### SEPARATE QUOTATIONS REQUIRED FOR ATTACHED 20 x IT SPECIFICATIONS

### IT NO: IT/26/01/2024-25

### IT SPECITICATION FOR PHURCHASE OF ROPE NYLONE 4" 32 MM FOR PMSS DASHT

S.NO	IT SPECIFICATION				
1,	Description	ROPE NYLONE HAWSERLAID 3 STRD CIRC 4"			
		DIA 32 MM			
2.	Location	Boat Deck			
3.	Make	Pakistan			
4.	Quantity	240 FTHM			
5.	Technical Specification	Firm should visit onboard prior confirmation of order			
6.	Eligibility	The Firm should be NTN/GST registered			
7.	EDD	ASAP			
8.	Warranty /Guarantee	02 Years			
Э.	Acceptance criteria	Accepted by ship staff			

### IT NO: IT/26/02/2024-25

### IT SPECIFICATION OF RADAR GPS - PMSS REHMAT

S No	Specification	Remarks
1.	Parent Equipment	Transas Radar
2.	Sub Equipment	GPS
3.	Assy Components	-
4.	Make	Taiwan / Equivalent
5.	Model	Garmin 585
6.	Quantity	01
7.	Justification i.e PMS/ Failure/ FWT etc	Item critically required for maintaining operationability w.r.t safe navigation, and smooth operation of radar.
8.	Work required/ Defect	Repair/ replacement of Radar GPS
9.	Detailed scope of work	Following included in scope of work:
10.	Technical Specification	a. Complete repair/ replacement of GPS.     B Provision of all accessories for safe navigation  Power supply: 24 VDC
11.	Eligibility Criteria	Following eligibility criteria be ensured:  a. The firm should visit onboard to understand defect.  b. Firm not undertaken the visit onboard ship to see extent of work will not technically qualify.  c. The firm has sufficient experience of same kind of work.  d. NTN/GST registered.
12.	EDD	01 x Weeks
13.	Warranty	01 x year warranty after satisfactory trials.
14.	Acceptance criteria	Onboard system trials by SS / SATs
15.	Any other relevant information	N/A

### IT NO: IT/26/03/2024-25

# RESTRICTED IT SPECIFICATIONS- REPAIR/ REPLACEMENT OF FUEL INJECTOR HARNESS AND ASSOCIATED SENSORS OF GENSET NO 1 – PMSS HINGOL

	Description					
1.	Parent Equipment	GENSET				
2.	Sub Equipment	Fuel Injection System				
3.	Assembly Component	Fuel Injector Harness				
4.	Model	C9Z05163				
5.	Make	Caterpillar C9 Marine GENSETs				
6.	Quantity/Item Details	S No Part/ NSN No Description G	Qty			
		1. 215-3294 Fuel injector harness 0	1			
		2. 060G1125 Fuel pressure sensor (0-10 bar) 0	1			
		3. 197-8394 Lub.oil pressure sensor 0	1			
		4. 060N1072 Pressure Transmitter (0-10 bar) 0	1			
7. 8.	Justification  Work required/Defect	Frequency drop is observed during normal operation of GENSE load above 50% due to malfunctioning of injector harness.  Repair/ Replacement of Injector Harness and Defective sensors	1 1 OI			
9.	Scope of work	<ul> <li>a. Repair/ Replacement of fuel injector harness, fuel pressure and lub. oil pressure sensor followed by successful testing.</li> <li>b. Onboard trials on 80% load.</li> </ul>	esens			
10.	Eligibility Criteria	<ul> <li>a. Any registered and security wise cleared local contractor who has working experience onboard MPVs</li> <li>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.</li> </ul>				
11.	EDC	07 Days				
12.	Warranty	01 Year				
	Acceptance	a Satisfactory Test/ Trials of fuel injectors harness on any of the GENSET no 1 up to at least 80% load up to 24 hours.  All parameters to be monitored within standard limit up to 80% load.				
13.	Criteria	b. All parameters to be monitored within standard limit upto 80	)% loa			

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## IT SPECIFICATIONS FOR REPLACEMENT OF CCTV Camera - PMSS DASHT

S No	Description						
1.	Parent Equipment	Network High Defi	nition Integrated PTZ Camera				
2.	Origin	CHINA	micor megrated F12 Camera				
3.	Sub Equipment	Camera					
4.	Model	DS2DY9185AI2	r equivalent				
5.	Make	HIKVision	equivalent the				
_ 6.	Quantity/Item Details	T01					
7.	Justification i.e PMS/ Failure/ FWT etc	FWT	FWT				
8.	Work required/Defect	CCTV Camera P required to be Sat	ower PCB not responding, same is				
9.	Scope of work	<ul> <li>a. Replacement of 01 x PTZ camera.</li> <li>b. Fabrication of Junction Boxes.</li> <li>c. 01 X Power PCB Card required</li> <li>d. Any growth work will be responsibility of Contractor.</li> </ul>					
10.	Technical Specs	Focal length	5.9135mm, 23 times of optical zoom				
i		Horizontal range	360° continuous rotation				
į		IR view distance	200m				
İ		Power Supply	AC24V 90W max				
		Network protocol	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP				
		Weight	15 Kg				
11.	Eligibility Criteria	Any Firm having good experience for repair/ maintenance of CCTV Camera systems					
12.	EDC	01 week					
13.	Warranty	01 year from date of delivery (any defect reported during warranty claim period is the responsibility of firm for rectification)					
4.	Acceptance Criteria	Upon successful repair and checking of camera					
15. L	Any Other Relevant Information	SS may be contacte	d for any further query/ requirement.				

IT NO: IT/26/05/2024-25

Parent Equipment Chiller Plant Chiller Seawater Cooling Pump  Assembly equipment Chiller Seawater Cooling Pump  Chiller Seawater Cooling Pump  Assembly equipment Chiller Seawater Cooling Pump  Ltd. Make Jiangsu Zhenhua Pump Industry Co. Ltd.  Justification i.e PMS/Failure/FWT  CLH80-65-9(Z)  Degraded performance PMS/Failure/FWT  Overhauling of Chiller Seawater Cooling Pump No 2 along with fabrication of new pump body and impeller.  Detailed scope of work  a. Fabrication of new pump body as per sample (Bronze) b. Fabrication of new impeller as per sample (Bronze) c. Replacement of old mechanical seal with high quality mechanical seal. d. Replacement of degraded seal rings with nickel/ phosphorus bronze material seal rings.	No.	Description		LLER SEAWATER PUMP				
2. Sub-equipment Chiller Seawater Cooling Pump  3. Assembly equipment Chiller Seawater Cooling Pump  4. Make Jiangsu Zhenhua Pump Industry Co. Ltd.  5. