents along with production certificate by OEM. c. Defective/ BER items must be replaced with new. d. Firm will not be allowed to use ship tools arid manpower e. QA/QC certificate issuance by QA/QC department 			

REPAIR/ OVERHAULING OF GENERAL SERVICE PUMP OF PMSS HINGOL

S No.	Description					
1.	Ships Name	PMSS HINGOL				
2.	Parent Equipment	Stand by system for bilges, fire main and DE flooding.				
3.	OEM	JIANGSU ZHENHUA PUMP INDUSTRY CO., LTD.				
4.	Model	80CLZ-5A				
5.	Origin	CHINA				
6.	Sub Assembly	General service system.				
7.	Assembly Components	General service pump (GS PUMP)				
8.	Qty	01				
9.	OEM Detail	Address GJJM+9x4, Jiang Du Qu, Yang Zhou Shi, Jiang Su Sheng, China, 255266 Contact Phone Not specified Contact Email Not Specified				
10.	Justification for work	General service	e pump (GS PUMP) performance found degraded and abnormal noise hauling of pump is to be required for sat operation.			
11.	Work Required	a. Defect List General service pump (GS PUMP) performance found degraded and abnormal noise observed, overhauling of pump is to be required for sat operation.	b. Repair Work Required (1) Fabrication of new pump body as per sample (Bronze) (2) Fabrication of new impeller as per sample(Bronze) (3) Replacement of old mechanical seal with high quality mechanical seal (4) Replacement of old worn out bearing with new SKF or other good bearing. (5) Servicing and overhauling of motor. (6) All old worn out gauges lines and adopters of pump needs to be replace with new (7) Precise alignment of pump with motor (8) Corroded/ damaged bolts and nuts to be replaced with new stainless bolts and nuts (9) Pump/ in way assembly removal and reinstallation (10) Any other leakage observed during dismantling/ installation work will be responsibility of firm.	c. Service Required Overhauling of General service pump (GS PUMP) and Servicing & overhauling of motor.	d. Spares Required 01x pump body. 01 x impeller. 01 x mechanical seals. 03 x bearings. 02 x gauges lines with adopters. 04 x adopters. Stainless steel, Stainless steel bolts, and nuts as per requirement	

		<p>(3) Replacement of old mechanical seal with high quality mechanical seal</p> <p>(4) Replacement of old worn out bearing with new SKF or other good bearing.</p> <p>(5) Servicing and overhauling of motor.</p> <p>(6) All old worn out gauges lines and adopters of pump needs to be replaced with new</p> <p>(7) Precise alignment of pump with motor</p> <p>(8) Corroded/ damaged bolts and nuts to be replaced with new stainless bolts and nuts</p> <p>(9) Pump/ in way assembly removal and reinstallation</p>	<p>overhauling of motor.</p> <p>03x bearings.</p> <p>02x gauges lines with adopters.</p> <p>04x adopters.</p> <p>Stainless steel,</p> <p>Stainless steel bolts, and nuts as per requirement.</p>	<p>1 1 IWI IWI</p> <p>livi seals.</p>
12.	EDC	07 Days		
13.	Warranty	<p>One year warranty after satisfactory test / trials w.r.t:</p> <ol style="list-style-type: none"> Satisfactory suction and discharge pressure of sea water pump Satisfactory and smooth operation without abnormal noise and vibration. Satisfactory operation without any leakage from mechanical seal, pump body and gauges lines. Satisfactory operation of gauges after installation of gauges lines. Precise alignment, impeller should be free to rotate. 		
14.	Acceptance Criteria	<ol style="list-style-type: none"> Satisfactory test and trials with smooth operation of sea water pump without abnormal noise or vibration and any type of leakage. Satisfactory suction and discharge pressure of sea water pump. Satisfactory test and trials with smooth operation of motor without abnormal noise and vibration. Satisfactory operation of gauges after installation of gauges lines. 		
15.	Any other relevant information	Firm may visit onboard for clear understanding of scope of work before quoting.		

IT SPECS FOR PROCUREMENT AND INSTALLATION OF MOTORIZED BREAKERS (SSGDS) - PMSS
NUSRAT

S No	IT SPECIFICATION				
1.	Ship's Name	PMSS NUSRAT			
2.	Parent Equipment	Power Generation and Distribution			
3.	OEM	Schneider			
4.	Model	MT-630 (Motor mechanism compact)			
6,	Origin	France			
7.	Sub Equipment	Switch board			
8.	Assembly Components	03 x Motorized breaker			
10.	Quantity	03			
15.	Work Required	a	b	c	d
		Defect List	Repair work required	Services required	Spares required
		03 x motorized breakers observed malfunctioning during operation due to FWT	03 x motorized breakers need to be replaced with new one for safe operation of SSDGs	03 x motorized breakers need to be replaced with new one for safe operation of SSDGs	03 x Motorized Breakers
16.	Detail Scope of Work	Details of S No column a, b & c			
		a	b	c	
		Detail of repair work required	Details of services required		Details of spares required
		03 x motorized breakers need to be replaced with new one for safe operation of SSDGs	a. 03 x motorized breakers are to be dismantled b. New 03 x motorized breakers are to be arranged c. New 03 x motorized breakers are to be fitted d. All control wiring to be checked/ inspected/ replaced e. The firm will arrange all renewal of wire/ jumper and lugs if required		03 x Motorized Breakers and rectifier cards

		<p>f. Setting of adjustable load pickup and drop off automatic and manual operating modes on SSDGs features</p> <p>g. Installation of rectifier card alongwith transformer for 220V AC to 24V DC to be ensure</p> <p>h. COC for OEM (Schneider) to be ensured</p> <p>j. To ensure the operational availability of SSDGs, firm will provide and install alternate compatible breaker in the system till completion of said job</p> <p>k. The firm will be responsible to undertake any work not covered above to ensure good quality of work</p> <p>l. The firm will arrange all spares, tools and accessories etc required for the same work.</p> <p>m. Breaker fitting should be as per previous breaker</p> <p>n. The firm will be responsible for requirement of external services</p> <p>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</p>	
17	Defect History	03 x motorized breakers observed malfunctioning during operation due to FWT	
18	Technical Specs	<p>a. MT-630</p> <p>b. 380V AC Main supply</p> <p>c. 50Hz</p> <p>d. 3 Phase</p> <p>e. 230V-240V AC</p> <p>f. 24V DC control supply</p> <p>g. 500-600 Ampere</p>	
19.	Eligibilities	<p>a. The firm should visit onboard and carry out inspection to establish the extent of required item</p> <p>b. The firm should having good experience of the same kind of work required onboard</p> <p>c. The firm should be NTN/GST registered</p>	
20.	EDC	20 x working days after issuance of work/ confirmation order	
21.	Warranty	01 year from the date of acceptance	
22.	Acceptance Criteria	<p>a. Successful full load trials of SSDGs</p> <p>b. Satisfactory operation of all functions available in motorized breakers</p> <p>c. Satisfactory operation of both breakers</p> <p>d. Practical acceptance by SS</p>	

**IT SPECIFICATION FOR PROCUREMENT OF SUPPORTING LIQUID AND DISTILLED WATER
FOR STD 22 GYRO - PMSS BASOL**

S.No	IT SPECIFICATION				
1.	Ship's Name	PMSS BASOL			
2.	Parent equipment	GYRO COMPASS			
3.	OEM	Raytheon Anschütz GmbH			
4.	Model	STD-22 Type 110-233			
5.	Serial No	Type 110-233			
6.	Origin	Germany			
7.	Sub equipment	Gyro Sphere			
8.	Part No. of Assembly Component	S. No	Part Number	Description	Req Qty
		a.	148-162E02	Supporting Liquid	02
		b.	148-392/ .148-398	Distilled Water	02
		c.	110-222.X01	Gasket	02
9.	Quantity	As per Serial No. 9			
10.	Source of availability	-			
11.	OEM details	Address: Anschütz GmbH Postfach 1166 D=24100 Kiel Germany Contact Phone: +49-431-30-19-0 Contact Email: Service@raykiel.com			
12.	Justification for Work	Conduct of Depot Level PMS routine (18-24 months) of STD-22 Gyro			
13.	Work Required	Conduct of PMS routine PMS No 6-2502-0000			
14.	Eligibility Criteria	CoC to be provided by firm			
15.	EDC	1 month			
16.	Warranty	01 Year			
17.	Acceptance Criteria	CoC from firm			

SNo.	Description										
1.	Ship's Name	PMSS BASOL									
2.	Parent Equipment	Fire Hydrants									
3.	OEM	China									
4.	Origin	China									
5.	Sub Equipment	Fire Hydrants and hoses									
6.	Quantity	22 x Fire Hydrants and 10 x hoses									
7.	Sources of Availability	China									
8.	OEM Details	Address Room 2-1-1801, No. 139, Ziyang Contact Phone Tel: 027-88737566 Fax: 027-88733403 Contact Email ■ ofiicer@mikand.cn									
9.	Justification for work	As per PMS routines/ technical manual									
10.	Detail scope of work	Details of Serial 15 Column a, b & c									
		<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>Detail of Repair Work Required</td> <td>Details of Services Required</td> <td>Details of Spares Required</td> </tr> <tr> <td>As per requirements for overhauling of Fire Hydrants</td> <td> Complete overhauling of Fire Hydrants system include following aspects: 1. Remove hydrant cap and inspect internal threads. 2. Dismantle and overhaul hydrant valve assembly completely. 3. Replace all defective seals, washers, O-ring and valve seat. </td> <td>As per requirements for overhauling of Fire Hydrants and hoses</td> </tr> </tbody> </table>	a	b	C	Detail of Repair Work Required	Details of Services Required	Details of Spares Required	As per requirements for overhauling of Fire Hydrants	Complete overhauling of Fire Hydrants system include following aspects: 1. Remove hydrant cap and inspect internal threads. 2. Dismantle and overhaul hydrant valve assembly completely. 3. Replace all defective seals, washers, O-ring and valve seat.	As per requirements for overhauling of Fire Hydrants and hoses
a	b	C									
Detail of Repair Work Required	Details of Services Required	Details of Spares Required									
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11.		4. Remove, Inspect and repair hoses completely. 5. Inspect/ overhaul couplings and nozzles of fire hydrants. 6. Record operating parameters (discharge pressure and flow-rate) as per OEM recommendation									
12.	Eligibilities	Reputable local contractor having working experience of Fire Hydrants system									
13.	EDC	02 Weeks									
14.	Warranty	01 Year									
15.	Acceptance Criteria	a. Satisfactory operation of all Fire Hydrants and hoses. b. Satisfactory operation without noise and vibration. c. Leakage free operation of system. d. Successful trials by end user.									
16.	Any other relevant information	a. Contactor may contact SS/ visit onboard ship to resolve any query. b. Growth work, damage/ defect occurring during work will be responsibility of contractor.									

IT NO: IT/81/16/2025-26
IT SPECIFICATION FOR RENEWAL OF PAINT WORK AND HYDRAULIC/
ELECTRICAL FITTINGS FOR HEILA CRANE - PMSS BASOL

SNo.	Description			
1.	Ship's Name	PMSS BASOL		
2.	Parent Equipment	HEILA Hydraulic Crane System		
3.	OEM	Eway Marine Hong Kong Co, Ltd		
4.	Model	242SYF-5-00		
5.	Origin	China		
6.	Sub Equipment	Hydraulic Crane System		
7.	Quantity	1 x HEILA crane		
8.	Sources of Availability	JIANGYINSHI BEIHAI LSA CO., LTD		
9.	OEM Details	Address Eway Marine Hong Kong Co. Ltd Contact Phone Tel: +86 21 61623526 Contact Email Sea-land@163.com		
10.	Detail Scope of Work	a Detail of Repair Work Required	b Details of Services Required	c Details of Spares Required
		As per requirements	Cleaning and Anti-rust painting as per prescribed paint scheme including following: a. Complete Paint/ Rust removal of entire system including motors fitted.	As per requirements

		<p>b. Replacement of eroded parts/ components (i.e. 316L ferules of hydraulic pipes) as per design/ specification/ material.</p> <p>c. Preparation " of all surfaces including application of polygate filling prior paint work</p> <p>d. Single coat of Zinc chromate primer via spray gun</p> <p>e. Application of OEM recommended paint marine type Akzo Nobel Interthane 987/990-Grey & Black (3 x coats via spray gun)</p> <p>f Polishing of entire system upon completion of paintwork</p> <p>g. Removal and re-installation/ fitting of all in-way parts/ accessories is the responsibility of the firm.</p> <p>h. Provision of OEM authorized paint is the responsibility of the firm</p> <p>j. Defect rectification of any leakage or replacement of parts/spares</p> <p>k. Renewal of hydraulic lines, adaptors and fittings.</p> <p>l. Renewal of electrical lines, fittings/ equipments</p> <p>m. Any growth in scope of work will be the responsibility of contractor</p>	
11.	Technical Specs	As per technical manual	
12.	Eligibilities	Reputable local contractor having working experience of crane	
13.	EDC	01 Week	
14.	Warranty	01 Year	
15.	Acceptance Criteria	<p>a. Satisfactory operation of crane</p> <p>b. Successful trials by end user</p>	
16.	Any other relevant information	<p>a. Contactor may contact SS/ visit onboard ship to resolve any query.</p> <p>b. Growth work, damage/ defect occurring during work will be responsibility of contractor.</p>	

REPAIR/ REPLACEMENT OF TURBOCHARGER AND HEAT EXCHANGER OF STBD RHIB BOAT OF HINGOL

S No.	Description																				
1.	Ships Name	PMSS HINGOL																			
2.	Parent Equipment	STBD RHIB BOAT																			
3.	OEM	YANMAR																			
4.	Model	4LHA-STP																			
5.	Origin	JAPAN																			
6.	Sub Assembly	Main Engine																			
7.	Assembly Components	Turbo charger and heat exchanger																			
8.	Part No of Assembly Components	As Provided by OEM																			
9.	Quantity	01																			
10.	Source Of Availability	Local Engineering Houses																			
11.	OEM Detail	Address 2-1-1 yaesu, chuo-ku Tokyo Japan Contact Phone +31365493200 Contact Email marinesales-yase@yanmar.com																			
12.	Alternate / Local Source	Local Engineering and Manufacturing Houses																			
13.	Justification for work	STBD RHIB boat engine heat exchanger body internally leaky and turbocharger performance found degraded.																			
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a	b	c																			
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(2). Replacement of turbo charger with new	Replacement of turbo charger with new	01 x turbo charger.																			
(3). Corroded/ damaged bolts and nuts to be replaced with new bolts and nuts.	Corroded/ damaged bolts and nuts to be replaced.																				
(4) Any removal and installation work	Corroded/ damaged bolts and nuts to be replaced.																				
16.	Technical specs	As per OEM manual.																			
17.	Eligibility	Security wise clear firm having working experience on Main Engine of RHIB boat onboard HINGOL CLASS MPVs of PMSA.																			
18.	EDC	07 Days																			

19	warranty	<p>One year warranty after satisfactory test / trials w.r.t:</p> <ul style="list-style-type: none"> a. Satisfactory operation of engines without any leakage/ seepage of exhaust and coolant water, from any point. b. Satisfactory operation of engine up to maximum designed RPM & speed by OEM without any abnormal noise and vibration. c. Satisfactory operation of engine up to maximum designed RPM & speed by OEM, all parameters should within limit. d. Satisfactory operation of cooling system without any leakage/ seepage of coolant and sea
20.	Acceptance Criteria	<ul style="list-style-type: none"> a. Satisfactory operation of engines without any leakage/ seepage of exhaust and coolant water, from any point. b. Satisfactory operation of engine up to maximum designed RPM & speed by OEM without any abnormal noise and vibration. c. Satisfactory operation of engine up to maximum designed RPM & speed by OEM, all

IT SPECIFICATION FOR PROCUREMENT OF ELECTRIC HOT-WATER TANK COMPONENTS

S No	Description								
1.	Ships Name	PMSS KASHMIR							
2.	Parent Equipment	ELECTRIC HOT-WATER TANK							
3.	OEM	TAIXING NAVIGATION MACHINERY CO., LTD							
4.	Model	DRG-0.5 0.5M3							
6.	Origin	China							
7.	Sub Equipment	Electric heat element							
8.	Assembly Equipment	Cover Tube sheet Electric heating tube Mounting plate Hexagon nut Spring shim							
9.	Part No. of Assembly Equipment	S. No	NSN/ Part No	Description	Quantity				
		a.	Q245R-3	Cover	1				
10.	Quantity	b.	FL-350	Tube sheet	1				
		c.	4221HH-0.5C-02	Electric heating tube	6				
		d.	LB-3	Mounting plate	1				
		e.	GB6173-M27X2	Hexagon nut	12				
		f.	GB93-27	Spring shim	12				
11.	Work Required	a	B	c	d				
		Defect List	Repair Work Required	Services Required	Spares Required				
		Heating element of hot water system found degraded need to be replaced.	Heating element of hot water system need to be replaced.	Replacement of defective parts of hot water system required	As per S No 9 & 10				
		Details of Serial 9 Column a, b & c							
12.	Technical Specs	S No	Description	Technical Specs					
			Design pressure	0.55 MPa					
			Working pressure	0.5 MPa					
			Design temperature	90 °C					
			Type of water pump	PRHW25-110					
			Flow rate	2.5m3/h					
			Pumping head	15 m					
			Rotate speed	2950 r/min					
			Motor power	0.75 Kw					
13.	Eligibilities	Reputable working local/ international contractor registered with FBR and having experience with PMSA.							
14.	EDD/ EDC	30 Days after award of contract							
15.	Warranty	01 Year							
16.	Acceptance Criteria (if any)	a. OEM Certified item b. Defective/BER items must be replaced with new one c. Firm will not be allowed to use ship tools and manpower							

IT NO: IT/81/19/2025-26
IT SPECIFICATIONS FOR CONDUCT OF PMS ROUTINES FOR 6.5M RIGID HULL
BOATS - PMSS BASOL

SNo.	Description					
1.	Ship's Name	PMSS BASOL				
2.	Parent Equipment	6.5 m RHIB				
3.	OEM	JIANGYINSHI BEIHAI LSA CO., LTD				
4.	Model	JYB65G				
6.	Origin	China				
7.	Sub Equipment	Power System Steering system Electrical system				
9.	Part No. of Assembly Component	JYB65G-DL JYB65G-CZ JYB65G-DQ				
10.	Quantity	1 x RHIB				
11.	Sources of Availability	JIANGYINSHI BEIHAI LSA CO., LTD				
14.	Justification for work	As per PMS routines/ technical manual				
15.	Work Required	a	b	c	d	
		Defect List	Repair Work Required	Services Required	Spares Required	
		Nil	Yes	Yes	Yes	
16.	Detail scope of work	Details of Serial 15 Column a, b & c				
		a	b	c		
		Detail of Repair Work Required	Details of Services Required		Details of Spares Required	
		As per requirements	Complete overhauling of rigid hull boat including following aspects:		As per requirements	

		<ol style="list-style-type: none"> 1. Repair/ replace throttle of boat to obey at different RPM. 2. Repair/ replace all steering components i.e. hydraulic ram assembly, O-rings, seals, hydraulic lines etc. 3. Electrical appliance inspection in the electric control unit. 4. Replacement of Air inlet filter, lubricating oil & fuel oil filter. 5. Clean all components with solvent and lint-free cloth. Reassemble in reverse order, applying new gaskets/seals. Torque bolts to manufacturer's specifications. 6. Run boat under supervision, check for leaks, abnormal vibration & noises. Gradually raise rpms to max limit. 7. Record operating parameters (oil pressure, discharge pressure, temperature) as per OEM recommendation 	
22.	Technical Specs	As per technical manual	
23.	Eligibilities	Reputable local contractor having working experience of rigid hull boats	
24.	EDC	01 Week	
25.	Warranty	01 Year	
26.	Acceptance Criteria	<ol style="list-style-type: none"> a. Satisfactory operation of boat b. Successful trials by end user 	
27.	Any other relevant information	<ol style="list-style-type: none"> a. Contactor may contact SS/ visit onboard ship to resolve any query. b. Growth work, damage/ defect occurring during work will be responsibility of contractor. 	

IT NO: IT/81/20/2025-26

**IT SPECIFICATIONS FOR PROCUREMENT OF EF MOTOR CONTROL CIRCUIT
BOARD OF SEEMATZ PROJECTOR/ SEARCH LIGHT- PMSS KOLACHI**

S No	Description											
1.	Ship's Name	PMSS KOLACHI										
2.	Parent equipment	SEEMATZ PROJECTOR/ SEAR LIGHT INSTALLED ON PORT SIDE AT BRIDGE TOP										
3.	OEM	CHINA										
4.	Model	463-525 HGS/XBO										
5.	Origin	CHINA										
6.	Sub equipment	EF MOTOR CONTROL CIRCUIT BOARD										
7.	Assembly components	EF MOTOR CONTROL CIRCUIT BOARD										
8.	Part No of Assembly components	463-525 HGS/XBO										
9.	Quantity	01										
10.	Work Required	<table border="1"><thead><tr><th>a</th><th>c</th><th>d</th></tr></thead><tbody><tr><td>Defect list</td><td>Service required</td><td>Spares <u>required</u></td></tr><tr><td>EF motor control circuit board of Seematz projector/ search light installed at bridge top port side is burnt</td><td>Installation</td><td>EF motor control i circuit board of Seematz projector/ search light</td></tr></tbody></table>	a	c	d	Defect list	Service required	Spares <u>required</u>	EF motor control circuit board of Seematz projector/ search light installed at bridge top port side is burnt	Installation	EF motor control i circuit board of Seematz projector/ search light	
a	c	d										
Defect list	Service required	Spares <u>required</u>										
EF motor control circuit board of Seematz projector/ search light installed at bridge top port side is burnt	Installation	EF motor control i circuit board of Seematz projector/ search light										
11.	Technical spaces	463-525 HGS/XBO										
12.	Eligibilities	Reputable local/ international contractor registered with FBR having working experience with PMSA.										
13.	EDC	15 Days										
14.	Warranty	01 Year company warranty										
15.	Acceptance criteria	End user satisfaction after successful trials.										

IT NO: IT/81/21/2025-26

**IT SPECIFICATIONS FOR FABRICATION OF FUEL SUPPLY LINES OF PORT & STBD
MAIN ENGINES EMP-PMSS KASHMIR**

S No	<u>Description</u>								
1.	Ships Name	PMSS KASHMIR							
2.	Parent Equipment	Main Engine							
3.	OEM	MAN B&W / DALIAN CRRC DIESEL ENGINE CO.,LTD.							
4.	Model	20RK270							
5.	Origin	Germany							
6.	Sub Equipment	Fuel supply line							
7.	Quantity	S No	Description	Size	Qty	Material			
		a.	Supply lines	Length: 7 ft, Dia: 2 Inch 1.8 Inch	02	Cu/Nk 90/10			
		b.	Engine suction line	Length: 6.5 ft Dia: 2 in ^	01				
		c.	Fuel probe receiver	Length: 8 ft Dia: 1.5 in	03	SS -316			
		d. 1	Discharge lines	Length: 6 ft Dia: 2 in L	02	Cu/ Nk 90/10			
8.	: Work Required	a	b	c	d				
		Defect List	Repair Work	Services Required	Spares Required				
		Fabrication	Fabrication of new lines as per quantity & material mentioned at S No 10	Nil	As per para 5				
		Installation/ dismantling	Dismantling and installation of new lines	Yes	Nil				
10.	Defect History	Fuel supply lines are being used with cold repairs for SAT operation of system							
11.	Technical Specs	Fabrication of new fuel supply lines as per sample							
12.	Eligibilities	Reputable local/ international contractor registered with FBR and having working experience with PMSA.							
13.	EDD/ EDC	30 Days after award of contract							
14.	Warranty	01 Year							
15.	Acceptance Criteria (if any)	a. OEM Certified item b. Pipe must be flushed before installation for clearing any debris c. No leakage of fuel after installation							

IT NO: IT/81/22/2025-26

IT SPECIFICATION FOR PROVISION OF TREADMILL – PMSS HINGOL

1.	Ships Name	PMSS HINGOL
2.	Parent Equipment	Treadmill
3.	OEM	Advance Fitness
4.	Model	BB-6131EAI
5.	Origin	USA
6.	Sub Equipment	Treadmill
7.	Assembly Equipment	Electric Treadmill
8.	Quantity	01
9.	Scope of Work Required	01 X New Electric Treadmill required
10.	Eligibility Criteria	Reputable firm having experience w.r.t provision of sports items (treadmill etc)
11.	EDC	15 x Days
12.	Warranty	5 Years

REPAIR/ OVERHAULING OF AURILARY SEA WATER PUMP NO 2 ONBOARD PMSS
HINGOL

S No	Ships Name	PMSS HINGOL			
1.	Parent Equipment	Sea Water Cooling System			
2.	OEM	JIANGSU ZHENHUA PUMP INDUSTRY CO, LTD			
3.	Model	CLH50-32-4.5(Z)			
4.	Origin	China			
5.	Sub Assembly	Main Fridge, Fin Stabilizers and Stern Seals Cooling System			
6.	Assembly Components	A/E Seawater Cooling Pumps			
7.	Work Required	Defect List	Repair Work Required	Service Required	Spares Required
		A/E Seawater Cooling Pump No 2 Performance found degraded, Mechanical Seal Leaky and abnormal noise observed, overhauling of pump is to be required for sat operation.	<p>(1) Fabrication of new pump body as per sample (Bronze)</p> <p>(2) Fabrication of new impeller as per sample(Bronze)</p> <p>(3) Replacement of old mechanical seal with high quality mechanical seal</p> <p>(4) Replacement of old worn out bearing with new SKF or other good bearing.</p> <p>(5) Servicing and overhauling of motor.</p> <p>(6) All old worn out gauges lines and adopters of pump needs to be replace with new</p> <p>(7) Precise alignment of pump with motor</p> <p>(8) Corroded/ damaged bolts and nuts to be replaced with new stainless bolts and nuts</p> <p>(9) Pump/ in way assembly</p>	Overhauling of A/E Seawater Cooling No 2 Pump and Servicing & overhauling of motor.	<p>01x pump body.</p> <p>01 x impeller.</p> <p>01x mechanical seals.</p> <p>03x bearings.</p> <p>02x gauges lines with adopters.</p> <p>04x adopters.</p> <p>Stainless steel,</p> <p>Stainless steel bolts.</p> <p>and nuts as per requirement.</p>

			removal and reinstallation Any other leakage observed during dismantling/ installation work will be responsibility of firm.		
8.	Eligibilities		Security wise clear firm having working experience on Main Engine of RHIB boat onboard HINGOL CLASS MPVs of PMSA.		
9.	EDC		07 Days		
10.	Warranty		One year warranty after satisfactory test / trials w.r.t: g. Satisfactory suction and discharge pressure of sea water pump h. Satisfactory and smooth operation without abnormal noise and vibration. i. Satisfactory operation without any leakage from mechanical seal, pump body and gauges lines. j. Satisfactory operation of gauges after installation of gauges lines. k. Precise alignment, impeller should be free to rotate. l. Any abnormality in pump, mechanical seal, water leakage from pump body/ gauges lines, suction, discharge pressure and motor performance will be rectified by the firm during warranty period.		
11.	Acceptance Criteria		e. Satisfactory test and trials with smooth operation of sea water pump without abnormal noise or vibration and any type of leakage. f. Satisfactory suction and discharge pressure of sea water pump. g. Satisfactory test and trials with smooth operation of motor without abnormal noise and vibration. h. <u>Satisfactory operation of gauges after installation of gauges lines.</u>		
12.	Any Other Relevant Information		Firm may visit onboard for clear understanding of scope of work before quoting		

**IT SPECIFICATIONS FOR FABRICATION, REPAIR/ REPLACEMENT AND SERVICING OF
DOOR CLOSERS, HINGES AND SEALS OF VARIOUS COMPARTMENTS EMP PMSS
KASHMIR**

S No	Description			
1.	Ships Name	PMSS KASHMIR		
2.	Parent Equipment	Structure		
3.	OEM	WUXI HAILIAN MARINE FITTING CO LTD		
6.	Origin	China		
7.	Sub Equipment	a. Water tight doors b. Non-water tight doors c. Hatches		
8.	Assembly Equipment	a. Closers b. Hinges c. Rubber Seals		
10.	Quantity	a. 20 in No (NWT Door) b. 30 in No (WT Doors) c. 74 in No (Cabins etc Doors)		
13.	Justification for work	Replacement of above mentioned items is required for SAT OPS		
14.	Wk Required	a	b	c
		Defect List	Repair Work Required	Services Required
	Door closers	14 x WT doors inspection required for chowk	20 x WT door closers servicing required	13 x Hydraulic door closers of NWT doors

		Door Hinges	Nil	All door hinges servicing required	Nil
		Door Seals	74 x fire protection doors' (NWT) rubber seals replacement required	Nil	Rubber Seal as per given dimension
		WT Door Couming	Fabrication of 20 x WT doors and hatches couming required	Nil	Nil
15.	Defect History	Fabrication, repair/ replacement and servicing of door hinges, closers and seals will be conducted first time since commissioning.			
16.	Technical Specs	As per sample			
17.	Eligibilities	Reputable local contractor registered with FBR and having working experience with PMSA.			
18.	EDD/ EDC	30 Days after award of contract			
19.	Warranty	01 Year			

20.	Acceptance Criteria (if any)	<ul style="list-style-type: none">a. Certified items as per sample.b. Defective door closers, hinges and seals must be replaced with new one.c. Chalk test should be done of all WT & NWT doors and hatches.d. Completion will be provided after successful chalk test.
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IT SPECIFICATION FOR CHEMICAL CLEANING OF MAIN ENGINE NO 1 & 2 COOLANT COOLERS AND LUB OIL COOLERS - PMSS ZHOB

S.No	Description			
1.	Ship's Name	PMSS ZHOB		
2.	Parent equipment	MTU Main Engine		
3.	OEM	MTU Germany		
4.	Model	MTU		
5.	Origin	Germany		
6.	Sub equipment	MTU Main Engine 1 & 2		
7.	Assembly component	Coolant Coolers and Lub Oil Coolers		
8.	Quantity	2 x Coolant Coolers, 2 x Lub Oil Coolers		
9.	Source of Availability	MTU Friedrichshafen GmbH		
10.	Justification for Work	Upon inspection of ME-1 & 2 coolant coolers and lub oil cooler of Main Engines No 1 & 2 are chocked. PMS routine 3-1118-0001 MOP No 051		
11.	Work Required	a	b	c
		Defect List	Repair Work required	Services Required
	Attached	Chemical cleaning of coolant coolers and lub oil coolers of Main Engines no 1 & 2 through OEM/ local engineering house.	See S.No 16 Para b	See S.No 16 Para c
12.	Detail scope of work	a	b	c
		Detail of Repair Work Required	Details of Services Required	Details of Spares Required
	Chemical cleaning of coolant coolers and lub oil coolers of Main Engines no 1 & 2 through OEM/ local engineering house.	a. Contractor is to visit ship and carry out detailed inspection of coolant coolers and lub oil coolers. b. Dismantling/ Assembling of Main Engines No 1 & 2 coolant coolers and lub oil coolers by contractor. c. Replacement of old seals with new high quality seals. d. Repair/ replacement of any other part i.e.	As required	
		sensors etc, if required will be treated as growth work. e. Firm to use OEM genuine spare parts.		
13.	Technical Specs	As per OEM Manual/ Specs		
14.	Eligibility criteria	a. Authorized rep of OEM/ Local contractor having working experience on pumps and impeller. Contractor is to visit the ship in order to understand the scope of work. b. Firm must visit site for understanding exact nature of work.		
15.	EDC	5 Days		

16.	Warranty	1-year warranty for satisfactory operation without following defects: a. Seawater/ fresh water leakage from coolers. b. Lub oil leakage from coolers. c. Increase of coolant and lub oil temperatures.
17.	Acceptance Criteria	a. Satisfactory harbor trials followed by successful sea trials of Main Engines No 1 & 2 on rated parameters. b. Satisfactory operation without leakage. c. Successful trials by end user. d. QA/QC certificate issuance by QA/QC Deptt.
18	Any other relevant information	a. Growth work, damage/ defect occurred during work is responsibility of contractor. b. Contactor may contact SS/ visit onboard ship to resolve any query.

SERVICING/ OVERHAULING OF OILY WATER SEPARATOR - PMSS HINGOL

S No	Details												
1.	Ships Name PMSS HINGOL												
2.	Parent Equipment OILY WATER SEPARATOR												
3.	OEM DONGTAI CITY DONGFANG MARINE FITTING CO, LTD.												
4.	Model YWC-0.50												
5.	Origin CHINA												
6.	Assembly Component OILY WATER SEPARATOR												
7.	Part No. of Assembly Component As Provided by OEM.												
8.	Quantity 01												
9.	Source of Availability Local Engineering Houses.												
10.	Justification for Work Oily Water Separator Performance poor												
11.	<table border="1"> <thead> <tr> <th>a</th> <th>B</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Oily, water separator performance poor</td> <td> <p>(1) Servicing/ repairing of pneumatic valves, screw pump, dosing pump, three stage membrane, oil content meter, pressure controller, two stage separator, first stage separator, temperature controller, electrical control system and dosing pump.</p> <p>(2) If required replace old defective components with new.</p> <p>(3) Corroded/ damaged bolts and nuts to be replaced with new stainless bolts and nuts.</p> <p>(4) Corroded/ damaged clamps and connectors to be replaced with new.</p> <p>(5) In way assembly removal and reinstallation</p> </td> <td> <p>Servicing/ repairing of pneumatic valves, screw pump, dosing pump, three stage membrane, oil content meter, pressure controller, two stage separator, first stage separator, temperature controller, electrical control system and dosing pump.</p> <p>Replacement of old defective components with new.</p> <p>Replacement Corroded/ damaged bolts and nuts.</p> </td> <td>All defective/ components which required replacing</td> </tr> </tbody> </table>	a	B	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Oily, water separator performance poor	<p>(1) Servicing/ repairing of pneumatic valves, screw pump, dosing pump, three stage membrane, oil content meter, pressure controller, two stage separator, first stage separator, temperature controller, electrical control system and dosing pump.</p> <p>(2) If required replace old defective components with new.</p> <p>(3) Corroded/ damaged bolts and nuts to be replaced with new stainless bolts and nuts.</p> <p>(4) Corroded/ damaged clamps and connectors to be replaced with new.</p> <p>(5) In way assembly removal and reinstallation</p>	<p>Servicing/ repairing of pneumatic valves, screw pump, dosing pump, three stage membrane, oil content meter, pressure controller, two stage separator, first stage separator, temperature controller, electrical control system and dosing pump.</p> <p>Replacement of old defective components with new.</p> <p>Replacement Corroded/ damaged bolts and nuts.</p>	All defective/ components which required replacing
a	B	c	d										
Defect/ Routine List	Repair Work Required	Services Required	Spares Required										
Oily, water separator performance poor	<p>(1) Servicing/ repairing of pneumatic valves, screw pump, dosing pump, three stage membrane, oil content meter, pressure controller, two stage separator, first stage separator, temperature controller, electrical control system and dosing pump.</p> <p>(2) If required replace old defective components with new.</p> <p>(3) Corroded/ damaged bolts and nuts to be replaced with new stainless bolts and nuts.</p> <p>(4) Corroded/ damaged clamps and connectors to be replaced with new.</p> <p>(5) In way assembly removal and reinstallation</p>	<p>Servicing/ repairing of pneumatic valves, screw pump, dosing pump, three stage membrane, oil content meter, pressure controller, two stage separator, first stage separator, temperature controller, electrical control system and dosing pump.</p> <p>Replacement of old defective components with new.</p> <p>Replacement Corroded/ damaged bolts and nuts.</p>	All defective/ components which required replacing										

			(6) Any other defect observed during dismantling/ installation work will be responsibility of firm.	In way assembly removal and reinstallation	
12.	Detailed scope of work	a Detail of Repair Work Required	b Detail of Services Required	c Detail of Spares Required	
		(1) Servicing/ repairing of pneumatic valves, screw pump, dosing pump, three stage membrane, oil content meter, pressure controller, two stage separator, first stage separator, temperature controller, electrical control system and dosing pump. (2) If required replace old defective components with new. (3) Corroded/ damaged bolts and nuts to be replaced with new stainless bolts and nuts. (4) Corroded/ damaged clamps and connectors to be replaced with new. (5) In way assembly removal and reinstallation (6) Any other defect observed during dismantling/ installation work will be responsibility of firm.	Servicing/ repairing of pneumatic valves, screw pump, dosing pump, three stage membrane, oil content meter, pressure controller, two stage separator, first stage separator, temperature controller, electrical control system and dosing pump. Replacement of old defective components with new. Replacement Corroded/ damaged bolts and nuts. In way assembly removal and reinstallation	All defective/ components which required replacing	
13.	Eligibilities	a. Any registered and security wise cleared local contractor who has working experience of oily water separator on HINGOL class MPVs. b. Firm must visit site for understanding the exact nature of defect/ hindrances involved in job prior quoting to avoid inconvenience on later stage after award of Work Order			
14.	EDC	07 Days			
15.	Warranty	One year warranty after satisfactory test /trails w.r.t: a. Satisfactory operation of oily water separator without any leakages. b. Satisfactory operation of all pneumatic control valves. c. Satisfactory operation of oily water separator control system. d. Satisfactory operation of screw pump and dosing pump. e. Satisfactory operation of all membranes, oil content meter and pressure			

		<p>controller.</p> <p>f. Satisfactory operation of all stages.</p> <p>g. Any defect occurred in operation, control system, Pneumatic valves and pumps will be rectified by the firm during warranty period</p>
16.	Acceptance Criteria	<p>a. Satisfactory operation of oily water separator without any leakages.</p> <p>b. Satisfactory operation of all pneumatic control valves.</p> <p>c. Satisfactory operation of oily water separator control system.</p> <p>d. Satisfactory operation of screw pump and dosing pump.</p> <p>e. Satisfactory operation of all membranes, oil content meter and pressure controller.</p> <p>f. Satisfactory operation of all stages.</p>

REPAIR/ REPLACEMENT OF STEERING MOTORS CONTROL PANEL BRIDGE - PMSS
KOLACHI

S No	Details							
1.	Ships Name	PMSS KOLACHI						
2.	Parent Equipment	BRIDGE CONTROL CONSOLE						
3.	OEM	JINZHOU HANGXING SHIP TECHNOLOGY CO, LTD.						
4.	Model	Integrated bridge control console						
5.	Origin	China						
6.	Sub Equipment	Steering Remote Panel F.Motor starter (MR200B)						
7.	Assembly Component	Steering Remote Panel F.Motor starter (MR200B)						
8.	Part No. of Assembly Component	S No	NSN/ Part No	Description	Qty			
	a.	(Supplied by shipyard)		Steering Remote Panel F. Motor starter	1			
9.	Source of availability	Local Market						
10.	Justification for Work	Steering control panel at Bridge found defective. RxR required.						
11.	Work Required	a	b	c	d			
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required			
	Steering control panel at Bridge found defective	Repair/ Replacement of Steering control panel at Bridge.		Inspection, Repair/ Replacement of Steering control panel at Bridge for sat ops.	As per S No 8			
12.	Detailed scope of work	Details of Repair Work Required		Details of services Required	Details of Spares Required			
		Repair/ Replacement of Steering control panel at Bridge.		Inspection, Repair/ Replacement of Steering control panel at Bridge for sat ops.	As per S No 8			
13.	Eligibility	Reputable local/ international contractor registered with FBR and having working experience with PMSA.						
14.	EDC	30 Days after award of contract						
15.	Warranty	01 Year						
16.	Acceptance Criteria	a. OEM Certified items b. All BER items to be replaced with new c. Firm will not be allowed to use ship tools and manpower d. QA/QC certificate issuance by QA/QC department						

**IT SPECIFICATIONS – PMS ROUTINE OF GENERAL PURPOSE ALARM SYSTEM - PMSS
KOLACHI**

S No	Details			
1.	Ships Name	PMSS KOLACHI		
2.	Parent Equipment	General Alarm System KLZ-24Z02		
3.	OEM	JINZHOU NORTH NAUTICAL INSTRUMENT CO.,LTD		
4.	Model	KLZ-24Z02		
5.	Origin	China		
6.	Sub Equipment	Emergency Main Engine Telegraph System		
7.	Assembly Component	Main Control Board JH5.623.233		
8.	Part No. of Assembly Component	S No	Part No	Item Description
		a.	6320PV290006	Main Control Board JH5.623.233
				02
9.	Justification for Work	To conduct PMS routine of General Purpose Alarm System (PMS No : 5-5401-0000)		
10.	Work Required	Defect/ Routine List	Repair Work Required	Services Required
		PM-007	Replace Main Control Board of Control Box at Alarm Bell	Inspection/ Overhauling of General purpose Alarm System required for SAT OPS
11.	Detailed scope of work	Details of Repair Work Required		Details of Spares Required
		Repair/ Replacement required for defective items of General Purpose Alarm System required for SAT OPS		Inspection/ Overhauling of General Purpose Alarm System required for SAT OPS. Defective parts must be replaced with new
				As per S No 9 & 10
12.	Technical Specs	Action warning 1 long Damage-control warning continuously short Ready for War & Voyage 3 long 1short Blackout 1short 1long 1short Input voltage With scope of change		Continuously 25~30s Continuously 25~30s Repeat 3 times, interval : 2s Repeat 3 times, interval : 2s 24 VDC +6%~-6%
13.	EDC	30 Days after award of contract		
14.	Warranty	01 year		
15.	Acceptance Criteria	a. OEM Certified item. b. Defective/ BER items to be replaced with new c. Firm will not be allowed to use ship tools and manpower d. QA/QC certificate issuance by QA/QC department		

IT NO: IT/81/29/2025-26

**REPAIR/ SERVICING/ REPLACEMENT OF SENSORS AND SAFETIES OF MAIN ENGINES
AND DIESEL GENERATORS - PMSS KOLACHI**

S No	Details																							
1.	Ships Name	PMSS KOLACHI																						
2.	Parent Equipment	a. MAIN DIESEL GENERATORS b. EMERGENCY AND HARBOR GENERATOR c. DIESEL ENGINE																						
3.	OEM	a. CHINA CUMMINS GENERATOR TECHNOLOGIES CHINA SHANGHAI KONTUNE POWER CO, LTD b. SHANGHAI KONTUNE POWER CO, LTD c. MAN B&W / DALIAN CRRC DIESEL ENGINE CO, LTD																						
4.	Model	a. CCFJ400J-KC b. CCFJ250J-KC c. 20RK270																						
5.	Origin	China																						
6.	Sub Equipment	FO Temperature sensor LO Temperature sensor Exhaust Temperature sensor Winding Temperature sensor Pressure switches Coolant temperature sensor of E/DG Coolant pressure sensor of E/DG Main Engine FW Temperature sensor Main Engine LO Temperature sensor Main Engine Exhaust Temperature sensor Main Engine speed sensor Main Engine cylinder Temperature sensor Main Engine bearing Temperature sensor Main Engine SW Temperature sensor & pressure switches																						
7.	Assembly Component	FO Temperature sensor LO Temperature sensor Exhaust Temperature sensor Winding Temperature sensor Pressure switches Coolant temperature sensor of E/DG Coolant pressure sensor of E/DG Main Engine FW Temperature sensor Main Engine LO Temperature sensor Main Engine Exhaust Temperature sensor Main Engine speed sensor Main Engine cylinder Temperature sensor Main Engine bearing Temperature sensor Main Engine SW Temperature sensor & pressure switches																						
8.	Part No. of Assembly Component	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>S No</th> <th>NSN/ Part No</th> <th>Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>NIL</td> <td>FO Temperature sensor</td> <td>As Required</td> </tr> <tr> <td>b.</td> <td>NIL</td> <td>LO Temperature sensor</td> <td>As Required</td> </tr> <tr> <td>c.</td> <td>NIL</td> <td>Exhaust Temperate sensor</td> <td>As Required</td> </tr> <tr> <td>d.</td> <td>NIL</td> <td>Winding Temperature sensor</td> <td>As Required</td> </tr> </tbody> </table>			S No	NSN/ Part No	Description	Qty	a.	NIL	FO Temperature sensor	As Required	b.	NIL	LO Temperature sensor	As Required	c.	NIL	Exhaust Temperate sensor	As Required	d.	NIL	Winding Temperature sensor	As Required
S No	NSN/ Part No	Description	Qty																					
a.	NIL	FO Temperature sensor	As Required																					
b.	NIL	LO Temperature sensor	As Required																					
c.	NIL	Exhaust Temperate sensor	As Required																					
d.	NIL	Winding Temperature sensor	As Required																					

		e.	NIL	Pressure switches	As Required	
		f.	NIL	Coolant temperature sensor of E/DG	As Required	
		g.	NIL	Coolant pressure sensor of E/DG	As Required	
		h.	NIL	Main Engine FW Temperature sensor	As Required	
		j.	NIL	Main Engine LO Temperature sensor	As Required	
		k.	NIL	Main Engine Exhaust Temperature sensor	As Required	
		l.	NIL	Main Engine speed sensor	As Required	
		m.	NIL	Main Engine cylinder Temperature sensor	As Required	
		n.	80-375-04-626-300	Main Engine bearing Temperature sensor	As Required	
		p.	NIL	Main Engine SW Temperature sensor & pressure switches		
9.	Source of availability	OEM, Local Market				
10.	Justification for Work	Replacement of above mentioned items is required for SAT OPS				
11.	Work Required	a	b	c	d	
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required	
		SSGD No 1, 2, 3 & E/DG all FW temp, LO temp, Exhaust temp, winding temp, pressure switches/ sensors inspection/ replacement. Coolant temp sensor of E/ DG defected. Coolant pressure sensor of E/ DG defected. SSDG No 2 LCP power supply defective. Both Main Engine all FW temp, LO temp, Exhaust temp, speed, cylinder temp, bearing temp, SW temp & pressure switches/ sensors inspection/ replacement if required.	Inspection/ replacement of above mentioned sensors required for SAT OPS	Inspection, repair/ replacement and cleaning of sensors required	As per S; No 9	
12.	Detailed scope of work	Details of Repair Work Required		Details of services Required	Details of Spares Required	
		SSGD No 1, 2, 3 & E/DG all FW temp, LO temp, Exhaust temp, winding temp, pressure switches/ sensors inspection/ replacement. Coolant temp sensor of E/ DG defected. Coolant pressure sensor of E/		Inspection, repair/ replacement and cleaning of sensors required	As per S;No 9	

		DG defected. SSDG No 2 LCP power supply defective. Both Main Engine all FW temp, LO temp, Exhaust temp, speed, cylinder temp, bearing temp, SW temp & pressure switches/ sensors inspection/ replacement if required.																							
13.	Technical Specs	<table border="1"> <thead> <tr> <th>S No</th><th>Description</th><th>Type</th><th>Power</th><th>Frequency</th></tr> </thead> <tbody> <tr> <td>a.</td><td>SSDGs</td><td>CCFJ400J-KC</td><td>500 KVA</td><td>50 Hz</td></tr> <tr> <td>b.</td><td>E/ DG</td><td>PGH2 Type</td><td>3 Phase AC</td><td>50 Hz</td></tr> <tr> <td>c.</td><td>Main Engine</td><td>20RK270</td><td>6875 kW</td><td>-</td></tr> </tbody> </table>	S No	Description	Type	Power	Frequency	a.	SSDGs	CCFJ400J-KC	500 KVA	50 Hz	b.	E/ DG	PGH2 Type	3 Phase AC	50 Hz	c.	Main Engine	20RK270	6875 kW	-			
S No	Description	Type	Power	Frequency																					
a.	SSDGs	CCFJ400J-KC	500 KVA	50 Hz																					
b.	E/ DG	PGH2 Type	3 Phase AC	50 Hz																					
c.	Main Engine	20RK270	6875 kW	-																					
14.	Eligibility	Reputable local/ international Contractor registered with FBR and having working experience with PMSA.																							
15.	EDC	30 Days after award of contract																							
16.	Warranty	01 Year																							
17.	Acceptance Criteria	a. OEM Certified item b. All BER items to be replaced with new c. Firm will not be allowed to use ship tools and manpower d. QA/QC certificate issuance by QA/QC department																							
18.	Any other relevant information	Contractor/ Rep of firm should visit ship prior quoting to inspect exact scope of work.																							

**IT SPECIFICATIONS – CONDUCT OF PMS ROUTINE OF AVIATION FUEL SYSTEM - PMSS
KOLACHI**

S No	Details				
1.	Ships Name	PMSS KOLACHI			
2.	Parent Equipment	AVIATION FUEL SYSTEM			
3.	OEM	CSSC SYSTEMS ENGINEERING RESEARCH INSTITUTE			
4.	Model	50CYZ-40			
5.	Origin	China			
6.	Sub Equipment	AVIATION FUEL SYSTEM			
7.	Assembly Component	Coupling hexagon elastic Block 79x40x16 Separating filter element 50LGF-30/10-3 Coalescing filter element 50LGF-30/10-4 Silk cloth CSC 500x500 Soft brush 2" Nixie tube H/PXC-1-1 Nixie tube H/PXC-1-2 Nixie tube H/PXC-1-3 Fuse RL98-16			
8.	Part No. of Assembly Component	S No	Part No	Item Description	Qty
		b.	3010PV8001004	Coupling hexagon elastic Block 79x40x16	
		c.	2995PV1020027	Separating filter element 50LGF-30/10-3	
		d.	2995PV1020028	Coalescing filter element 50LGF-30/10-4	
		e.	7920PV0030706	Silk cloth CSC 500x500	
		f.	7920PV0020002	Soft brush 2"	
		g.	5961PV0990032	Nixie tube H/PXC-1-1	
		h.	5961PV0990033	Nixie tube H/PXC-1-2	
		i.	5961PV0990034	Nixie tube H/PXC-1-3	
		j.	2995PV1020099	Fuse RL98-16	
		k.	5999PV9000111	Buzzer LA3Z-1X4V	
9.	Justification for Work	To conduct PMS routine of Aviation Fuel System (PMS No 3-5607-0000)			
10.	Work Required	Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		PM-008	Inspection and maintenance of coupling	Inspection/ Overhauling of aviation fuel system required	As per S No 9 & 10
		PM-009	Inspection and maintenance of filter separator		
		PM-010	Inspection and maintenance of aviation fuel control device		
11.	Detailed scope of work	Details of Repair Work Required	Details of services Required	Details of Spares Required	
		Repair/ Replacement of defective items of Aviation Fuel System	Inspection/ Overhauling of Aviation Fuel	As per S No 9 & 10	

		required for SAT OPS	System required	
12.	Technical Specs	Flow rate for pressure refueling on deck Flow rate for gravity refueling on deck Service tank Sludge tank	200L/min~250L/min 150L/min~200L/min ≥2500L ≥1000L	
13.	EDC	30 Days after award of contract		
14.	Warranty	01 year		
15.	Acceptance Criteria	e. OEM Certified item. f. Defective/ BER items to be replaced with new g. Upon scrutiny of items and provided documents along with production certificate by OEM h. Firm will not be allowed to use ship tools and manpower i. QA/QC certificate issuance by QA/QC department		

REPAIR/ REPLACEMENT OF SEARCH LIGHT WISKA - PMSS BASOL

S No	Details									
1.	Ships Name PMSS BASOL									
2.	Parent Equipment High Performance Search Light Wiska									
3.	OEM Eway Marine (HONGKONG) Co., Limited									
4.	Model SW400-1000-X(230)-P14-R02-I01-S05									
5.	Serial No SW400/1000FL20 Searchlight									
6.	Origin China									
7.	Sub Equipment Search Light Wiska									
8.	Assembly Component Drive unit FL20, Control unit RCU-E Searchlight Wiska									
9.	Quantity 1 x Wiska light 20 x double rod tube light with base 50 x glass covers of exterior light									
10.	Source of Availability WISKA Hoppmann & Mulsow GmbH Kisdorfer Weg 28 D24568 Kaltenkirchen China									
11.	Justification for Work 2 x Motors, rotating gears, high performance searchlight Lamp) 230V 1000W and PCB of search light Wiska found deteriorated and unable to move at 360 degree									
12.	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td>Complete detailed health assessment of 2 x Motors, rotating gears, high performance searchlight (Lamp) 230V 1000W and PCB of search light Wiska</td> <td>As required during repair/ replacement of search light Wiska and 20 W ceiling light bases</td> <td>As per requirements for repair/ replacement of search light Wiska with new 20 x double rod tube light (20 W) with complete base 50 x glass covers of exterior light (As per sample)</td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Complete detailed health assessment of 2 x Motors, rotating gears, high performance searchlight (Lamp) 230V 1000W and PCB of search light Wiska	As required during repair/ replacement of search light Wiska and 20 W ceiling light bases	As per requirements for repair/ replacement of search light Wiska with new 20 x double rod tube light (20 W) with complete base 50 x glass covers of exterior light (As per sample)
a	b	c								
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required								
Complete detailed health assessment of 2 x Motors, rotating gears, high performance searchlight (Lamp) 230V 1000W and PCB of search light Wiska	As required during repair/ replacement of search light Wiska and 20 W ceiling light bases	As per requirements for repair/ replacement of search light Wiska with new 20 x double rod tube light (20 W) with complete base 50 x glass covers of exterior light (As per sample)								
13.	Technical Specs As per technical manual									
14.	Eligibilities Reputable local contractor having working experience of high performance search light Wiska									
15.	EDC 01 week									
16.	Warranty 01 year									
17.	Acceptance Criteria <ul style="list-style-type: none"> a. Satisfactory operation of high performance search light Wiska and ceiling lights. b. Contractor would be responsible for any damage to electrical assembly. c. Successful trials by end user. d. QA/QC certificate issuance by QA/QC 									

18.	Any other relevant info	Contactor may contact SS/ Visit onboard ship to resolve any query Growth Work, Damage/ defect occurred during work is responsible of contractor
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IT NO: IT/81/32/2025-26

REPAIR/ MAINTENANCE OF 3A ROUTINES OF FIN STABILIZERS - PMSS BASOL

S No	Details																			
1.	Ships Name	PMSS BASOL																		
2.	Parent Equipment	Fin Stabilizer																		
3.	OEM	Harbin Engineering University																		
4.	Model	NJ4-1.8S-1																		
5.	Origin	China																		
6.	Sub Equipment	Fin Stabilizer																		
7.	Part No. of Assembly Component	As per enclosed JICs																		
8.	Quantity	2 x Fin Stabilizer																		
9.	Source of Availability	Harbin Engineering University																		
10.	Justification for Work	<p>As per PMS routines/ technical manual To carry out following maintenance routines of Fin Stabilizers:</p> <table border="1"> <thead> <tr> <th>MOP</th> <th>Description</th> <th>Period</th> </tr> </thead> <tbody> <tr> <td>PM-011</td> <td>Checkup of the spare sealing ring.</td> <td>3A</td> </tr> <tr> <td>PM-012</td> <td>Replace the filter element of filter</td> <td>3A</td> </tr> <tr> <td>PM-013</td> <td>Replace the sealing of hydraulic cylinder</td> <td>3A</td> </tr> <tr> <td>PM-014</td> <td>Clean the oil tank and replace oil</td> <td>3A</td> </tr> <tr> <td>PM-015</td> <td>Replace cooler</td> <td>3A</td> </tr> </tbody> </table>	MOP	Description	Period	PM-011	Checkup of the spare sealing ring.	3A	PM-012	Replace the filter element of filter	3A	PM-013	Replace the sealing of hydraulic cylinder	3A	PM-014	Clean the oil tank and replace oil	3A	PM-015	Replace cooler	3A
MOP	Description	Period																		
PM-011	Checkup of the spare sealing ring.	3A																		
PM-012	Replace the filter element of filter	3A																		
PM-013	Replace the sealing of hydraulic cylinder	3A																		
PM-014	Clean the oil tank and replace oil	3A																		
PM-015	Replace cooler	3A																		

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a	b	c									
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required									
As per requirements	<p>Detailed work scope for carrying out 3A routines of Fin Stabilizers is as under:</p> <ul style="list-style-type: none"> a. Dismantling of all accessories required for carrying out above mentioned routines. b. Cleaning of all dismantled items in detail. c. All spares required for carrying said routines is to be provided by the contractor, this includes sealing rings, hydraulic oil and cooler of the system as well. List of the spares required may be obtained from the ship. d. Replacement of all removed gaskets/ seals for carrying said routines with new gaskets/ seals, same will also be provided by the contractor. e. Complete defect diagnosis and rectification of oil leakage from Port Fin Stabilizer of the ship. f. Any other repair/ maintenance job will be covered in growth work. g. Conduct of Harbour and sea trials. h. Record operating parameters (oil pressure, discharge pressure, temperature) as per OEM recommendation 	As per requirements									
12.	Technical Specs	As per technical manual									
13.	Eligibilities	Reputable local contractor having working experience of Fin Stabilizer									
14.	EDC	02 weeks									
15.	Warranty	01 Year									
16.	Acceptance Criteria	<ul style="list-style-type: none"> a. Satisfactory operation of Fin Stabilizer b. Satisfactory SATs followed by HATs. c. Satisfactory operation without noise and vibration. d. Leakage free operation of system. 									
17.	Any other relevant info	<ul style="list-style-type: none"> a. Contactor may contact SS/ visit onboard ship to resolve any query. b. Growth work, damage/ defect occurring during work will be responsibility of contractor. 									

IT NO: IT/81/33/2025-26
IT SPECIFICATION

S. No	Description														
1.	Ships Name	PMSS HINGOL													
2.	Parent Equipment	Propulsion System.													
3.	OEM	SHANGHAI OCEAN MARINE EQUIPMENT CO.,LTD													
4.	Model	OC-ZXCS													
5.	Origin	China/													
6.	Sub. Assembly	Power Transmission System.													
7.	Assembly	Shaft Earthing & Speed Measuring Device.													
8.	Part No of Assembly Components	As Provided by OEM													
9.	Quantity	04													
10.	Source Of Availability	Local Engineering Houses .													
11.	Justification for work	ME#1, ME#2, ME#3 and ME#4 Shaft Earthing & Speed Measuring Devices found defective													
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13	Detail Scope of Work	a	b	c
		Detail of Repair Work Required	Detail of Service Required	Detail of Spare J Required
		<p>(ij. Repair/ Replacement of earth carbon brushes rings, earth carbon brush holders.</p> <p>(2). Repair/ Replacement of measuring carbon brushes holders.</p> <p>(3). Repair/ Replacement of potential measurement boxes of shafting earthing.</p> <p>(4) . Repair/ Replacement of digital LED speed displays, signal amplifiers, sensors, magnets, measurement speed sensors and special line segment of measurement box.</p> <p>(5). Inspection and repairing of circuit.</p> <p>(6) . All tools and test equipment or any spare required to conduct said work will be arranged by firm/ contractor and no growth work will be acceptable</p>	<p>Repairing of earth carbon brushes rings, earth carbon brushes holders, measuring carbon brushes holders, potential measurement box of shafting earthing.</p> <p>04 x earth carbon, brushes rings 08 x earth carbon. brush holders 04 x measuring carbon brush holders. •04 x potential. measurement box of shafting earthing.</p> <p>08 x special line segment of 5 measurement box 08 x digital LED</p>	
		<p>(7). System will be pre checked before start of work.</p> <p>(8). Any other defect occurred during dismantling/ installation work will be responsibility of firm.</p> <p>(9) Dismantling/ assembling/ installation and in way removal work is responsibility of contractor.</p>	<p>sensors, magnets, speed sensors and special line segment of measurement box if necessary replace.</p>	<p>speed displays. 04 x signal amplifiers 04x sensors. 08 x magnets are required if necessary.</p>
14.	Technical specs	As per OEM manual.		
15.	Eligibility	Security wise clear firm having working experience on Propulsion & power transmission system		
16	EDC	07 Days		
17.	Warranty	<p>One year warranty after satisfactory test / trials w.r.t:</p> <p>a. Satisfactory operation of ME#1, ME#2, ME#3 and ME#4 shaft 'earthing & speed measuring devices at different RPM.</p> <p>b. Satisfactory operation of all repair/ replaced components of shaft earthing & speed measuring devices at different RPM.</p> <p>c. Only OEM Recommended spares will be acceptable.</p> <p>d. Any abnormality/ malfunctioning of ME#1, ME#2, ME#3 and ME#4 shaft earthing & speed measuring devices at different RPM and all components which repaired/ replace by firm will be replace by the firm during warranty period.</p>		
18.	Acceptance Criteria	<p>a. Satisfactory operation of ME#1, ME#2, ME#3 and ME⁴ shaft earthing & speed , measuring devices at different RPM</p> <p>b. Satisfactory operation of all repair/ replaced components of shaft earthing & speed measuring devices at different RPM.</p>		

IT SPECIFICATION OF REPAIR/ MAIN GLENDINNING UNITS (SMART ACTUATOR) GLENDINNING UNITS (SMART ACTUATOR) PMSS RAFAQAT

1.	Ship's Name	PMSS RAFAQAT		
2.	Parent Equipment	Main Diesel Engine and Gearbox		
3.	OEM	USA		
4.	Model	SWBS 233		
5.	Origin	USA		
6.	Sub Equipment	Main Control System of MDE Governor and Gearbox		
7.	Assembly Components	MDE Glendinning units (smart actuator)		
8.	Part No. of Assembly	11312-XX-TMG-P & 11312-XX-TMG-S		
9.	Quantity	02		
10.	Work Required	a Defect List	b Repair Work	c Services Required
		MDE Glendinning units (smart actuator) performance degraded	Glendinning units (Smart Actuator) repair/ maintenance required.	Removal and fitting of Glendinning units (Smart Actuator)
				All material, spares, tools, special equipment tools, accessories etc required or said work are to arrange by the contractor
11.	Detail scope of work	Details of Serial 10 Column a, b & c		
		a Detail of Repair Work	b Details of Services Required	c Details of Spares Required
		a. Removal of Glendinning Units from onboard ship. b. fault diagnosis of defective components of Glendinning units (Smart Actuator) is to be carried out. c. Repair/ replacement defective component, control PCB card and control cables.	Removal and fitting of Glendinning units (Smart Actuator)	All material, spares, tools, special equipment tools, accessories etc required or said work are to arrange by the contractor.
			Any damage occurs during the course of inspection work will be	

12.	<p>d. Installation of repaired Glendinning units (Smart Actuator) done by firm without any liability/ responsibility on part of the ship onboard ship.</p> <p>e. calibration of smart actuator is to be verified.</p> <p>f. Confirmation the interlocks and the signal communication from local, remote and flying bridge to MDE Governor and gearbox in head and astern state.</p> <p>g. Unit harness, linkages and hardware's is to be verified.</p> <p>h. All warning and alarms indications (LEDs) on throttle operational capabilities. To be done.</p> <p>j. Command and achieved electrical signals should be confirmed with accuracy.</p> <p>k. Throttle section on various modes of operational to be ensure.</p>	
13.	Eligibilities	The firm should visit onboard for assessment of existing fitting
14.	EDC	07 working days
15.	Warranty	1 Year
16.	Acceptance Criteria	Successful trials by end user. QA/QC Certificate issued by.

**IT SPECIFICATIONS - REPAIR/ REPLACEMENT OF BOAT DECK AND CPOs/ SAILORS
LOBBY LADDERS - PMSS HINGOL**

SNo	Description						
1.	Ships Name	PMSS HINGOL					
2.	Parent Equipment	Boat deck and CPOs/ Sailors Lobby Ladders					
3.	OEM	China					
4.	Origin	China					
5.	Sub Equipment	Repair/ Replacement of Boat deck and CPOs/ Sailors Lobby			Ladders		
6.	Assembly Component	Repair/ Replacement of Boat deck and CPOs/ Sailors Lobby			Ladders		
7.	Quantity	02 in No					
8.	Sources of Availability	Local Contractor					
9.	Justification for Work	Repair/ Replacement of Boat deck and CPOs/ Sailors Lobby Ladders					
10.	Work Required	a	b	c			
		Defect List	Repair Work Req	Services Req	Spares Req		
		Replacement of Ladders footplates, welding and alignment of frame	Replacement of Ladders footplates, welding and alignment of frame	Replacement of Ladders footplates, welding and alignment of frame	Replacement of Ladders footplates, welding and alignment of frame		
11.	Detail Scope of Work	a	b	c			
		Details of Repair Work Req	Details of Services Req	Details of Spares Req			
		Removal of old plates with installation of new aluminum plates and frame with specific welding work on joints	Removal of old plates with installation of new aluminum plates and frame with specific welding work on joints	Removal of old plates with installation of new aluminum plates and frame with specific welding work on joints			
12	Eligibility	Security wise clear firm having working experience PUMP) on board HINGOL Class MPVs of PMSA.		on General service pump (GS			
13	EDC	07 Days					
14	Warranty	a. 3 x year warranty after satisfactory trials/test b. Material will be reported if deformity or wear is developed during warranty period					
15	Acceptance Criteria	a. Satisfactory work as per requirement , b. . Damage/ defect occurred to system during work is responsibility -61 contractor c. Dismantling/ assembling/ installation and in way removal work is responsibility					

16	Any other relevant information	Firm may visit onboard for clear understanding of scope of work before quoting.
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IT NO: IT/81/36/2025-26

PROCUREMENT OF OFFICE REVOLVING CHAIRS AND CERAMIC TILES - HQ PMSA

S No	Description	
1.	Ship's Name	HQ PMSA/ DG Sectt
2.	Parent Equipment	Office revolving computer chair and Ceramic Tiles
3.	Origin	Pakistan
4.	Store Required	11 x office revolving computer chair is required Ceramic Tiles 350 Sq Mtr
5.	Technical Specifications	<u>OFFICE REVOLVING CHAIRS</u> a. Office chair revolving b. Koro base with Chinese tyre c. 360-degree revolving d. Reclining option e. up and down mechanism
6.	Eligibilities	Have past experience w.r.t procurement of office accessories onboard PMSA Ships
7.	EDC	15 days
8.	Warranty	01 Year
9.	Acceptance Criteria	Upon acceptance and satisfaction of end user

CONDUCT OF OVERHAULING ROUTINES FOR MOBILE FIREFIGHTING & ELECTRIC SUBMERGED PUMP - PMSS BASOL

S No	Details																																																								
1	Ships Name	PMSS BASOL																																																							
2.	Parent Equipment	Mobile Fire Fighting Pump Electric Submerged Pump																																																							
3.	OEM	Jiangsu Zhenhua Pump Industry Co. Ltd.																																																							
4.	Model	65CWY-40 CQX30203																																																							
5.	Serial No	CB/13523-93																																																							
6.	Origin	China																																																							
7.	Sub Equipment	Pump and Motor																																																							
8.	Assembly Component	Pump, Mobile emergency fire pump, Pump shaft, Mechanical seal, Impeller, "O" rubber ring Ø 109x3.55, Diesel engine of pump 5.7 kW, Priming device, Handcart, Triangular belt A type, Discharge Dividing device and Suction & Discharge Hoses																																																							
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		As per requirements	<p>Detailed work scope for carrying out repair/ overhauling routines of portable FF pump is as under:</p> <ul style="list-style-type: none"> a. Dismantling of all accessories required for carrying out above mentioned routines. b. Cleaning of all dismantled items in detail. c. Pump and motor to be removed. Chain Block or any other lifting equipment which may be required is to be arranged by the firm d. All degraded/ defective components to be procured/ fabricated. Bronze material to be used. e. All degraded Nuts and Bolts are to be replaced with new (Stainless Steel). f. Motor and pump to be assembled with proper alignment. g. Pump be installed back, followed by successful onboard trials on rated parameters. 	As per S No. 9 & 10
14.	Technical Specs	As per technical manual		
15.	Eligibilities	Reputable local contractor having working experience of pumps		
16.	EDC	02 weeks		
17.	Warranty	01 Year		
18.	Acceptance Criteria	<ul style="list-style-type: none"> a. Satisfactory discharge pressure of pumps. b. Satisfactory and smooth operation without high vibration and noise. c. Satisfactory operation without sea water leakage. d. Precise alignment of motor shaft, so that impeller should be free to rotate. 		
19.	Any other relevant info	<ul style="list-style-type: none"> a. Contactor may contact SS/ visit onboard ship to resolve any query. b. Growth work, damage/ defect occurring during work will be responsibility of contractor. 		

REPAIR/ REPLACEMENT OF VULKAN RESILIENT COUPLING - PMSS NUSRAT

S No	Details			
1.	Ships Name	PMSS NUSRAT		
2.	Parent Equipment	APME		
3.	OEM	MTU		
4.	Model	16 V 396 TB 93 (4 Stroke Water Cooled System)		
5.	Serial No	5590577		
6.	Origin	Germany		
7.	Sub Equipment	VULKAN Resilient coupling		
8.	Assembly Component	VULKAN Resilient coupling		
9.	Part No. of Assembly Component	EZR 2032 /		
10.	Quantity	01		
11.	Justification for Work	Resilient coupling worn out during normal operation at sea. Coupling is to be replaced for sat ops		
12.	Work Required	a	b	c
Defect/ Routine List		Repair Work Required	Services Required	Spares Required
	Resilient coupling worn out during normal operation at sea	Replacement of resilient coupling is required for sat ops	-	VULKAN Resilient coupling
13.	Detailed scope of work	a	b	c
Detail of Repair Work Required		Detail of Services Required	Detail of Spares Required	
	Replacement of resilient coupling is required for sat ops	<p>a. Defective Resilient coupling is to be dismantled.</p> <p>b. New resilient coupling is to be arranged.</p> <p>c. Special tool is to be arrange for dismantling and fitting of said coupling.</p> <p>d. New resilient coupling is to be fitted back.</p> <p>e. The firm will be responsible to undertake any work not covered above to ensure good quality of work.</p> <p>f. The firm will be responsible for welding/ cutting, if required.</p>	VULKAN Resilient coupling	

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

DEFECT DIAGNOSIS & RECTIFICATION OF PROPULSION CONTROL SYSTEM ALONG WITH REPLACEMENT OF DEGRADED COMPONENTS AND WIRING - PMSS KASHMIR

S No	Details																											
1.	Ships Name	PMSS KASHMIR																										
2.	Parent Equipment	Propulsion System																										
3.	OEM	CRRC China																										
4.	Model	RK-20																										
5.	Serial No	NIL																										
6.	Origin	UK																										
7.	Sub Equipment	Control System																										
8.	Assembly Component	a. Combine propulsion Control Panel b. Communication Module c. Control Handle d. Wiring																										
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k.	711-607	Control handle CJM1-BS1																										
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10.	Quantity	As per S No 9																										
11.	Justification for Work	FWT																										
12.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Defect diagnosis of misc interlocks of propulsion control system</td> <td>Nil</td> <td>Diagnosis</td> <td>Nil</td> </tr> <tr> <td>Repair/ replacement of identified component</td> <td>Yes</td> <td>Nil</td> <td>Yes</td> </tr> <tr> <td>Repair of combine controller</td> <td>Yes</td> <td>Nil</td> <td>Nil</td> </tr> <tr> <td>Replacement of 4 x communication module PLCs</td> <td>Nil</td> <td>Nil</td> <td>Yes</td> </tr> </tbody> </table>			a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Defect diagnosis of misc interlocks of propulsion control system	Nil	Diagnosis	Nil	Repair/ replacement of identified component	Yes	Nil	Yes	Repair of combine controller	Yes	Nil	Nil	Replacement of 4 x communication module PLCs	Nil	Nil	Yes
a	b	c	d																									
Defect/ Routine List	Repair Work Required	Services Required	Spares Required																									
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Repair of combine controller	Yes	Nil	Nil																									
Replacement of 4 x communication module PLCs	Nil	Nil	Yes																									
13.	Eligibilities	Reputable local contractor registered with FBR and having working experience with PMSA.																										
14.	EDC	30 Days after award of contract																										
15.	Warranty	01 Year																										
16.	Acceptance Criteria	a. OEM Certified items. b. Satisfactory trial at sea for 7 x days																										

CONDUCT OF OVERHAULING ROUTINES OF FIXED FF PUMPS - PMSS BASOL

S No	Details																																									
1.	Ships Name	PMSS BASOL																																								
2.	Parent Equipment	Electric Firefighting Pump Bilge Jet Pump Daily Service Bilge water Pump																																								
3.	OEM	Jiangsu Zhenhua Pump Industry Co. Ltd.																																								
4.	Model	CLH80-65-5.5(Z)																																								
5.	Origin	China																																								
6.	Sub Equipment	Pump and Motor																																								
7.	Assembly Component	Pump body, Impeller, Shaft, Mechanical seal, Bearings, Motor winding																																								
8.	Part No. of Assembly Component	<table border="1"> <thead> <tr> <th>S No</th> <th>NSN/ Part No</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>CLH80-65-5.5(Z)</td> <td>Electric Firefighting Pump</td> </tr> <tr> <td>b.</td> <td>9320PV1010702/ZH3-35</td> <td>Mechanical seal</td> </tr> <tr> <td>c.</td> <td>4320PV1020005/ 466ZH-CLH-04-05</td> <td>Impeller</td> </tr> <tr> <td>d.</td> <td>6105PV1600007/ 466ZH-CLH-04-04</td> <td>Motor Shaft</td> </tr> <tr> <td>e.</td> <td>3110PV0020036/ GB/T276-1994/6309</td> <td>Motor Bearing</td> </tr> <tr> <td>f.</td> <td>CP10-0.5T</td> <td>Bilge Jet Pump</td> </tr> <tr> <td>g.</td> <td>4320PV8160004/ 426ZH96-01 -05</td> <td>Nozzle</td> </tr> <tr> <td>h.</td> <td>GCN35-1V-W102-4</td> <td>Daily Service Bilge Water Pump</td> </tr> <tr> <td>j.</td> <td>9320PV1010707/ M32N-35G9L</td> <td>Mechanical seal</td> </tr> <tr> <td>k.</td> <td>3110PV0110002</td> <td>Bearing</td> </tr> <tr> <td>l.</td> <td>3110PV0020032</td> <td>Bearing</td> </tr> <tr> <td>m.</td> <td>3030PV0010003</td> <td>Belt</td> </tr> </tbody> </table>		S No	NSN/ Part No	Description	a.	CLH80-65-5.5(Z)	Electric Firefighting Pump	b.	9320PV1010702/ZH3-35	Mechanical seal	c.	4320PV1020005/ 466ZH-CLH-04-05	Impeller	d.	6105PV1600007/ 466ZH-CLH-04-04	Motor Shaft	e.	3110PV0020036/ GB/T276-1994/6309	Motor Bearing	f.	CP10-0.5T	Bilge Jet Pump	g.	4320PV8160004/ 426ZH96-01 -05	Nozzle	h.	GCN35-1V-W102-4	Daily Service Bilge Water Pump	j.	9320PV1010707/ M32N-35G9L	Mechanical seal	k.	3110PV0110002	Bearing	l.	3110PV0020032	Bearing	m.	3030PV0010003	Belt
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m.	3030PV0010003	Belt																																								
9.	Quantity	01 x Electric Firefighting Pump 02 x Bilge Jet Pump 01 x General Service Pump																																								
10.	Source of Availability	Jiangsu Zhenhua Pump Industry Co. Ltd. China																																								
11.	Justification for Work	As per PMS routines/ technical manual To carry out following maintenance routines of Pump:																																								
		<table border="1"> <thead> <tr> <th>MOP</th> <th>Description</th> <th>Period</th> </tr> </thead> <tbody> <tr> <td>PM-008</td> <td>Overhaul of motor</td> <td>O</td> </tr> <tr> <td>PM-010</td> <td>Overhaul of pump</td> <td>O</td> </tr> <tr> <td>PM-010</td> <td>Overhaul of pump</td> <td>O</td> </tr> <tr> <td>PM-002</td> <td>Overhaul of pump (change nozzle).</td> <td>O</td> </tr> </tbody> </table>		MOP	Description	Period	PM-008	Overhaul of motor	O	PM-010	Overhaul of pump	O	PM-010	Overhaul of pump	O	PM-002	Overhaul of pump (change nozzle).	O																								
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Nil	Yes	Yes	Yes																																							

	Detailed scope of work	a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
13.		As per requirements	<p>Detailed work scope for carrying out repair/ overhauling routines of pump is as under:</p> <p>a. Dismantling of all accessories required for carrying out above mentioned routines.</p> <p>b. Cleaning of all dismantled items in detail.</p> <p>c. Pump and motor to be removed. Chain Block or any other lifting equipment which may be required is to be arranged by the firm.</p> <p>d. All degraded/ defective components to be procured/fabricated. Bronze material to be used.</p> <p>e. All degraded Nuts and Bolts are to be replaced with new (Stainless Steel).</p> <p>f. Motor and pump to be assembled with proper alignment.</p> <p>g. Pump be installed back, followed by successful onboard trials on rated parameters.</p>	As per S No. 9 & 10
14.	Technical Specs	As per technical manual		
15.	Eligibilities	Reputable local contractor having working experience of pumps		
16.	EDC	02 weeks		
17.	Warranty	01 Year		
18.	Acceptance Criteria	<p>a. Satisfactory discharge pressure of pumps.</p> <p>b. Satisfactory and smooth operation without high vibration and noise.</p> <p>c. Satisfactory operation without sea water leakage.</p> <p>d. Precise alignment of motor shaft, so that impeller should be free to rotate.</p>		
19.	Any other relevant info	<p>a. Contactor may contact SS/ visit onboard ship to resolve any query.</p> <p>b. Growth work, damage/ defect occurring during work will be responsibility of contractor.</p>		

PROCUREMENT OF POWER AMPLIFIER - PMSS NUSRAT

S No	Details				
1.	Ships Name	PMSS NUSRAT			
2.	Parent Equipment	POWER AMLIFIER			
3.	OEM	TOA JAPAN			
4.	Model	A-1724			
5.	Serial No	N/A			
6.	Origin	TOA JAPAN			
7.	Sub Equipment	TOAA-1724 PA Amplifier			
8.	Assembly Component	TOA A-1724 PA Amplifier			
9.	Quantity	S No	Description	Qty	
		a.	TOAA-1724 PA Amplifier	01	
		b.	TOA MX-113 Pre Amplifier Mixer	01	
10.	Source of Availability	N/A			
11.	Justification for Work	Power Amplifier is required for main broadcast system onboard ship			
12.	Detailed scope of work	Defect Analyzed	a Detail of Repair Work Required	b Detail of Services Required	c Detail of Spares Required
		NIL	Installation of Power Amplifier onboard for main broadcast	01 X TOA A- 1724 PA Amplifier required	01 X TOA A- 1724 PA Amplifier 01 X TOA MX- 113 Pre Amplifier Mixer
13.	Eligibilities	a. Have past experience w.r.t procurement onboard PMSA ships b. Local contractor must visit ships to understand scope of work			
14.	EDC	07 x working days after issuance of work order.			
15.	Warranty	01 Year			
16.	Acceptance Criteria	Upon successful completion of installation			
17.	Any other relevant info	SS may be contacted for any query/ requirement			

IT NO: IT/81/42/2025-26
REPAIR/ MAINTENANCE OF FUELING POINT - PMSA BASE GWADAR

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

IT NO: IT/81/43/2025-26
SUPPLY OF ELECTRIC WIRE AND BREAKER FOR INSTALLATION OF ACS AT BLUE ROOM – HQ PMSA

S No	Description																											
1.	Ship's Name	HQ PMSA/ Blue Room																										
2.	Justification	Under Mentioned items are essentially required for installation of ACs at Blue Room.																										
3.	Store Required	<table border="1"> <thead> <tr> <th>S No</th> <th>Description</th> <th>Den</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>DB Box</td> <td>No</td> <td>03</td> </tr> <tr> <td>b.</td> <td>Breaker 30A</td> <td>No</td> <td>10</td> </tr> <tr> <td>c.</td> <td>Wire 2 Core</td> <td>Coil</td> <td>02</td> </tr> <tr> <td>d.</td> <td>Wire 4 Core</td> <td>Coil</td> <td>02</td> </tr> <tr> <td>e.</td> <td>LS Breaker</td> <td>No</td> <td>12</td> </tr> </tbody> </table>			S No	Description	Den	Qty	a.	DB Box	No	03	b.	Breaker 30A	No	10	c.	Wire 2 Core	Coil	02	d.	Wire 4 Core	Coil	02	e.	LS Breaker	No	12
S No	Description	Den	Qty																									
a.	DB Box	No	03																									
b.	Breaker 30A	No	10																									
c.	Wire 2 Core	Coil	02																									
d.	Wire 4 Core	Coil	02																									
e.	LS Breaker	No	12																									
4.	Eligibilities	FBR and SBR Registered Firm																										
5.	EDC	15 days																										
6.	Warranty	01 Year																										
7.	Acceptance Criteria	Upon acceptance and satisfaction of end user																										

IT SPECIFICATION OF AVR CARD AND OCR OF SFC

S No	Details
1.	Ships Name PMSS SABQAT
2.	Parent Equipment SFC (STATIC FREQUENCY CONVERTER)
3.	OEM STAMFORD
4.	Model -
5.	Origin UK
6.	Sub Equipment AVR Card and OCR
7.	Assembly Component AVR MX 321 OCR (Schneider Electric)
8.	Part No. of Assembly Component MX 321 (E000-23212) OCR (Schneider Electric)
9.	Quantity 01
10.	Source of Availability Local Market
11.	Justification for Work Repair/ Replacement of AVR Card and OCR of SFC
12.	OEM Details Address: STAMFORD FOUNTAIN Court, lynch Wood, Peterborough, United Kingdom PE2 6FZ United Kingdom (UK) Contact Phone +44(0) 1733 395300 Contact Email: Stamford-avk@cummins.com
13.	Detailed scope of work Procurement of 12 x MMOB Markers
14.	Technical Specs a. AVR MX 326: Sensing Input voltage: 190-264 v AC (2(or 3 phase) Frequency: 50-60 Hz Power Input (PMG if applicable): Voltage 170-220 V AC Protections: Under frequency, over voltage, time delay operating Temperature: -40to +70 degree C
15.	Eligibilities a. The Firm may visit onboard to assess the exact specification items required. b. The Firm should have good experience to undertake repair/ maintenance/ replacement of said system/ equipment. c. The firm should be NTN/ GSD registered.
16.	EDC 07 x days after issuance of work order
17.	Warranty 01 x Year
18.	Acceptance Criteria Satisfactory (HATs & SATs) after repair/ replacement of AVR and OCR

IT NO: IT/81/45/2025-26

PROCUREMENT OF WALKTHROUGH GATE - PMSS INDUS

S No	Details		
1.	Ships Name	PMSS INDUS	
2.	Parent Equipment	Walk Through Gate	
3.	Make	CEIA, Italy	
4.	Model	HIPE MULTIZONE PLUS	
5.	Quantity	02	
6.	Assembly Component	Control Unit Malfunctioned	
7.	Justification for Work	Control Unit Malfunctioned	
8.	Work Required	Replacement of Control Unit	
9.	Work Description	Installation Of New Control Unit	
10.	Technical Specs	Passage useful width	32.3 inches (approx..820 mm)
		Control Unit Dimensions	380 x 157 x 82 mm Weight: 1.9 KG
		Control Unit (stainless steel)	387 x 178 x 80 mm Weight: 2 KG
		Power Supply	100-240 VAC (or 115-230 v)
		Operating Temp	-20° C to +65° C
		Tolerance	Upto 95% (non-condensing)
		Version: Waterproof (IP 66 Control Unit)	
11.	Eligibility	As per TCR The firm should be having good experience in repair/ Maintenance of such system/ Equipment.	
12.	Acceptance Criteria	Inspection by end user.	

CONDUCT OF PMS ROUTINE OF AVIATION FUEL SYSTEM - PMSS KASHMIR

S No	Details																																															
1.	Ships Name	PMSS KOLACHI																																														
2.	Parent Equipment	AVIATION FUEL SYSTEM																																														
3.	OEM	CSSC SYSTEMS ENGINEERING RESEARCH INSTITUTE																																														
4.	Model	50CYZ-40																																														
5.	Origin	China																																														
6.	Sub Equipment	AVIATION FUEL SYSTEM																																														
7.	Assembly Component	Coupling hexagon elastic Block 79x40x16 Separating filter element 50LGF-30/10-3 Coalescing filter element 50LGF-30/10-4 Silk cloth CSC 500x500 Soft brush 2" Nixie tube H/PXC-1-1 Nixie tube H/PXC-1-2 Nixie tube H/PXC-1-3 Fuse RL98-16																																														
8.	Part No. of Assembly Component	<table border="1"> <thead> <tr> <th>S No</th> <th>NSN/ Part No</th> <th>Description</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>3010PV8001004</td> <td>Coupling hexagon elastic Block Ø79x40x16</td> <td>1</td> </tr> <tr> <td>b.</td> <td>2995PV1020027</td> <td>Separating filter element 50LGF-30/10-3</td> <td>1</td> </tr> <tr> <td>c.</td> <td>2995PV1020028</td> <td>Coalescing filter element 50LGF-30/10-4</td> <td>1</td> </tr> <tr> <td>d.</td> <td>7920PV0030706</td> <td>Silk cloth CSC 500x500</td> <td>1</td> </tr> <tr> <td>e.</td> <td>7920PV0020002</td> <td>Soft brush 2"</td> <td>1</td> </tr> <tr> <td>f.</td> <td>5961PV0990032</td> <td>Nixie tube H/PXC-1-1</td> <td>1</td> </tr> <tr> <td>g.</td> <td>5961PV0990033</td> <td>Nixie tube H/PXC-1-2</td> <td>1</td> </tr> <tr> <td>h.</td> <td>5961PV0990034</td> <td>Nixie tube H/PXC-1-3</td> <td>1</td> </tr> <tr> <td>j.</td> <td>2995PV1020099</td> <td>Fuse RL98-16</td> <td>1</td> </tr> <tr> <td>k.</td> <td>5999PV9000111</td> <td>Buzzer LA3Z-1X4V</td> <td>1</td> </tr> </tbody> </table>			S No	NSN/ Part No	Description	Qty	a.	3010PV8001004	Coupling hexagon elastic Block Ø79x40x16	1	b.	2995PV1020027	Separating filter element 50LGF-30/10-3	1	c.	2995PV1020028	Coalescing filter element 50LGF-30/10-4	1	d.	7920PV0030706	Silk cloth CSC 500x500	1	e.	7920PV0020002	Soft brush 2"	1	f.	5961PV0990032	Nixie tube H/PXC-1-1	1	g.	5961PV0990033	Nixie tube H/PXC-1-2	1	h.	5961PV0990034	Nixie tube H/PXC-1-3	1	j.	2995PV1020099	Fuse RL98-16	1	k.	5999PV9000111	Buzzer LA3Z-1X4V	1
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k.	5999PV9000111	Buzzer LA3Z-1X4V	1																																													
9.	Justification for Work	To conduct PMS routine of Aviation Fuel System (PMS No 3-5607-0000)																																														
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	Detailed scope of work	a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
11.		Repair/ Replacement of defective items of Aviation Fuel System required for SAT OPS	Inspection/ Overhauling of Aviation Fuel System required	As per S No 9
12.	Technical Specs	Flow rate for pressure refueling on deck Flow rate for gravity refueling on deck Service tank Sludge tank	200L/min~250L/min 150L/min~200L/min ≥2500L ≥1000L	
13.	Eligibilities	Reputable local/ International contractor registered with FBR and having working experience with PMSA		
14.	EDC	30 Days after award of contract		
15.	Warranty	01 year		
16.	Acceptance Criteria	a. OEM Certified item. b. Defective/ BER items to be replaced with new c. Upon scrutiny of items and provided documents along with production certificate by OEM d. Firm will not be allowed to use ship tools and manpower e. QA/QC certificate issuance by QA/QC department		

CONDUCT PMS ROUTINE OF SINGLE ROLLER ELECTRIC CABLE REEL - PMSS
KASHMIR

S No	Details																																																			
1.	Ships Name	PMSS KASHMIR																																																		
2.	Parent Equipment	Double Roller Electric Cable Reel																																																		
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11.			Inspection/ Overhauling of Double Roller Electric Cable Reel required for SAT OPS. Defective parts must be replaced with new.	Repair/ Replacement required for defective items of Double Roller Electric Cable Reel required for SAT OPS	As per S No 9
12.	Technical Specs		Voltage/ Frequency working load	380V 50Hz 6 KN	
			cable storage length of roller power	150m 3.7 KW	
			revolution	1360 r/min	
			working system	30 min	
13.	Eligibilities		Reputable local/ international contractor registered with FBR and having working experience with PMSA.		
14.	EDC		30 Days after award of contract		
15.	Warranty		01 Year		
16.	Acceptance Criteria		a. OEM Certified item. b. Upon scrutiny of items and provided documents along with production certificate by OEM. c. Defective/ BER items must be replaced with new. d. Firm will not be allowed to use ship tools and manpower e. QA/QC certificate issuance by QA/QC department		

IT NO: IT/81/48/2025-26
PMS ROUTINE OF SINGLE ROLLER ELECTRIC CABLE REEL - PMSS KASHMIR

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13.	Eligibilities	Reputable local/ international contractor registered with FBR and having working experience with PMSA.		
14.	EDC	30 Days after award of contract		
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16.	Acceptance Criteria	a. OEM Certified item. b. Upon scrutiny of items and provided documents along with production certificate by OEM. c. Defective/ BER items must be replaced with new. d. Firm will not be allowed to use ship tools and manpower e. QA/QC certificate issuance by QA/QC department		

REPAIR/ REPLACEMENT OF PORT & STBD SWINGING VANE HYDRAULIC STEERING
GEAR- PMSS KOLACHI

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2.	Parent Equipment Swinging-Vane Hydraulic Steering Gear																																																																																																																																																				
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gg.	Special seal for steering gear	2030PV1050058	4																																																																																																																																																		
hh.	Screw	5305PV0010157	24																																																																																																																																																		
jj.	O-ring	9320PV0020007	24																																																																																																																																																		
kk.	Gasket	9320PV0010007	28																																																																																																																																																		
ll.	O-ring	9320PV0030157	2																																																																																																																																																		
mm.	O-ring	9320PV0030158	2																																																																																																																																																		

		nn.	O-ring	9320PV0030155	2
		pp.	Upper bushings	2030PV1050031	2
		qq.	Special seal ring for steering gear	2030PV1050058	4
		rr.	Screw	5305PV0010079	16
		ss.	Gasket	5310PV1020015	16
		tt.	O-ring	9320PV0020070	2
		uu.	O-ring	9320PV0030156	2
		vv.	Rotor blade panel	2030PV1050034	12
		ww.	Spring	2030PV1050035	72
		xx.	Check Valve	2030PV1050042	24
		yy.	Special seal strip for steering gear	2030PV1050054	26
		zz.	Gasket	2030PV1050059	20
		aaa.	Hard seal strip	2030PV1050060	2
		bbb.	Thrust Bearing	2030PV1050036	2
		ccc.	Lower bushing	2030PV1050037	2
		ddd.	Screw seal gasket	2030PV1050046	24
		eee.	Special seal for steering gear	2030PV1050058	4
		fff.	Screw	5305PV0010157	2
		ggg.	O-ring	9320PV0020007	24
		hhh.	Gasket	9320PV0010007	28
		jjj.	Gasket	9320PV0010005	48
		kkk.	Gasket	9320PV0010004	24
		III.	Cross recessed countersunk head screw	5305PV0200066	24
		mmm.	O-ring	9320PV0020011	24
		nnn.	O-ring	9320PV0020016	12
		ppp.	Gasket	5310PV1020012	24
8.	Work Required	Repair/ replacement of seals and O-rings of swinging-vane rudder motors for satisfactory response of steering system			
9.	Detailed scope of work	Repair/ replacement of defective/ deteriorated seals/ O-rings of swingingvane rudder motors of Port and STBD Steering system as mentioned in required quantity			
10.	Technical Specs	Technical specification of the system as follows: a. Nominal Torque 80k N.m b. Steering Time 28s (Stbd 35 to Port 35 with single motor at each side), 14s (Stbd 35 to Port 35 with double motors at each side) c. Nominal Pressure 5 Mpa d. Rotating Speed 1500 Rpm			
11.	Eligibility	a. Have experience to work for ships (Preferably PMSA Ships) b. Company must be certified with HQ PMSA c. Company must be registered with FBR. d. Item must be original along with CoC from OEM			
12.	EDC	15 Days after award of contract			
13.	Warranty	01 Year			
14.	Acceptance Criteria	a. OEM Certified items b. Response must be as mentioned in technical specification c. System should run without any leakage/seepage, vibration or noise d. System should be handed over without zero error in rudder angle e. Upon satisfactory SATs at 900 RPMs as per technical Specs at S No 11			

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

S No	Details															
1.	Ships Name	PMSS ZHOB														
2.	Parent Equipment	Bridge Control Console														
3.	OEM	Jinzhou Hangxing Ship Technology Co Ltd														
4.	Origin	China														
5.	Sub Equipment	Firemain Pressure Meters														
6.	Part No. of Assembly Component	KLY-D72														
7.	Quantity	2 x firemain pressure meters														
8.	Source of Availability	Jinzhou Hangxing Ship Technology Co Ltd														
9.	Justification for Work	Upon inspection meters of firemain pressure meters found in degraded state														
10.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>N/A</td> <td>Repair/ Replacement of Firemain Pressure Meters Of Bridge Control Console by local engineering house</td> <td>See S.No 14 Para b</td> <td>See S.No 14 Para c</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	N/A	Repair/ Replacement of Firemain Pressure Meters Of Bridge Control Console by local engineering house	See S.No 14 Para b	See S.No 14 Para c		
a	b	c	d													
Defect/ Routine List	Repair Work Required	Services Required	Spares Required													
N/A	Repair/ Replacement of Firemain Pressure Meters Of Bridge Control Console by local engineering house	See S.No 14 Para b	See S.No 14 Para c													
11.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td>Repair/ Replacement of Firemain Pressure Meters Of Bridge Control Console by local engineering house</td> <td> <p>a. Contractor is to visit ship and carry out detailed inspection of meters.</p> <p>b. Repair/ replacement of Firemain meters with new.</p> <p>c. All meters provided should be branded, imported if required, no cheap quality/ copy of specified meters will be accepted.</p> </td> <td>Digital pressure meter Part No: KLY-D72</td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Repair/ Replacement of Firemain Pressure Meters Of Bridge Control Console by local engineering house	<p>a. Contractor is to visit ship and carry out detailed inspection of meters.</p> <p>b. Repair/ replacement of Firemain meters with new.</p> <p>c. All meters provided should be branded, imported if required, no cheap quality/ copy of specified meters will be accepted.</p>	Digital pressure meter Part No: KLY-D72					
a	b	c														
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required														
Repair/ Replacement of Firemain Pressure Meters Of Bridge Control Console by local engineering house	<p>a. Contractor is to visit ship and carry out detailed inspection of meters.</p> <p>b. Repair/ replacement of Firemain meters with new.</p> <p>c. All meters provided should be branded, imported if required, no cheap quality/ copy of specified meters will be accepted.</p>	Digital pressure meter Part No: KLY-D72														
12.	Eligibilities	<p>a. Reputable local contractor having working experience of gauges and meters system related activity in PMSA.</p> <p>b. Local contractor must visit ship to understand exact requirement/ scope of work.</p>														
13.	EDC	7 Days														
14.	Warranty	1 -year warranty for all mentioned works.														
15.	Acceptance Criteria	Good quality meters followed by successful trials of meters on rated parameters														

16.	Any other relevant info	Damage/ defect occurred during work is responsibility of contractor.
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IT NO: IT/81/51/2025-26

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

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

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

SMALL STANDARD DUTY (SSD) FOAM FILLED MARINE FENDER - PMSS ZHOB

S No	Details	
1.	Ships Name	PMSS ZHOB
2.	Parent Equipment	Small Standard Duty (SSD) Foam Filled Marine Fender
3.	OEM	Marine Fenders International, Inc.
4.	Model	Cylindrical Marine Fender
5.	Origin	USA
6.	Sub Equipment	Marine Fender
7.	Assembly Component	Cylindrical Marine Fender
8.	Part No. of Assembly Component	OG-SSD-2436/OG-SSD-1636
9.	Quantity	2 x in Nos (Marine fender size 24 x 36 inch) 4 x in Nos (Marine fender size 16 x 36 inch)
10.	Work Required	Procurement of 6 x SSD Foam Filled Marine Fender
11.	Detailed scope of work	Procurement of 2 x in Nos (Marine fender size 24 x 36 inch) and 4 x in Nos (Marine fender size 16 x 36 inch)
12.	Technical Specs	<ul style="list-style-type: none">a. Size of fender: 16 x 36 inches (400x900) 24 x 36 inches(600x900)b. Safe working load 2 tonsc. Pad eye end fittings internally connected with chaind. Hawse pipe and rope type end fittingse. Certificate of safe working load test must be provided by OEM
13.	Eligibilities	Any firm having experience with PMSA
14.	EDC	ASAP
15.	Acceptance Criteria	<ul style="list-style-type: none">a. Specification as per manufacturer's product sheet.b. Physical inspection of provided item w.r.t physical inspection.
16.	Any other relevant info	Equivalent OEMs acceptable subject to compliance with technical specifications

PROCUREMENT OF 06 X COOPER BEARING - PMSS BASOL

S No	Details			
1.	Ships Name	PMSS BASOL		
2.	Parent Equipment	Intermediate Bearing		
3.	OEM	Cooper Roller Bearing Co, Ltd		
4.	Model	01E BCP 170mm EX IH TE (G1/8) SRS SLUB		
5.	Serial No	1L19216/1		
6.	Origin	England		
7.	Sub Equipment	Split Type Cooper Roller Bearings		
8.	Quantity	6		
9.	Source of availability	Cooper Roller Bearing Co, Ltd		
10.	Work Required	a	b	c
		Defect/ Routine List	Repair Work Required	Services Required
		NIL	NIL	YES
11.	Detailed scope of work	Details of Repair Work Required	Details of services Required	Details of Spares Required
		NIL	<p>Removal/ reinstallation of complete split type cooper roller bearing assembly encompasses following aspects:</p> <ul style="list-style-type: none"> a. Inspection of bearing shell, journal surface and oil seals. b. Verify proper lubrication flow path. c. Measure bearing clearance using feeler or dial gauge and compare with manufacturer's limits. d. Check alignment of shaft with respect to bearing seating e. Inspect oil lines, filters & flow indicators for clogging or leaks f. Refit whole assembly with new gasket/ seal and refill lubricant to correct level. g. Start propulsion and monitor bearing temperature, vibrations and compare with normal limits. 	06 x split type cooper roller bearings
12.	Technical	As per technical manual		

	Specs	
13.	Eligibility	Reputable local contractor having working experience of shafting system.
14.	EDC	01 Week
15.	Warranty	01 Year
16.	Acceptance Criteria	<ul style="list-style-type: none"> a. Satisfactory operation of propulsion system b. Successful trials by end user
17.	Any other relevant information	<ul style="list-style-type: none"> a. Contactor may contact SS/ Visit onboard ship to resolve any query. b. Growth work, damage/ defect occurring during work will be responsibility of contractor.

REPAIR/ REPLACEMENT OF ELECTRIC FIRE FIGHTING PUMP - PMSS ZHOB

S No	Details										
1.	Ships Name	PMSS ZHOB									
2.	Parent Equipment	Electric Fire Fighting Pump									
3.	OEM	Jiangsu Zhenhua Pump Industry Co Ltd									
4.	Model	CLH80-65-5.5(Z)									
5.	Origin	China									
6.	Sub Equipment	Firemain Pump									
7.	Part No. of Assembly Component	Seal ring Impeller Mechanical seal Motor bearing Impeller nut Pump shaft Inlet vacuume gauge Outlet vacuume gauge O-ring	466ZH-CLH-04-02 466ZH-CLH-04-05 ZH3-35 GB/T276-1994/6309 466ZH-CLH-04-09 466ZH-CLH-04-04 YB-150(-0.1~0.1MPa, 0.4G) Y-150(-0.1 ~0.1 MPa, 1.5G) GB/T3452.1 245 x 3.55								
8.	Quantity	01									
9.	Source of Availability	Jiangsu Zhenhua Pump Industry Co Ltd									
10.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td>Repair/ Replacement of Electric Fire Fighting Pump by local engineering house</td> <td> <p>a. Contractor is to visit ship and carry out detailed inspection of pump.</p> <p>b. Replacement of pump body with new.</p> <p>c. Repair/ replacement of impeller, motor bearing, motor shaft, suction and discharge valve, mechanical seal and pump shaft</p> <p>d. Repair/ replacement of any other part i.e discharge line etc, if required will be treated as growth work.</p> <p>e. All parts to be properly aligned during assembling of pump, no loose fit will be accepted, all nut bolts will be replaced with new.</p> </td> <td> Seal ring Part No: 466ZH-CLH-04-02 Impeller Part No: 466ZH-CLH-04-05 Mechanical seal Part No: ZH3-35 Motor bearing Part No: GB/T276-1994/6309 Impeller nut Part No: 466ZH-CLH-04-09 Pump shaft Part No: 466ZH-CLH-04-04 Inlet vacuume gauge Part No: YB-150(- </td></tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Repair/ Replacement of Electric Fire Fighting Pump by local engineering house	<p>a. Contractor is to visit ship and carry out detailed inspection of pump.</p> <p>b. Replacement of pump body with new.</p> <p>c. Repair/ replacement of impeller, motor bearing, motor shaft, suction and discharge valve, mechanical seal and pump shaft</p> <p>d. Repair/ replacement of any other part i.e discharge line etc, if required will be treated as growth work.</p> <p>e. All parts to be properly aligned during assembling of pump, no loose fit will be accepted, all nut bolts will be replaced with new.</p>	Seal ring Part No: 466ZH-CLH-04-02 Impeller Part No: 466ZH-CLH-04-05 Mechanical seal Part No: ZH3-35 Motor bearing Part No: GB/T276-1994/6309 Impeller nut Part No: 466ZH-CLH-04-09 Pump shaft Part No: 466ZH-CLH-04-04 Inlet vacuume gauge Part No: YB-150(-
a	b	c									
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required									
Repair/ Replacement of Electric Fire Fighting Pump by local engineering house	<p>a. Contractor is to visit ship and carry out detailed inspection of pump.</p> <p>b. Replacement of pump body with new.</p> <p>c. Repair/ replacement of impeller, motor bearing, motor shaft, suction and discharge valve, mechanical seal and pump shaft</p> <p>d. Repair/ replacement of any other part i.e discharge line etc, if required will be treated as growth work.</p> <p>e. All parts to be properly aligned during assembling of pump, no loose fit will be accepted, all nut bolts will be replaced with new.</p>	Seal ring Part No: 466ZH-CLH-04-02 Impeller Part No: 466ZH-CLH-04-05 Mechanical seal Part No: ZH3-35 Motor bearing Part No: GB/T276-1994/6309 Impeller nut Part No: 466ZH-CLH-04-09 Pump shaft Part No: 466ZH-CLH-04-04 Inlet vacuume gauge Part No: YB-150(-									

				0.1~0.1MPa 0.4G) Outer Vacuum gauge Part No: Y-150(- 0.1~0.1MPa 1.5G) O-ring Part No: GB/T3452.1 245 x 3.55
11.	Eligibilities	a. Reputable local contractor having working experience of firefighting system related activity in PMSA. b. Local contractor must visit ship to understand exact requirement/scope of-work.		
12.	EDC	10 Days		
13.	Warranty	1-year warranty for satisfactory operation of pump w.r.t. a. Sea water leakage from pump/mechanical seal. b. Increased vibration/ noise/ hard to rotate (drawing extra current). c. Decrease/ low discharge pressure. d. Pitting/ Erosion in pump body and parts.		
14.	Acceptance Criteria	a. Satisfactory discharge pressure of fireman pump. b. Satisfactory operation without high noise and vibration. c. Satisfactory operation without sea water leakage. d. precise alignment, impeller should be free to rotate. e. Satisfactory discharge pressure of 7 bars		
15.	Any other relevant info	Growth work, Damage/ defect occurred during work is responsibility of contractor.		

PROCUREMENT/ PURCHASE OF PLANTS AND AUXILIARY MACHINERY ITEMS - PMSS
ZHOB

S No	Details	
1.	Ships Name PMSS ZHOB	
2.	Parent Equipment Auxiliary Machinery	
3.	Sub Equipment Auxiliary Machinery	
4.	Assembly Component Genset Drive Belt Genset sea water pump impeller Genset (Pre Fuel Filter Separ) Jubilee Clamps (Different Size) RO Belt (Size A28) RO Cartridge Filters Citric Acid (For backwash of RO plant) Insulation breaker Mechanical seal for GS pump Mechanical seal Auxiliary seawater pump KFWA Fuel Filters RHIB boat Fuel Filter RHIB boat Lube Oil Filter HPAC P61 Filter Core Steering Gear Pressure Filter Steering Gear Return Filter Hydraulic crane Filter Cart (Air) Hydraulic crane Filter Oil Lugs for electric cables (Size 34")	
5.	Part No. of Assembly Component Genset drive belt Genset sea water pump impeller Genset (Pre Fuel Filter Separ) Jubilee Clamps (Different Size) RO Belt (Size A28) RO Cartridge Filters Citric Acid Insulation breaker Mechanical seal for GS pump Mechanical seal Auxiliary seawater pump KFWA Fuel Filters RHIB boat Fuel Filter RHIB boat Lube Oil Filter HPAC P61 Filter Core Steering Gear Pressure Filter Steering Gear Return Filter Hydraulic crane Filter Cart (Air) Hydraulic crane Filter Oil Lugs for electric cables (Size 34")	Part No: 192-2169 NSN No: 4320-71-524-8866 Part No: 7E-0321 Part No: SEPAR 00530 Part No: JBL-000MS Part No: FSHB3-10003 Part No: FSHB3-00803 Part No: 77-92-9/E330 Part No: T1B160 Part No: ZH3-35 Part No: ZH3-28 Part No: X00036161 Part No: 1650-550800 Part No: 127695-35150 Part No: 060036 Part No: S160-5-16 Part No: S160-5-15 Part No: 0000377267 Part No: 0000377098 Part No: WA8CC-2TC14/A06-M4
6.	Quantity Genset Drive Belt Genset sea water pump impeller Genset (Pre Fuel Filter Separ) Jubilee Clamps (Different Sizes) RO Belt (Size A28) RO Cartridge Filters	10x No 10 x No 20 x No 150 x No 10 x No 20 x No

		Citric Acid (For backwash of RO plant) 5 x Kg Insulation breaker 5 x No Mechanical seal for GS pump 5 x No Mechanical seal Auxiliary seawater pump 8 x No KFWA Fuel Filters 10 x No RHIB boat Fuel Filter 15 x No RHIB boat Lube Oil Filter 15 x No HPAC P61 Filter Core 10 x No Steering Gear Pressure Filter 10 x No Steering Gear Return Filter 10 x No Hydraulic crane Filter Cart (Air) 10 x No Hydraulic crane Filter Oil 10 x No Lugs for electric cables (Size 34") 20 x No													
7.	Justification for Work	Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery.													
8.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>N/A</td> <td>Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery through recommended OEM/ local engineering sources.</td> <td>See S No 14 Para b</td> <td>See S No 14 Para c</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	N/A	Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery through recommended OEM/ local engineering sources.	See S No 14 Para b	See S No 14 Para c	
a	b	c	d												
Defect/ Routine List	Repair Work Required	Services Required	Spares Required												
N/A	Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery through recommended OEM/ local engineering sources.	See S No 14 Para b	See S No 14 Para c												
9.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td>Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery through recommended OEM/ local engineering sources.</td> <td>Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery</td> <td>Mentioned at S No 9</td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery through recommended OEM/ local engineering sources.	Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery	Mentioned at S No 9				
a	b	c													
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required													
Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery through recommended OEM/ local engineering sources.	Items are required for repair/ replacement of items to carry out PMS routines and maintenance of machinery	Mentioned at S No 9													
10.	Eligibilities	OEM recommended spares													
11.	EDC	5 Days													
12.	Warranty	1 year													
13.	Acceptance Criteria	a. OEM recommended spares/ parts. b. Certified spares to be used for avoiding damage to system and ship. c. QA/QC certificate issuance by QA/QC Deptt.													

IT NO: IT/81/56/2025-26

PROCUREMENT OF MAIN ENGINE 1 & 2 PPS CARDS - PMSS ZHOB

S No	Details			
1.	Ships Name	PMSS ZHOB		
2.	Parent Equipment	Main Engines 1 & 2		
3.	OEM	MTU		
4.	Model	MPU30-04		
5.	Origin	China		
6.	Sub Equipment	PPS CARD mpu30-04 Part No X00E 5021 0833		
7.	Part No. of Assembly Component	X00E 5021 0833		
8.	Quantity	2		
9.	Source of Availability	China		
10.	Justification for Work	Upon inspection of LOPs of MTUs parameters fluctuation observed suspected PPS card malfunctioning.		
11.	Work Required	a Defect/ Routine List	b Repair Work Required	c Services Required
		N/A	Installation of Main Engines 1 & 2 PPS Cards by the firm	See S.No 14 Para b See S.No 14 Para c
12.	Detailed scope of work	a Detail of Repair Work Required	b Detail of Services Required	c Detail of Spares Required
		Installation of Main Engines 1 & 2 PPS Cards by the firm	Installation of Main Engines 1 & 2 PPS Cards through recommended OEM/ local engineering house	2 x PPS CARD mpu30-04 Part No: X00E 5021 0833
13.	Eligibilities	COC needs to be provided by OEM		
14.	EDC	45 Days		
15.	Warranty	1-year		
16.	Acceptance Criteria	a. COC, HATs & SATs b. QA/QC certificate issuance by the QA/QC Deptt.		
17.	Any other relevant info	Growth work, Damage/ defect occurred during work is responsibility of contractor.		

REPLACEMENT OF AUXILIARY SEAWATER COOLING PUMP MOTORS NO 1 & 2 - PMSS
ZHOB

S No	Details									
1.	Ships Name PMSS ZHOB									
2.	Parent Equipment Auxiliary Seawater Cooling System									
3.	OEM Jiangsu Zhenhua Pump Industry Co. Ltd. (China)									
4.	Model CLH50-32-4.5(Z)									
5.	Origin China									
6.	Sub Equipment Auxiliary Seawater Cooling Pumps Motors									
7.	Part No. of Assembly Component Y100L-2H									
8.	Quantity 2 x Electric Motors									
9.	Source of Availability Jiangsu Zhenhua Pump Industry Co. Ltd. (China)									
10.	Justification for Work Replacement of auxiliary seawater cooling pumps motors of 1 & 2.									
11.	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td>Replacement of auxiliary seawater cooling pumps motors OEM/ local engineering house.</td> <td>Replacement of auxiliary seawater cooling pumps motors</td> <td>2 x No Electric Motor NSN: 6105-PV- 100-0024 Part No:Y100L-2H</td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Replacement of auxiliary seawater cooling pumps motors OEM/ local engineering house.	Replacement of auxiliary seawater cooling pumps motors	2 x No Electric Motor NSN: 6105-PV- 100-0024 Part No:Y100L-2H
a	b	c								
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required								
Replacement of auxiliary seawater cooling pumps motors OEM/ local engineering house.	Replacement of auxiliary seawater cooling pumps motors	2 x No Electric Motor NSN: 6105-PV- 100-0024 Part No:Y100L-2H								
12.	Eligibilities Reputable contractor having working experience of seawater pumps motors/ electrical equipments and machinery.									
13.	EDC 5 Days									
14.	Warranty 1 year warranty for satisfactory operation of seawater pump motors without following defects: a. Seawater leakage from pumps, mechanical seals and discharge valves. b. Increased vibration/ noise/ hard to rotate. c. Decreased/ low discharge pressure of sea water after fitted with pump. d. Low/ Zero insulation of motors.									
15.	Acceptance Criteria <ul style="list-style-type: none"> a. Satisfactory discharge pressure of sea water pumps. b. Satisfactory and smooth operation without high vibration and noise. c. Satisfactory operation without seawater leakage. d. Precise alignment, impeller should be free to rotate. e. Successful trials by end user. f. QA/QC certificate issuance by QA/QC Deptt. 									
16.	Any other relevant info <ul style="list-style-type: none"> a. Damage/ defect occurred to system during work will be responsibility of contractor. b. Dismantling/ assembling/ installation and in way removal work is responsibility of contractor. 									

IT NO: IT/81/58/2025-26

SERVICING / OVERHAULING OF GS PUMP - PMSS ZHOB

S No	Details
1.	Ships Name PMSS ZHOB
2.	Parent Equipment GS (General Service) Pump
3.	OEM Jiangsu Zhenhua
4.	Model 80CLZ-5A
5.	Origin Jiangsu Zhenhua Pump Industry Co. Ltd.
6.	Sub Equipment GS (General Service) Pump
7.	Assembly Component Pump Shaft, Impeller and other miscellaneous parts.
8.	Part No. of Assembly Component Mechanical seal ZH3-35 Impeller 466ZH-CLZ-10-03 Impeller nut ZHYM20LH Pump Shaft 466ZH-CLZ-04-15 Pump bearing GB/T276-1994/6308 Motor bearing GB/T276-1994/6309 O ring GB-T3452 Seal ring 466ZH-CLZ-10-02
9.	Quantity 1
10.	Source of Availability Jiangsu Zhenhua Pump Industry Co., Ltd.
11.	Justification for Work Upon inspection of GS Pump impeller, body and pump assembly was found in deteriorated condition.

		<table border="1" data-bbox="494 139 1547 1491"> <thead> <tr> <th data-bbox="494 139 747 276">a</th><th data-bbox="747 139 1171 276">b</th><th data-bbox="1171 139 1547 276">c</th></tr> <tr> <th data-bbox="494 276 747 287">Detail of Repair Work Required</th><th data-bbox="747 276 1171 287">Detail of Services Required</th><th data-bbox="1171 276 1547 287">Detail of Spares Required</th></tr> </thead> <tbody> <tr> <td data-bbox="494 287 747 1491"> Servicing/ overhauling of GS Pump through recommended OEM/ local engineering house. </td><td data-bbox="747 287 1171 1491"> a. Servicing of degraded pump body. b. Replacement of degraded pump impeller with nickel/ phosphorus bronze material pump impeller. c. Replacement of old mechanical seal ZH3-35 with new high quality mechanical seal. d. Replacement of degraded seal rings with nickel/ phosphorus bronze material seal rings. e. Replacement of degraded pump shaft with Stainless Steel (316L) material pump shaft. f. Old gauge lines and adopters of pump needs to be renewed. g. Precise alignment of pumps with motor along with replacement of motor bearing P No. GB/T276- 1994/6309. h. Corroded/ damaged bolts and, nuts to be replaced with new Stainless steel (316L) bolts and nuts. </td><td data-bbox="1171 287 1547 1491"> Mechanical seal NSN: 9320-PV- 101-0703 Impeller NSN: 4320-PV- 112-0005 Impeller nut NSN: 4320-PV- 199-0004 Pump Shaft NSN: 4320-PV- 112-0004 Pump bearing NSN: 3110-PV- 002-0044 Motor bearing NSN: 3110-PV- 101-0703 O ring NSN: 9320-PV- 003-0119 Seal ring NSN: 4320-PV- 112-0003 </td></tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Servicing/ overhauling of GS Pump through recommended OEM/ local engineering house.	a. Servicing of degraded pump body. b. Replacement of degraded pump impeller with nickel/ phosphorus bronze material pump impeller. c. Replacement of old mechanical seal ZH3-35 with new high quality mechanical seal. d. Replacement of degraded seal rings with nickel/ phosphorus bronze material seal rings. e. Replacement of degraded pump shaft with Stainless Steel (316L) material pump shaft. f. Old gauge lines and adopters of pump needs to be renewed. g. Precise alignment of pumps with motor along with replacement of motor bearing P No. GB/T276- 1994/6309. h. Corroded/ damaged bolts and, nuts to be replaced with new Stainless steel (316L) bolts and nuts.	Mechanical seal NSN: 9320-PV- 101-0703 Impeller NSN: 4320-PV- 112-0005 Impeller nut NSN: 4320-PV- 199-0004 Pump Shaft NSN: 4320-PV- 112-0004 Pump bearing NSN: 3110-PV- 002-0044 Motor bearing NSN: 3110-PV- 101-0703 O ring NSN: 9320-PV- 003-0119 Seal ring NSN: 4320-PV- 112-0003
a	b	c									
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required									
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13.	Eligibilities	Reputable contractor having relevant work experience. Moreover, contractor is to visit onboard to fully understand the scope of work.									
14.	EDC	7 Days									
15.	Warranty	1 year warranty for satisfactory operation of seawater pump w.r.t a. Sea water leakage from pump / mechanical seal. b. Increased vibration/ noise/ hard to rotate (drawing extra current). c. Decreased/ low discharge pressure. d. Pitting/ Erosion in Pump body and Parts.									
16.	Acceptance Criteria	a. Satisfactory discharge pressure of GS sea water pump. b. Satisfactory and smooth operation without high vibration and noise. c. Satisfactory operation without sea water leakage.									

		<p>d. Precise alignment; impeller should be free to rotate.</p> <p>e. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if worn-out).</p> <p>f. Satisfactory discharge pressure 0.6 MPa of general service pump & operation without leakage, vibration & abnormal noise.</p> <p>g. Full Power Trials, HATs & SATs.</p> <p>h. QA/QC certificate issuance by QA/QC Deptt.</p>
17.	Any other relevant info	<p>a. Contactor may contact SS/ visit onboard ship to resolve any query.</p> <p>b. Damage/ defect to system during work is responsibility of contractor.</p>

IT NO: IT/81/59/2025-26

SERVICING/ OVERHAULING OF STEERING MOTOR NO 1 - PMSS ZHOB

S No	Details					
1.	Ships Name	PMSS ZHOB				
2.	Parent Equipment	Steering system				
3.	OEM	Wuhan Mekand Equipment Co Ltd				
4.	Model	MS132M-4				
5.	Origin	China				
6.	Sub Equipment	Steering Motor No 1				
7.	Assembly Component	Steering Motor No 1				
8.	Part No. of Assembly Component	NSN No:	6150-PV-100-0062			
		Part No:	S160-05-12			
9.	Quantity	01				
10.	Source of Availability	Wuhan Mekand Equipment Co Ltd				
11.	Justification for Work	Upon inspection steering motor no 1 of steering system performance degraded				
12.	Work Required	a Defect/ Routine List	b Repair Work Required	c Services Required		
		N/A	Servicing/ overhauling of steering motor no 1 by recommended OEM/ local engineering house	See S.No 13		
				See S.No 13		

		a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
13.	Detailed scope of work	Servicing/ overhauling of steering motor no 1 by recommended OEM/ local engineering house	<p>a. Contractor is to visit ship and carry out detailed inspection of motor.</p> <p>b. Repair/ replacement of motor windings with new, shaft bearing, mechanical seal of pump.</p> <p>c. Repair/ replacement of any other part i.e O Ring Seal etc, if required will be treated as growth work.</p> <p>d. All parts to be properly aligned during assembling of motor, no loose fit will be accepted.</p>	Steering Motor NSN No: 6150-PV-100-0062 Part No: S160-05-12
14.	Eligibilities	a. Reputable local contractor having working experience of hydraulic system related activity in PMSA. b. Local contractor must visit ship to understand exact requirement/scope of work.		
15.	EDC	7 Days		
16.	Warranty	1-year warranty for all mentioned works.		
17.	Acceptance Criteria	Satisfactory harbor trials followed by successful sea trials of steering motor on rated parameters		
18.	Any other relevant info	Growth work, Damage/ defect occurred during work is responsibility of contractor.		

REPAIR/ REPLACEMENT OF 01 X PPS CARD OF MAIN ENGINE NO 1 - PMSS BASOL

S No	Details												
1.	Ships Name	PMSS BASOL											
2.	Parent Equipment	Main Engine No 1											
3.	OEM	MTU Germany											
4.	Model	16V4000M73L DIESEL ENGINE											
5.	Origin	Germany											
6.	Sub Equipment	PPS Housing											
7.	Assembly Component	PPS Card											
8.	Part No. of Assembly Component	NSN: 5310 73 518 2072											
9.	Quantity	01											
10.	Source of Availability	MTU											
11.	Detailed scope of work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td>Repair/ replacement of PPS card required for defect rectification</td> <td> a. Installation of PPS card. b. OEM certified software to be installed. c. Elimination and rectification of alarms displayed on MCS-5 and LOP. d. Satisfactory monitoring/ operation of Main Engine. </td> <td>01 x PPS card for Main Engine</td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Repair/ replacement of PPS card required for defect rectification	a. Installation of PPS card. b. OEM certified software to be installed. c. Elimination and rectification of alarms displayed on MCS-5 and LOP. d. Satisfactory monitoring/ operation of Main Engine.	01 x PPS card for Main Engine		
a	b	c											
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required											
Repair/ replacement of PPS card required for defect rectification	a. Installation of PPS card. b. OEM certified software to be installed. c. Elimination and rectification of alarms displayed on MCS-5 and LOP. d. Satisfactory monitoring/ operation of Main Engine.	01 x PPS card for Main Engine											
12.	Technical Specs	As per OEM/ Technical Manual.											
13.	Eligibilities	OEM authorized Rep having experience of MTU Main Engines fitted onboard HINGOL class MPVs.											
14.	EDC	15 days											
15.	Warranty	1 year											
16.	Acceptance Criteria	a. Work will be carried out by/ through OEM rep. b. Satisfactory trials of Main Engine											

IT NO: IT/81/61/2025-26

SERVICING/ OVERHAULING OF FUEL OIL TRANSFER PUMP - PMSS ZHOB

S No	Details															
1.	Ships Name	PMSS ZHOB														
2.	Parent Equipment	Fuel Oil Transfer Pump														
3.	OEM	Hebei Hengsheng Pumps Co Ltd														
4.	Model	K200-01/Y112M-4-H														
5.	Origin	China														
6.	Sub Equipment	Motor arid Pump														
7.	Part No. of Assembly Component	Upper left hand gear Right hand gear Lower left hand gear Mechanical seal Bearing 6206 Safety valve spring Elastic block Bearing 6306-2RS/Z2 Vacuum gauge Pressure gauge Pressure gauge valve	K200-01-10 K200-01-11 K200-01-12 58U-30 GB/T276-1994 6206 K55-01-14 B1104-66-00 GB/T276-1994 6306-2RS/Z2 Z-60-C 2.5 Y-60-C2.5 KF-L8/14E													
8.	Quantity	01														
9.	Source of Availability	Hebei Hengsheng Pumps Co Ltd China														
10.	Justification for Work	Upon inspection fuel transfer pump performance found degraded, abnormal noise and vibration observed														
11.	Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> <tr> <th>Defect/ Routine List</th> <th>Repair Work Required</th> <th>Services Required</th> <th>Spares Required</th> </tr> </thead> <tbody> <tr> <td>Abnormal noise and vibration observed in fuel transfer pump</td> <td>Servicing/ overhauling Of Fuel Oil Transfer Pump by local engineering house</td> <td>See S.No 12</td> <td>See S.No 12</td> </tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair Work Required	Services Required	Spares Required	Abnormal noise and vibration observed in fuel transfer pump	Servicing/ overhauling Of Fuel Oil Transfer Pump by local engineering house	See S.No 12	See S.No 12		
a	b	c	d													
Defect/ Routine List	Repair Work Required	Services Required	Spares Required													
Abnormal noise and vibration observed in fuel transfer pump	Servicing/ overhauling Of Fuel Oil Transfer Pump by local engineering house	See S.No 12	See S.No 12													

		<th>a</th> <th>b</th> <th>c</th>	a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	
12.	Detailed scope of work	Servicing/ overhauling of Fuel Oil Transfer Pump by local engineering house	<p>a. Contractor is to visit ship and carry out detailed inspection of pump.</p> <p>b. Repair/ replacement of gears of pump.</p> <p>c. Repair/ replacement of Motor of pump, motor bearing, motor shaft, suction and discharge gauges and their lines, mechanical seal, safety valve, suction strainer to be changed with new and pump shaft coupling (Star Coupling).</p> <p>d. All parts to be properly aligned during assembling of pump, no loose fit will be accepted, all nuts bolts will be replaced with new.</p>	Upper left hand gear Part No: K200-01-10 Right hand gear Part No: K200-01-11 Lower left hand gear Part No: K200-01-12 Mechanical seal Part No: 58U-30 Bearing 6206 Part No: GB/T276-1994 6206 Safety valve spring Part No: K55-01-14 Elastic block Part No: B1104-66-00 Bearing 6306-2RS/Z2 GB/T276-1994 6306-2RS/Z2 Vacuum gauge Z-60-C 2.5 Pressure gauge Y-60-C2.5 Pressure gauge valve KF-L8/14E	
13.	Eligibilities	<p>a. Reputable local contractor having working experience of concerned local system related activity in PMSA.</p> <p>b. Local contractor must visit ship to understand exact requirement/ scope of work.</p>			
14.	EDC	10 Days			
15.	Warranty	1-year warranty for satisfactory operation w.r.t <p>a. Fuel Leakage from pump/ mechanical seal.</p> <p>b. Increased vibration/ noise/ hard to rotate (drawing extra current).</p> <p>c. Decrease/ low discharge pressure.</p> <p>d. Pitting/ Erosion in pump body and parts.</p>			
16.	Acceptance Criteria	<p>a. Satisfactory transfer of fuel from tank to tank.</p> <p>b. Satisfactory operation without high noise and vibration.</p> <p>c. Satisfactory operation without leakage.</p> <p>d. Precise alignment, new Star coupling of shaft performance test.</p>			
17.	Any other relevant info	Growth work, Damage/ defect occurred during work is responsibility of contractor.			

**REPLACEMENT OF HEADER COMPLETE & UPPER HEMISPHERE OF STD 22 GYRO –
PMSS BASOL**

S No	Details												
1.	Ships Name PMSS BASOL												
2.	Parent Equipment Gyro Compass												
3.	OEM Raytheon Anschütz GmbH												
4.	Model STD-22 Type 110-233												
5.	Serial No Type 110-233												
6.	Origin Germany												
7.	Sub Equipment Gyrosphere												
8.	Assembly Component Heater Complete, Upper Hemisphere												
9.	<table border="1"> <thead> <tr> <th>S. No</th> <th>Part Number</th> <th>Description</th> <th>Req Qty</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>110-231X01</td> <td>Heater, Complete</td> <td>01</td> </tr> <tr> <td>b.</td> <td>110-222X09</td> <td>Upper Hemisphere</td> <td>01</td> </tr> </tbody> </table>	S. No	Part Number	Description	Req Qty	a.	110-231X01	Heater, Complete	01	b.	110-222X09	Upper Hemisphere	01
S. No	Part Number	Description	Req Qty										
a.	110-231X01	Heater, Complete	01										
b.	110-222X09	Upper Hemisphere	01										
10.	Quantity As per Serial No 9												
11.	Source of Availability Replacement of heater complete and upper hemisphere												
12.	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work Required</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td>Replacement of above mentioned items for defect rectification of STD 22 Gyro</td> <td> (1) All spares, tools and test equipment are to be arranged by the contractor. (2) Satisfactory onboard trial/ set to work. (3) Growth work will be sole responsibility of the firm. </td> <td></td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required	Replacement of above mentioned items for defect rectification of STD 22 Gyro	(1) All spares, tools and test equipment are to be arranged by the contractor. (2) Satisfactory onboard trial/ set to work. (3) Growth work will be sole responsibility of the firm.				
a	b	c											
Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required											
Replacement of above mentioned items for defect rectification of STD 22 Gyro	(1) All spares, tools and test equipment are to be arranged by the contractor. (2) Satisfactory onboard trial/ set to work. (3) Growth work will be sole responsibility of the firm.												
13.	Technical Specs As per Serial No 9												
14.	Eligibilities Certified local contractor having working experience onboard 6HT MPVs. Firms conducted servicing of STD-22 Gyros onboard MPVs will be preferred.												
15.	EDC ASAP												
16.	Warranty 1 Year												
17.	Acceptance Criteria <ul style="list-style-type: none"> a. OEM Certified items. b. Items will be accepted after physical inspection by SS. c. Upon scrutiny of item and provided documents i.e. technical specifications by OEM. 												
18.	Any other relevant info SS may be contacted through D(P&CC) for any further query/ requirement.												

PMS ROUTINE OF PORTABLE HPAC – PMSS KASHMIR

S No	Description				
1.	Ships Name	PMSS KASHMIR			
2.	Parent Equipment	Portable HPAC			
3.	OEM	WUHAN MEKAND EQUIPMENT CO., LTD			
4.	Model	MKD-50/150			
5.	Origin	China			
6.	Part No. of Assembly Equipment Quantity	S No	NSN/Part No	Description	Qty
		a.	6105PV1000068/ 180M-2	Electric motor	1
		b.	4310PV5060004/IK22.0	Compression Host	1
		c.	i. 4310PV5010030/ 57628 ii. 4310PV5010031/57929	Valve piston	2 2
		d.	i. 4310PV5010025/ 56687 ii. 4310PV5010026/ 56691	Valve seat	2 2
		e.	4310PV5060034/ 64231	4-stage Piston Complement	1 set
		f.	4310PV5060030/ 63063	4-stage Piston bush	1
		g-	4310PV5060121 / 76592	4-stage Piston	1
		h.	4310PV5060043/N22049	Piston-ring set	1 set
7.	Justification for work	PMS 3-3105-0000			
8.	Work Required	a	b	c	d
		Defect List	Repair Work Required	Services Required	Spares Required
		3-3105-0000	Filter cartridge change Intermediate separator maintenance	Nil Yes	Yes Nil
9.			maintenance Filling valve maintenance Safety valves function check Checking blow-off pressure Checking final pressure gauge Oil change	Yes Yes Yes Yes Nil	Nil Nil Nil Nil Yes
10.	Detailed scope of work	Conduct PMS routines as mentioned at para 15 & relevant JICs			
11.	Technical Specs	S No	Item	Technical specs	
		a.	Dimensions	1650x950x1150 mm	
		b.	Working Pressure	150 bar	

		c.	Flow	56 m3/h
		d.	Compression Host rotation speed	1320 rpm
12.	Eligibilities	Reputable local/ international contractor registered with FBR and having working experience with PMSA.		
13.	EDD/ EDC	30 Days after award of contract		
14.	Warranty	01 Year		
15.	Acceptance Criteria (if any)	a. OEM Certified items b. All BER items to be replaced with new c. Firm will not be allowed to use ship tools and manpower		

**REPAIR OF MAIN CONTROL PCB OF SHIPBORNE PUBLIC
ADDRESS SYSTEM - PMSS KASHMIR**

S. No	Description												
1. Ships Name	PMSS KASHMIR /												
2. Parent Equipment	KG-2 Shipborne Public Address System												
3. OEM	Jiaxing Kexun Electron Ltd, CHINA												
4. Model	KX03E-002-001 >												
5. Serial No.	KXPCB-1082												
6. Origin	CHINA												
7. Sub Equipment	PA Remote Cbntral Box												
8. Assembly Component	Main Control PCB y												
9. Part No. of Assembly Component	KX03E-002-001												
10. Quantity	02												
15. Work Required	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td>Defect List</td><td>Repair Work Req</td><td>Services Req</td><td>Spares Req</td></tr> <tr> <td>02 x Main Control PCBs are defective</td><td>02 x Main Control PCBs are to be repaired</td><td></td><td></td></tr> </tbody> </table>	a	b	c	d	Defect List	Repair Work Req	Services Req	Spares Req	02 x Main Control PCBs are defective	02 x Main Control PCBs are to be repaired		
a	b	c	d										
Defect List	Repair Work Req	Services Req	Spares Req										
02 x Main Control PCBs are defective	02 x Main Control PCBs are to be repaired												
16. Detail Scope of Work	<table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> </thead> <tbody> <tr> <td>Details of Repair Work Req</td><td>Details of Services Req</td><td>Details of Spares Req</td></tr> <tr> <td>02 x Main Control PCBs are to be repaired</td><td>-</td><td>-</td></tr> </tbody> </table>	a	b	c	Details of Repair Work Req	Details of Services Req	Details of Spares Req	02 x Main Control PCBs are to be repaired	-	-			
a	b	c											
Details of Repair Work Req	Details of Services Req	Details of Spares Req											
02 x Main Control PCBs are to be repaired	-	-											
22. Technical Specs	<ul style="list-style-type: none"> a. Main Control PCB is a programmable PCB. b. It is a single chip internal control layer PCB. c. It realize the functions of control .& alarm. d. Dimension: 200x140*108 e. Weight: 500 Gms Approx. 												
23. Eligibilities	Reputable local contractor												
24. EDC	30 Days												
25. Warranty	1 Year from date of delivery.												
26. Acceptance Criteria	End user satisfaction after successful trials. Firm registered with FBR												
27. Any other relevant information	<ul style="list-style-type: none"> a. Contact SS/ visit onboard for clear understanding of scope of work. b. Damage/ defect occurred to system during work is responsibility of contractor. 												

IT NO: IT/81/65/2025-26

PMS ROUTINE OF PRE LUBRICATING PUMP FOR MAIN ENGINES -
PMSS KASHMIR

S No	Description																																				
1.	Ships Name																																				
2.	Parent Equipment																																				
3.	OEM																																				
4.	Model																																				
6.	Origin																																				
7.	Sub Equipment																																				
8.	Assembly Equipment Top right-hand gear Left-hand gear Lower right-hand gear Mechanical Seal Bearing SF-1 Safety Valve Spring Y8-01-05 Elastic Block B1104-66-10 Cleaning Cloth QXB-400x400 2# Kerosene GB 253-1989 2# 90# Industrial Gear Oil SY 1172-1980 90# Hairbrush QB/T 1103-2001 (30mm) Graphite Paper 200x250x0.1 3# Lubricating Grease GB 491-1987 3#																																				
9.	Quantity																																				
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h.	GB 253-1989 2	2# Kerosene GB 253-1989 2#	12L																																		
14.	Justification for work To conduct PMS routine of Pre Lubricating Pump for Main Engine 1 & 2 (PMS No 3-4322-0001-0002)																																				
15.	Work Required <table border="1"> <thead> <tr> <th>a</th><th>b</th><th>c</th><th>d</th></tr> </thead> <tbody> <tr> <td>Defect/ Routine List</td><td>Repair work Required</td><td>Services Required</td><td>Spares Required</td></tr> <tr> <td>PM-011</td><td>Overhauling of Pumps required as per PMD Routine</td><td>Overhauling of Pre Lubricating Pump for Main Engine 1 & 2 required for SAT OPS</td><td>As Per SR No 10</td></tr> </tbody> </table>	a	b	c	d	Defect/ Routine List	Repair work Required	Services Required	Spares Required	PM-011	Overhauling of Pumps required as per PMD Routine	Overhauling of Pre Lubricating Pump for Main Engine 1 & 2 required for SAT OPS	As Per SR No 10																								
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16	Technical Specs	S. No	Description	Working Pressure	Capacity (m3/h)	Power (KW)	Speed (rpm)
17		a.	Pre Lubricating Pump	0.72 MPa	10	5.5	960
18	Eligibilities	Reputable local/ international contractor registered with FBR and having wo. KHI experience with PMSA.					
19	EDD/EDC.	30 Days after award of contract					
	Warranty	01 Year					
	Acceptance Criteria (if any)	a.' OEM Certified item. b. Upon scrutiny of items and provided documents along with production certificate by OEM. c. Defective/ BER items must be replaced with new. d. Firm will not be allowed to usd ship tools and manpower					

IT NO: IT/81/66/2025-26

PMS ROUTINE OF OIL SLUDGE PUMP - PMSS KASHMIR

S Nc	Description			
1.	Ships Name	PMSS KASHMIR		
2.	Parent Equipment	OIL SLUDGE PUMP		
3.	OEM	HEBEI HENGSHENG PUMPS CO., LTD.		
4.	Model	GCN40-1V-W102		
6.	Origin	China		
7.	Sub Equipment	OIL SLUDGE PUMP		
8.	Assembly Equipment	Stator G40-1-03 Rotor G40-1-04 Mechanical Seal M32N-45G9L Bearing GB/T276-1994 6208 Bearing GB/T296-1994 3208 Belt GB/T11544-1997 L1321 Gasket 1 G40-1-08 Gasket 2 G40-1-15 Compound Seal Washer JB/T982-1977 14 Cleaning Cloth QXB-400x400 2# Kerosene GB253-1989 2# Clean Water H2O Hairbrush QB/T1103-2001 B30 90#Industrial Gear Oil SY1172-1980 90#		
9.	Part No. of Assembly Equipment	S No	NSN/Part No	Description
		a.	G40-1-03	Stator
10.	Quantity	b.	G40-1-04	Rotor
		c.	M32N-45G9L	Mechanical Seal
		d.	GB/T276-1994 6208	Bearing
		e.	GB/T296-1994 3208	Bearing
		f.	GB/T11544-1997 L1321	Belt
		g.	G40-1-08	Gasket 1
		h.	G40-1-15	Gasket 2
		j.	JB/T982-1977 14	Compound Seal Washer
11	Justification for	To conduct PMS routine of Oil Sludge Pump (PMS No 3-4541-0001)		
12.	Work Required	a	b	c
	Defect/ Routine List	Repair Required	Work	Services Required
	PM-011	Overhauling of pump required		As per S No 9 & 10
13.	Detailed scope of work	Details of Serial 15 Column a, b & c		
		a	b	c
		Detail of Repair Work Required		Details of services Required
				Details of Spares Required

		Overhauling of Oil Sludge Pump required for SAT OPS. Defective parts must be replaced with new.	Repair/ Replacement required for defective items of pumps required for SAT OPS.	As per S No 9 & 10		
14	Technical Specs	S No	Description	Working Pressur	Capacity (m3/h)	Power (KW)
		a.	Oil Sludge Pump	0.4 MPa	4.8	1.5
15.	Eligibilities	Reputable local/ international contactor registered with FBR and having working experience with PMSA.				
16.	EDD/ EDC	30 Days after award of contract				
17.	Warranty	01 Year				
18.	Acceptance Criteria (if any)	<ul style="list-style-type: none"> a. OEM Certified item. b. Upon scrutiny of items and provided documents along with production certificate by OEM. c. Defective/ BER items must be replaced with new. d. Firm will not be allowed to use ship tools and manpower e. QA/QC certificate issuance by QA/QC department 				

IT SPECIFICATIONS

S. No	Description															
1.	Ship's Name															
2.	Parent Equipment															
3.	OEM															
4.	Model															
5.	Origin															
6.	Sub Equipment															
7.	Assembly Components															
8.	Quantity															
9.	Source of Availability															
10.	Justification for Work															
11.	<p>Detail Scope of Work</p> <p>Details of Serial 9 Column a, b & c</p> <table border="1"> <thead> <tr> <th>a</th> <th>b</th> <th>c</th> </tr> <tr> <th>Detail of Repair Work</th> <th>Detail of Services Required</th> <th>Detail of Spares Required</th> </tr> </thead> <tbody> <tr> <td>Fabrication and replacement.</td> <td>Fabrication and replacement.</td> <td>Fabrication and replacement.</td> </tr> </tbody> </table>	a	b	c	Detail of Repair Work	Detail of Services Required	Detail of Spares Required	Fabrication and replacement.	Fabrication and replacement.	Fabrication and replacement.						
a	b	c														
Detail of Repair Work	Detail of Services Required	Detail of Spares Required														
Fabrication and replacement.	Fabrication and replacement.	Fabrication and replacement.														
12.	<p>Technical Specs</p> <p>01 X Main Engine Exhaust Expansion Bellow Stainless Steel (Grade 316-L) with following dimensions is to be repaired/fabricated:</p> <p>ENGINE SPECIFICATIONS: Power: 2880 kW Speed: 2050 rpm No. of cylinders: 16 Bore/stroke: 170/190 mm Fuel consumption at rated power: 657 L/Hr</p> <p>EXHAUST EXPANSION BELLOW</p> <table> <tbody> <tr> <td>a.</td> <td>Length of Inner diameter</td> <td>765 mm</td> </tr> <tr> <td>b.</td> <td>Length of Outer diameter</td> <td>810 mm</td> </tr> <tr> <td>c.</td> <td>Thickness</td> <td>35 mm</td> </tr> <tr> <td>d.</td> <td>Flange</td> <td>08</td> </tr> <tr> <td>e.</td> <td>Pitch Circle Diameter</td> <td>80Q mm</td> </tr> </tbody> </table>	a.	Length of Inner diameter	765 mm	b.	Length of Outer diameter	810 mm	c.	Thickness	35 mm	d.	Flange	08	e.	Pitch Circle Diameter	80Q mm
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d.	Flange	08														
e.	Pitch Circle Diameter	80Q mm														
13.	<p>Eligibilities</p> <p>a. Any registered and security wise cleared local contractor having good experience in above mentioned scope of work b. Firm must visit site for understanding exact nature of defect/ hindrances involved in job prior quoting to avoid inconvenience on later stage after award of Work Order. Firm is to quote for growth work by visiting ship in commercial quotation prior award of work order. HQ PMSA/Ship will not accept growth</p>															
14.	EDC															
15.	Warranty															

16.	Acceptance Criteria	<ul style="list-style-type: none">a. Pressure test of exhaust bellow at 3 Bar to be conducted before installation.b. No seawater leakage to be observed during normal operation at sea.c. No exhaust gas leakage to be observed from elbow at power of Main Engine i.e. 2050 RPMs
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IT NO: IT/81/68/2025-26

IT SPECIFICATIONS- DRESSING LINE, CEREMONIAL FLAGS & PENNANTS -
PMSS KOLACHI

S. No	Description	
1.	Ships Name	PMSS KOLACHI
2.	Parent Equipment	(1) Dressing line (70 x Flags & pennants 4 BD) (2) Meters Nylon rope (8mm) for dressing line (3) Ceremonial flags & Pennants (8 BD)
3.	Quantity	(1) 01 x Dressing line (70 x Flags & pennants 4 BD) (2) 140 Meters Nylon rope (8mm) for dressing line (3) 48 x Ceremonial flags & Pennants (8 BD)
4.	Sources of Availability	Pakistan
5.	Justification for Work	Requirement of dressing line and ceremonial flags for dressed overall and WIP visits.
6.	Store Required	(1) 01 x Dressing line (70 x Flags & pennants 4 BD) (2) 140 Meters Nylon rope (8mm) for dressing line (3) 48 x Ceremonial flags & Pennants (8 BD)
7.	Eligibilities	PMSA and NTN GST registered firm
8.	EDC	Within 15 Days
9.	Warranty	01 x year warranty after delivery
10.	Acceptance Criteria	a. To be approved as per sample selected. b. Acceptance of end user.

**IT SPECIFICATION FOR SERVICING OF EXHAUST ELBOWS OF GENSET NO 1
AND 2 – PMSS ZHOB**

S.No	Description		
1.	Ship's Name	PMSS ZHOB	
2.	Parent equipment	Genset No 1 & 2	
3.	OEM	Caterpillar	
4.	Model	C9	
6.	Origin	Caterpillar	
7.	Sub equipment	Exhaust System	
8.	Assembly component	Exhaust Elbows	
9.	Part No. of Assembly Component	No serviced parts	
10.	Quantity	2 x Exhaust Elbows of Gensets No 1 and 2	
11.	Justification for Work	Repair/ replacement of deteriorated exhaust elbows of GENSET No 1 & 2	
12.	Detail scope of work	a	b
		Detail of Repair Work Required	Details of Services Required
		Servicing of deteriorated exhaust elbows of GENSET No 1 & 2 through OEM/ local sources.	<p>a. 'Complete inspection by removal of lagging & heat sheet by firm</p> <p>b. Replacement of heat retardant gaskets on all joints of flanges and heat sheets by the firm with material Stainless Steel Grade(316L)</p> <p>c. Removal of deteriorated exhaust flap flanges and bellow.</p> <p>d. Fabrication of new exhaust flap flange and bellow as per sample by the firm (overboard trunking Dia:7.96", Heat Sheet Dia: 12.7")</p> <p>e. Exhaust expansion flap flange and bellow be installed back by the firm.</p>
			<p>f. The studs/ Nut bolts on both flanges be used of Forged Steel material. The exhaust piping be enwrapped by heat insulation material (lagging with heat sheet), g. After installation of exhaust piping successful onboard trials on running GENSETS by the firm (without fumes)</p> <p>h. All tools and test equipment's will be arranged by the firm</p> <p>j. All in way accessories be removed by firm and fitted back</p>

13.	Technical Specs	As per OEM Manual/ Specs
14.	Eligibility criteria	Authorized rep of OEM/ Local contractor having relevant working experience. Contractor is to visit the ship in order to understand the scope of work.
15.	EDC	7 Days
16.	Warranty	1 year
17.	Acceptance Criteria	<ul style="list-style-type: none"> a. Pressure test of exhaust elbows to be conducted before installation. b. No seawater leakage after installation and normal operation of Gensets. c. No exhaust gas leakage from both elbows at Max power of Gensets. d. Satisfactory repair/ replacement, installation and operation of exhaust elbows of Gensets No 1 & 2. e. Full Power Trials, HATs & SATs. f. QA/QC certificate issuance by QA/QC Deptt.
18.	Any other relevant information	<ul style="list-style-type: none"> a. Growth Work, Damage/ defect occurred during work is responsibility of contractor. b. Contactor may contact SS/ visit or\boprd ship to resolve any query.

IT SPECIFICATION SERVICING OF EXHAUST ELBOWS OF MAIN ENGINES NO 3 & 4 – PMSS ZHOB

S.No	Description			
1.	Ship's Name	PMSS ZHOB		
2.	Parent equipment	MTU Main Engine		
3.	OEM	MTU Germany		
4.	Model	MTU 16V4000M73L		
5.	Origin	Germany		
6.	Sub equipment	Main Engine Exhaust system		
7.	Assembly component	Exhaust Elbows		
8.	Part No. of Assembly Component	No serviced parts		
9.	Quantity	2 x (Exhaust Elbows Mild Steel)		
10.	Source of Availability	MTU Friedrichshafen GmbH		
11.	Justification for Work	2 X Main Engines Exhaust Elbows Mild steel found degraded. Seepage observed from Exhaust elbows due to deterioration		
12.	Work Required	a	b	c d
		Defect List	Repair Work required	Services Required Spares Required
13.	Detail scope of work	Attached	Servicing of ME 3 & 4 Exhaust Elbows through OEM/ local engineering house.	See S.No 13 Para b See S.No 13 Para c
		a	b	c
		Detail of Repair Work Required	Details of Services Required	Details of Spares Required

	Servicing of ME 3 & 4 Exhaust Elbows through OEM/ local engineering house.	<p>a. Removal of cladding, lagging and heat protective sheets from both elbows by the firm.</p> <p>b. Removal of exhaust elbows by the firm.</p> <p>c. Repair/ replacement of exhaust elbows by the firm with mild steel material.</p> <p>d. The pressure test of exhaust expansion bellows be undertaken at 5 bar.</p> <p>e. Exhaust elbow be installed back with insulating gaskets on both exhaust elbows.</p> <p>f. ..Elbow to be welded with bulkhead, from inside and outside during installation.</p> <p>g. The Mild steel studs/ Nut bolts on both elbow flanges for installation.</p> <p>h. After installation of exhaust elbow, successful onboard trials on running Engine by the firm.</p> <p>j. Arrangement of all</p>	2 x Exhaust Elbows Mild Steel (As per sample)
		tools and test equipment required during dismantling/ assembling by the firm.	
		k. Sole responsibility of firm in case of growth work to avoid complications on later stage. Firm be directed to visit the ship before quoting for understanding removal/ installation and defect rectification scope.	
14	Last Procurement of spares in PMSA	Last procured in 2025 for PMSS ZHOB with price Rs. 862,500/- vide work order no 050/2025 dated 23 July 2023.	
15	Defect History	Replacement with new components exhaust elbow of main engines no 1 & 2 in July 2025 having work order no 050/2025 dated 23 July 2025.	
16	Technical Specs	As per OEM Manual/ Specs	
17	Eligibility criteria	Authorized rep of OEM/ Local contractor having relevant working experience. Contractor is to visit the ship in order to understand the scope of work.	
18	EDC	7 Days	
19	Warranty	1-year	

20.	Acceptance Criteria	<ul style="list-style-type: none"> a. Pressure test of exhaust elbows at 5 bar to be conducted before installation. b. No seawater leakage after installation and normal operation of engines. c. No exhaust gas leakage from both elbows at Max power of main engines i.e 2050 RPM. d. Satisfactory repair/ replacement, installation and operation of exhaust elbows of ME No 3 & 4. e. Full Power Trials, HATs & SATs. f. QA/QC certificate issuance by QA/QC Deptt.
21.	Any other relevant information	<ul style="list-style-type: none"> a. Growth Work, Damage/ defect occurred during work is responsibility of contractor. b. Contactor may contact SS/ visit onboard ship to resolve any query.

IT SPECIFICATIONS FOR PMS ROUTINE OF HIGH PRESSURE AIR COMPRESSOR 1 & 2 -
PMSS KASHMIR

S No	Description					
1.	Ships Name	PMSS KASHMIR				
2.	Parent Equipment	HIGH PRESSURE AIR COMPRESSOR				
3.	OEM	WUHAN MEKAND EQUIPMENT CO., LTD				
4.	Model	MKD-50/150				
6.	Origin	China				
7.	Sub Equipment	a. Inlet filter element b. lubrication oil N28355 c. Lubrication oil filter element d. Condensate drain valve				
8.	Assembly Equipment	a. Inlet filter element b. lubrication oil N28355 c. Lubrication oil filter element d. Condensate drain valve <ul style="list-style-type: none"> i. O-ring N2720 ii. slot ring N4177 iii. Valve piston 57628 iv. Valve piston 57629 v. O-ring N3489 vi. O-ring N2507 vii. Valve seat 56687 viii. Valve seat 56691 ix. O-ring N4178 x. O-ring N7091 				
9.	Part No. of Assembly Equipment	S No	NSN/Part No	Description	Qty	
		a.	N3029	Inlet filter element	2	
		b.	N28355	lubrication oil	16 liter	
		c.	N15839	lubrication oil filter	2	
		d.	N2720	O-ring	8	
		e.	N4177	slot ring	8	
		2	57628	Valve piston	4	
		g-	57629	Valve piston	4	
		h.	N3489	O-ring	8	
		i.	N2507	O-ring	8	
			56687	Valve seat	4	
			56691	Valve seat	4	
		L	N4178	O-ring	8	
		m.	N7091	O-ring	4	
10.	Quantity	02 (Fwd & Aft)				
11.	Source of Availability	OEM, Local Market				

12.	OEM Details	Address WUHAN MEKAND EQUIPMENT CO., LTD Contact Phone NIL Contact Email NIL			
13.	Alternate/ Local Source	Alternate Source i Local market Address NIL Contact Phone NIL			
14.	Justification for work	To conduct PMS routine of High Pressure Air Compressor 1 & 2 (PMS No 3-3101-0001-0002)			
15.	Work Required	a	b	c	d
		Defect/ Routine List	Repair Work Required	Services Required	Spares Required
		PMS-3-3101-PM- 004	Inlet filter Element replacement	Replacement of required items as per MOP PM-004, PM- 005, PM-006 and PM-007 for HPAC 1 & 2 required	As per S No 9 & 10
		PMS-3-3101-PM- 005	Lubrication Oil replacement		
		PMS-3-3101-PM- 006	Lubrication oil filter element replacement		
		PMS-3-3101-PM- 007	Condensate drain valve maintenance		
16	Detailed scope of work				
		a	b	c	
		Detail of Repair Work Required	Details of services Required	Details of Spares Required	
		Replacement of Inlet filter Element, Lubrication Oil, Lubrication oil filter element and maintenance of Condensate drain valve required		Replacement of required items as per MOP PM-004, 10 PM-005, PM-006 and PM-007 for HPAC 1 & 2 required	As per S No 9 & 10
17	Technical Specs	S No	Description		Technical Specs
		a.	Dimensions		1650x950x1150 mm
		b.	Working Pressure		150 bar
		c.	Lubrication pressure		2-5
		d.	Oil tank capacity		8 L
		e.	Flow		56 m3/h

18.	Eligibilities	Reputable working local/ international contractor registered with FBR and having I experience with PMSA.
19.	EDD/ EDC	30 Days after award of contract
20	Warranty	01 Year
21.	Acceptance Criteria (if any)	<ul style="list-style-type: none"> 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 f. QA/QC certificate issuance by QA/QC department

**IT SPECIFICATIONS OVERHAULING OF INJECTORS OF GENSET NO 3 – PMSS
BASOL**

s No.	Description																			
1.	Ship's Name	PMSS BASOL																		
2.	Parent Equipment	C9 Marine Generator																		
3.	OEM	CATERPILLAR																		
4.	Model	C9 Air Cooled C9Z05159																		
5.	Serial No.	C9Z05159																		
6.	Origin	China																		
7.	Sub Equipment	Fuel System																		
8.	Assembly Components	Fuel Injectors, After cooler, injector harness																		
10.	Quantity	01																		
12.	OEM Details	Address 8 FUK WANG STREET, YUEN LONG INDUSTRIAL ESTATE, N.T., HONG KONG Contact Phone +852-28950777 Contact Email cel-cat.com																		
3.	Alternate/ Local Source	Alternate Source Allied Engineering Services & Supplies (Pvt) Ltd. Address Plot 21/2 Sector No 22, Korangi Industrial Area, Karachi, Pakistan Contact Phone UAN: 111 250 250 Tel: 35066901 Contact Email admin@aesl.com.pk																		
14.	Justification for work	As per OEM recommendation/ Central Maintenance Schedule																		
15.	Work Required	<table border="1"><thead><tr><th>a</th><th>b</th><th>c</th><th>d</th></tr></thead><tbody><tr><td>Defect List</td><td>Repair Work Required</td><td>Services Required</td><td>Spares Required</td></tr><tr><td>Nil</td><td>Nil</td><td>Yes</td><td>Yes</td></tr><tr><td></td><td></td><td></td><td></td></tr></tbody></table>			a	b	c	d	Defect List	Repair Work Required	Services Required	Spares Required	Nil	Nil	Yes	Yes				
a	b	c	d																	
Defect List	Repair Work Required	Services Required	Spares Required																	
Nil	Nil	Yes	Yes																	
16.	Detail scope of work	Details of Serial 15 Column a, b & c																		

		a	b	c
		Detail of Repair Work Required	Details of Services Required	Details of Spares Required
		NIL	<p>Overhauling of C9 CAT GENSET No 3 encompasses following aspects:</p> <p>a. Detailed health inspection of Genset through diagnostic tool and health assessment.</p> <p>b. Overhaul considerations must include inspection/ replacement of 06 x fuel injectors, sensors and software updation.</p> <p>c. Inspection/ replacement of cooler core.</p> <p>d. Provision and installation of only OEM recommended parts for satisfactory operation and extended life of Genset.</p> <p>e. Satisfactory onboard trials of Genset after installation on 100% load through load van i.e 192 KW.</p> <p>f. PQA of Genset No 3 on variable loads.</p> <p>g. Sharing of report indicating any defects and unseen anomaly in the system.</p>	<p>Reconditioning/ replacement of following components -</p> <p>a. 06 x fuel injectors</p> <p>b. Engine wiring harness</p> <p>c. Cooler core</p> <p>d. Fuel, lube oil sensors</p> <p>e. Software update</p>
17	Last Procurement	MOH of GENSET 3 conducted in Mar 24.		
18.	Technical Specs	As per OEM/ Technical manual.		
19.	Eligibilities	OEM authorized Rep having experience of CAT C9 DGs fitted on HINGOL class		
20.	EDC	07 days		
21	Warranty	01 year after Satisfactory load trials of GENSET		
22	Acceptance	a. Work will be carried out by/ through OEM rep		

**IT SPECIFICATIONS FOR CONDUCT OF 8A REPAIR/ MAINTENANCE ROUTINES OF 04 x
MARINE GEARBOX - PMSS BASOL**

S No.	Description																																			
1.	Ship's Name	PMSS BASOL																																		
2.	Parent Equipment	MARINE GEARBOX																																		
3.	OEM	ZF Friedrichshafen AG Marine Propulsion Systems 88038 Friedrichshafen Deutschland																																		
4.	Model	ZF 9000																																		
5.	Origin	Germany																																		
6.	Sub Equipment	Marine Gearbox																																		
7.	Part No. of Assembly Component	As per spare parts catalog ZF 9000 3103 002 035 ZF 9050 MTU FRIEDRICHSHAFEN																																		
8.	Quantity	04 x Marine Gearbox																																		
9.	Sources of Availability	ZF Friedrichshafen AG Marine Propulsion Systems																																		
10.	OEM Details	<p>Address ZF Friedrichshafen AG Marine Propulsion Systems 88038 Friedrichshafen Deutschland - Germany</p> <p>Contact Phone Tel: +49 7541 77-2207</p> <p>Contact Email www.zf.com</p>																																		
11.	Justification for work	<p>As per PMS routines/ technical manual To carry out following maintenance routines of 04 x Marine Gearbox:</p> <table border="1"> <thead> <tr> <th>MOP</th> <th>Description</th> <th>Period</th> </tr> </thead> <tbody> <tr> <td>PM-016</td> <td>Recalibrate display devices</td> <td>8A</td> </tr> <tr> <td>PM-018</td> <td>Check shaft seal of input shaft</td> <td>8A</td> </tr> <tr> <td>PM-019</td> <td>Check shaft seal of output shaft</td> <td>8A</td> </tr> <tr> <td>PM-009</td> <td>Flexible clutch: visual inspection</td> <td>8A</td> </tr> <tr> <td>PM-010</td> <td>Flexible engine and transmission support; visual inspection</td> <td>8A</td> </tr> <tr> <td>PM-011</td> <td>Clutch discs</td> <td>8A il</td> </tr> <tr> <td>PM-012</td> <td>Running gears: visual inspection</td> <td>8A</td> </tr> <tr> <td>PM-013</td> <td>Check oil pump</td> <td>8A</td> </tr> <tr> <td>PM-014</td> <td>Check control unit</td> <td>8A</td> </tr> <tr> <td>PM-015</td> <td>Check actuation device (mechanical/ electrical)</td> <td>8A</td> </tr> </tbody> </table>		MOP	Description	Period	PM-016	Recalibrate display devices	8A	PM-018	Check shaft seal of input shaft	8A	PM-019	Check shaft seal of output shaft	8A	PM-009	Flexible clutch: visual inspection	8A	PM-010	Flexible engine and transmission support; visual inspection	8A	PM-011	Clutch discs	8A il	PM-012	Running gears: visual inspection	8A	PM-013	Check oil pump	8A	PM-014	Check control unit	8A	PM-015	Check actuation device (mechanical/ electrical)	8A
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		<p>As per requirements</p> <p>Detailed work scope for carrying out 8A routines of Marine Gearbox is as under:</p> <ol style="list-style-type: none"> a. Remove the inspection cover and check the gearing of wheels on input shaft, intermediate shaft, and output shaft. b. Check rubber rings of flexible clutch for flawless condition. To do this, rotate Engine slowly and check rubber parts through inspection hole of bell housing c. For checking the control unit If possible, replace rather than dismantle the complete control unit. Readjustment of the control unit is not required when dismantling is necessary for cleaning or replacing individual pressure springs. However, a pressure test on the transmission is required. d. Check/ calibrate display devices for oil pressures and oil temperatures for correct display values. Connect calibrated display devices in parallel and compare values displayed. Display errors must not exceed 10% of individual operating ranges. Dismantle display devices and arrange for recalibration and/or use replacement display devices. e. Check/ Replace shaft seal of output shaft for leaks. f. Check/ Replace shaft seal of input shaft for leaks. g. Loosen fixing screws and remove mechanical actuation. Replace the complete unit and make sure mechanical actuation runs freely h. Loosen fixing screws and remove 	<p>As per requirements</p>
		<p>electrical actuation. Replace the complete unit and measure the electrical resistance (26.7 ohm +/- 8% at 20°C).</p> <p>j. Carry out all maintenance routines as per JICs</p> <p>k. Conduct of HATs and SATs. Record all operating parameters (oil pressure, discharge pressure, temperature) as per OEM recommendation</p>	
15	Technical Specs	As per technical manual	
16	Eligibilities	Reputable local contractor having working experience of Marine Gearbox	

17	EDC	02 weeks
18	Warranty	01 Year
19	Acceptance Criteria	<ul style="list-style-type: none"> a. Satisfactory operation of Marine Gearbox b. Satisfactory SATs followed by HATs. c. Satisfactory operation without noise and vibration. a. Leakage free operation of system.
20	Any other relevant information	<ul style="list-style-type: none"> a. Contactor may contact SS/ visit onboard ship to resolve any query. b. Growth work, damage/ defect occurring during work will be responsibility of contractor.

IT NO: IT/81/74/2025-26

IT SPECIFICATION FOR OVERHAUL ENGINE AND RUDDER TELEGRAPH WITH LIGHT ALARM - PMSS BASOL

SNo.	Description																																			
1.	Ship's Name	PMSS BASOL																																		
2.	Parent Equipment	Engine and Rudder Telegraph																																		
3.	OEM	LIAONING LIDA AUTOMATION EQUIPMENT MANUFACTURING LTD.																																		
4.	Model	EDZ11 . Z																																		
6.	Origin	China																																		
7.	Sub Equipment	Transmitter receiver, Receiver transmitter, Receiver transmitter, Audible and visual alarm, Junction box																																		
8.	Assembly Components	Alarm Siren, Fuse Core Indicator Light, Indicator Panel Control Module																																		
9.	Part No; of Assembly Component	<table border="1"> <thead> <tr> <th>S NO</th><th>NSN/ Part No</th><th>Description</th></tr> </thead> <tbody> <tr> <td>1.</td><td>6350PV2020011 7LD623.013G1</td><td>Control panel</td></tr> <tr> <td>2.</td><td>TB/NF21</td><td>■ "Transmitter receiver</td></tr> <tr> <td>3.</td><td>EDZ11TB/NJ2</td><td>Receiver transmitter</td></tr> <tr> <td>4.</td><td>EDZ11TC/NJ1</td><td>Receiver transmitter</td></tr> <tr> <td></td><td>YLX12024Z</td><td>Audible and visual alarm</td></tr> <tr> <td>6.</td><td>FX1</td><td>Junction box</td></tr> <tr> <td></td><td>OEZ35-TB/A-F1</td><td>Transmitter</td></tr> <tr> <td>8.</td><td>OEZ35-TC/A-J1</td><td>Receiver</td></tr> <tr> <td>9.</td><td>YL120-24Z</td><td>Electric Bell</td></tr> <tr> <td>10.</td><td>6350PV1010003</td><td>Control board</td></tr> </tbody> </table>		S NO	NSN/ Part No	Description	1.	6350PV2020011 7LD623.013G1	Control panel	2.	TB/NF21	■ "Transmitter receiver	3.	EDZ11TB/NJ2	Receiver transmitter	4.	EDZ11TC/NJ1	Receiver transmitter		YLX12024Z	Audible and visual alarm	6.	FX1	Junction box		OEZ35-TB/A-F1	Transmitter	8.	OEZ35-TC/A-J1	Receiver	9.	YL120-24Z	Electric Bell	10.	6350PV1010003	Control board
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10.	6350PV1010003	Control board																																		
10.	Quantity	01 x Engine and Rudder Telegraph with light alarm																																		
11.	Sources of Availability	MTU																																		
	OEM Details	Address: LIAONING LIDA AUTOMATION EQUIPMENT MANUFACTURING LTD Contact Phone: +86-512-52345677 Contact Email: jsb@jzldhh.com																																		
13.	Alternate/ Local Source	N/A																																		
14.	Justification for work	As per PMS routines/ technical manual																																		
15.	Work Required	<table border="1"> <thead> <tr> <th>a</th><th>b :</th><th>c</th><th>d</th></tr> <tr> <th>Defect List</th><th>Repair Work Required</th><th>Services Required</th><th>Spares Required</th></tr> </thead> <tbody> <tr> <td>Nil</td><td>Yes</td><td>Yes</td><td>Yes</td></tr> </tbody> </table>		a	b :	c	d	Defect List	Repair Work Required	Services Required	Spares Required	Nil	Yes	Yes	Yes																					
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		As per requirements	<p>Complete overhaul of Engine and Rudder telegraph system including following aspects:</p> <ol style="list-style-type: none"> 1. Inspect/ overhaul Bridge Engine Telegraph head: housing, indicator scale, lever movement, and mechanical detents. Inspect Engine Control Room (ECR) repeater and Engine Room Local Telegraph. Check wiring for loose terminals, chafing, corrosion, or burnt smell. Verify power supply (DC/AC as per vessel design). Check label plates, direction indicators, and handle lock mechanisms. 2. Inspect/ overhaul functional Test from Engine Room and Bridge and verify: ECR repeater receives correct order. Alarm bell/buzzer sounds for new order. Confirmation lever at ECR acknowledges order. Bridge receives "Acknowledged" indication. Confirm Engine Room Local Telegraph also repeats same order. Repeat test in reverse order and check full movement range. Confirm signal lamp or buzzer extinguishes upon proper acknowledgment. Check return signal path for delays or dropouts. 3. Check and overhaul Electrical & Signal Testing by checking synchro transmitter (ST) and receiver (SR) voltages and continuity Replace defective synchro units, transmitters, dial lamps, or wiring as required. 4. Check end overhaul rudder telegraph system by Bridge Steering Gear Room Physical Inspection and Functional Test 5. Confirm alarm reset function works, and re-arming.; of alarm loop. Perform final check: paneUamp indicators, siren, wiring, ground continuity, and ensure no short circuits or faulty insulation. 6. Satisfactory operations of engine and rudder telegraph system. Carry out complete overhauling as per JICs and technical manual following all SOPs 	New fuse cores, Spare relays, Indicator lamps / bulbs, Replacement buttons and siren unit, Terminal blocks or lugs, Cable ties / labeling tags / Wiring sleeves / Insulation sleeves and mentioned at S No 9
17.	Technical Specs	As per OEM/Technical Manual.		
18.	Eligibilities	OEM authorized Rep having experience of combined alarm system		
19.	EDC	ASAP (07 days)		
20.	Warranty	1 year		
21.	Acceptance Criteria	<ol style="list-style-type: none"> Work will be carried out by/ through OEM rep. Satisfactory trials of Main Engine 		

IT NO: IT/81/75/2025-26

IT SPECIFICATIONS - REPAIR/ MAINTENANCE OF 02 X SEA WATER PUMPS C-9 MAIN ENGINES OF FRB 158 - EASTERN WING

1	Ship's Name	EASTERN WING/ FRBs			
2	Parent Equipment	C 9 Main Engines			
3	OEM	Caterpillar, USA			
4	Make/ Model	Caterpillar C 9			
5	Serial No	PortX9Y00442 stbd X9Y00359			
6	Origin	USA			
7	Sub Equipment	Cooling System			
8	Assembly components	Sea water pump			
9	Part No of assembly components	197-5993			
10	Quantity	02			
11	Justification of work	Performance of 02 x sea water pumps degraded due old vintage.			
12	Work Required	A	b	c	d
		Defect list	Repair work required	Services Required	Spares Required
		Performance of 02 x Sea Water pumps found degraded due old vintage	Repair/ maintenance of 02 x sea water pumps	Repair/ maintenance of 02 x sea water pumps required including all associated accessories	As per requirement
13	Detail scope of work	Defect Analyzed	a	B	c
			Detail of Repair work required	Details of Services Required	Details of Spares Required
		Performance of 02 x Sea Water pumps degraded due old vintage. <ul style="list-style-type: none"> Coolant temperature high during normal operation. Rise in temperature may lead failure to engines. Vibration observed during normal operation 	Inspection and repair/ maintenance of undermentioned items and replacement (if required):	Repair/ maintenance of 02 x sea water pumps including all associated accessories required.	As per requirement
			6L2280		
			1359819		
			8C3080		
			1131110		
			CAM		

			1149088	Seal Pump		
			1750225	Ring retain		
			3665761	Shaft water pump		
			4P5926	Key stainless		
			5G5078	Ring		
			2D6392	Seal O Ring		
			7E0321	Impeller		
			7E0328	Plate As		
			8H4320	Bearing		
			8T2944	Seal O ring		
			3704053	Slinger		
			3704056	Spacer		
14	Technical Specs		6L2280	Rod		
			1359819	Seal		
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			7E0328	Plate As		
			8H4320	Bearing		
			8T2944	Seal O ring		
			3704053	Slinger		
			3704056	Spacer		
15	Eligibilities	Any well-known national/ international firm having good experience for repair/ maintenance of Caterpillar Engines and associated accessories				
16	EDC	15 days				
17	Warranty	One year after installation and successful trials onboard				

18	Acceptance Criteria	<p>Physical inspection of under mentioned parts by end user after installation onboard and trials upto maximum engine RPMs for satisfactory performance:</p> <ul style="list-style-type: none"> • Machining/alignment of shaft. • Machining of impeller housing. • Replacement of impellers, seals, bearing etc.
19	Any other relevant information	<p>a. Installation/ Replacement of Marine Grade spares/ accessories are to be ensured by contracted firm.</p> <p>b. Dismantling and re-installation of in-way accessories is responsibility of the firm.</p> <p>c. Any breakage/ material failure during dismantling/ installation will be lies with the firm.</p>

IT SPECIFICATION FOR OVERHAULING/FABRICATION OF EXHAUST FLAP AND EXHAUST DUCTING/ EXPANSION BELLOW OF APME & ASME - PMSS REHMAT

S NO	IT Specifications		
1.	Ship's Name	PMSS REHMAT	
2.	Parent Equipment	Main Engine MTU 16V396TB93	
3.	OEM	Germany	
4.	Model	16V396TB93	
5.	Serial No.	APME 5590552 ASME 5590553	
6.	Origin	Germany	
7.	Sub Equipment	Turbo Charger A, B & M/ Exhaust flaps and exhaust ducting/ expansion bellow	
8.	Assembly Component	Exhaust ducting	
9.	Part No of Assembly Component		
10.	Quantity	02 X Engine (APME & ASME)	
11.	Source of Availability	Local Market	
12.	OEM Details	<p>Address Firma - MTU - Motoren - Und Turbine-Union Friedrichshafen GmbH Abt VKT Postfach 2040 D-7990 Friedrichshafen</p> <p>Contact Phone +49 7541 90-0</p> <p>Contact Email info@mtu-online.de</p>	
13.	Alternate/ Local Source	<p>Alternate Source MTU Pakistan Representative Office</p> <p>Address Plot No C-5 Block B Verna Industrial Area Karachi Pakistan</p> <p>Contact Phone +922135051111</p> <p>Contact Email Info@mtu-pakistan.com</p>	
14.	Justification for Work	Exhaust flap and exhaust ducting/ expansion bellow are observed degraded due FWT and exhaust flap failed to close after shutting down the engine	
15.	Work required	a	b
		Defect List	Service Required
			c
			Spares Required

	<p>a. Work requisition ME-58/25 dated 11-11-25 was forwarded to BMG and same was outsourced.</p>	<p>a. Removal of complete old exhaust Ducting (pipes) and installation of new exhaust Ducting (pipes)</p> <p>b. Removal of exhaust flaps and installation of newly fabricated exhaust flaps</p> <p>c. Removal of A, B & M turbo charger body and installation of newly fabricated turbo charger body</p> <p>d. Removal of old expansion bellow, expansion bellow sleeve and expansion clamps replaced with new one</p> <p>e. Removal of drain cocks and installation of newly fabricated drain cocks</p> <p>f. Replacement of old lagging and cladding SS sheet with new one</p>	<p>1. 52 x feet high carbon steel fabricated exhaust line/ pipe as per sample</p> <p>2. 02 x SS exhaust flaps as per sample</p> <p>3. 06 x Turbo charger fabricated bodies including accessories</p> <p>4. 12 x SS expansion bellow, 06 x expansion bellow sleeve and 24 x expansion clamps</p> <p>5. 10 x SS drain cock as per sample</p> <p>6. 160 sq.ft lagging High temperature resistance material up to 700 °C and 16C£ sq.ft SS cladding sheet High temperature material up to 700 °C.</p> <p>8. Carbon steel nuts and bolts.</p> <p>9. Instrument Silver paint work.</p>
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16.	Detail Scope of Work	Details of Serial 9 Column a, b & c		
		a	b	c
		Detail of Repair Work Required	Detail of Services Required	Detail of Spares Required
		flap of Main exhaust exhaust system will be dismantled, cleaned and repaired/ overhauled for sat ops.	a. All spares, special equipment / tools, accessories etc for repair/ maintenance for said work to be arranged by the firm.	1. Carbon steel nuts and bolts.
		Main exhaust pipe and flap valve will be dismantled, cleaned/ overhauled and re-installed with new accessories/ fittings.	b. Any damage /in way removal/ defect / wear tear occur during the course of removal and installation of exhaust fans are to be repaired/ met by firm.	2. Instrument Silver paint work.
		Repair/ overhauled Turbo chargers A, B & M (If required)	c. Requirement of external services, if required will be responsibilities of firm.	3. Cladding and lagging of exhaust lines
		Repair/ replace expansion bellows with SS nut/ bolts (if required).		4. High temperature material upto 700 °C.

17.	Defect History	<p>a. Repair/ overhauling of exhaust flap and exhaust ducting/ expansion bellow carried out vide work order no 159/2023 dated 13 Dec 2023 of APME.</p> <p>b. Work requisition ME-58/25 dated 11-11-25 was forwarded to BMG and same was declared outsourced.</p> <p>c. ASME exhaust system repair/ overhauling during TOH vide Contract No PMSA/2019-20/D(P&CC)/1930224 dated 24-10-2019.</p>
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18.	Technical Specs	Carbon steel nut/ bolts
19.	Eligibilities	a. Carried out repair/ maintenance of Main engines exhaust system of PMSS Corvettes. b. Income tax registered. c. Sales tax registered. d. Firm is required to visit onboard ship.
20.	EDC	20 x days after issuance of work/ confirmation order.
21.	Warranty	01 x Year to be started after completion of successful trials.

22.	Acceptance criteria	<ul style="list-style-type: none">a. Satisfactory operation of equipment.b. Acceptance by SS.c. Carbon steel nut/ bolts.d. High temperature material 700 °C.e. No exhaust leakage.f. Cladding and lagging of exhaust line.
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IT SPECIFICATIONS OF STORE REQUIRED FOR INSTALLATION OF DR 3000
S1X- PMSS KOLACHI

S No	Description											
1.	Ship's Name	PMSS KOLACHI										
2.	Parent equipment	DR 3000S1X										
3.	OEM	CHINA										
4.	Origin	ZHUHAI HAOYUN MARINE EQUIPMENT CO., LTD										
5.	Sub equipment	a. CIRCUIT BREAKER 25A, 3 POLE CIRCUIT BREAKER (IC65N- C 3P 25A) b. CIRCUIT BREAKER 50, 3 POLE CIRCUIT BREAKER (2CDS253001R0505)										
6.	Part No of Assembly components	a. CIRCUIT BREAKER 50, 3 POLE CIRCUIT BREAKER (2CDS253001R0505) b. CIRCUIT BREAKER 25A, 3 POLE CIRCUIT BREAKER (IC65N- C 3P 25A)										
7.	Quantity	a. 02 x CIRCUIT BREAKER 25A, 3 POLE b. 03 x CIRCUIT BREAKER 50, 3 POLE										
8.	Sources of availability	OEM/ Any local firm										
9.	OEM details	ADDRESS : 3RD FLOOR,3RD BUILDING, MAKER TOWN,ZHUHAI ROAD, HONGQI TOWN GUANGDONG PROVINCE, CHINA TEL : +86 0756-7756805 FAX : +86 0756-7757805 EMAIL: HEDONGQIN@ZHHAOYUN.CN										
10.	Justification for work	Above mentioned circuit breakers is required for installation of DR 3000 S1X onboard PMSS KOLACHI.										
11.	Detail scope of work	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33.33%; text-align: center;">a</td><td style="width: 33.33%; text-align: center;">b</td><td style="width: 33.33%; text-align: center;">c</td></tr> <tr> <td>Defect list</td><td>Repair work required</td><td>Service required , ;</td></tr> <tr> <td>NA</td><td>NA</td><td>As mentioned at S.No 07</td></tr> </table>		a	b	c	Defect list	Repair work required	Service required , ;	NA	NA	As mentioned at S.No 07
a	b	c										
Defect list	Repair work required	Service required , ;										
NA	NA	As mentioned at S.No 07										
12.	Status of item Patternization in WIMS	Items are patternized CIRCUIT BREAKER 50, 3 POLE (5925-FT-100-4180) CIRCUIT BREAKER 25A, 3 POLE (5925-78-528-8099)										
13.	Status of availability in Depot	NIS										
14.	Technical spec	CIRCUIT BREAKER 50, 3 POLE CIRCUIT BREAKER 25A, 3 POLE										
15.	Eligibilities	Reputable local/ international contractor registered with FBR having working experience with PMSA.										
16.	EDC	10 x Days										
17.	Warranty	02 Year company warranty										
18.	Acceptance criteria	End user satisfaction after successful trials. Firm registered with FBR i										

IT SPECIFICATIONS – PROCUREMENT OF PAINTS - PMSS HINGOL

S No	Details			
1.	Ships Name	PMSS HINGOL		
2.	Parent Equipment	Paints		
3.	Part No. of Assembly Component	S No	Description	Qty (Ltr)
		a.	Paint Interthane 990 (International)	100
		b.	Thinner International	100
		c.	Paint Finishing General Service Black	80
		d.	Paint Enamel Red	32
		e.	Paint Weather Work Finishing, Light Grey Flash Point 34C(MIN)	80
		f.	Paint Remover	12
		g.	Paint Finishing Red	16
		h.	Paint Priming Aluminum	20
		j.	Paint Drier	20
4.	Source of availability	Through local contractor		
5.	Justification for Work	Paint are essentially required to maintain the overall look of the ships		
6.	Work Required	a	b	c
		Defect List	Repair work Required	Details of Services Required
		Paint deteriorated	Paints are required to maintain the overall look of the ship	Paint work required on the ship
7.	Detail scope of Work	a	b	c
		Detail of Repair work Required	Details of Services Required	Details of Spares Required
		Paints are required to maintain the overall look of the ship	Paint work required on the ship	-
8.	Eligibilities	a. Any registered and security wise cleared local contractor having good experience in above mentioned scope of work b. Reputable local/ international contractor having working experience with PMSA		
9.	Warranty	15 Days after award of contract		
10.	Acceptance Criteria	a. OEM Certified item b. Import documents along with production certificate by OEM be provided. c. QA/ QC Certificate issuance by QA/ QC department		

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 os to be clearly mentioned. It should also contain a **pay order 2% in the shape of pay order of the offered value** as earnest money. Cross cheque or cash is not acceptable in this case. The offer received without earnest money will be rejected.
- c. **SPECIAL INSTRUCTIONS:** Tender documents and its conditions may please be read point to point and understood properly before quoting. All tender conditions should be responded properly. In case of any deviation due to non-acceptance of tender conditions, the same should be highlighted alongwith changed offer / conditions. Tender may however be liable to be rejected.

PREPARATION OF QUOTATION

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

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

S No	Description	Unit Price	Qty	Total	Total Price
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Without this format quotation will not be accepted.

3. DATE AND TIME FOR RECEIPT OF TENDER:

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

4. TENDER OPENING:

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

5. VALIDITY OFFER:

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

6. QUOTING OF RATES:

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

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

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

8. EARNEST MONEY:

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

9. TENDER FEE:

Each technical offer must be accompanied with Cash of **Rs.7,500/-** for two stage and **Rs 2,000/-** for single stage 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. QA/ QC certificate required in respect of technical items.
- d. 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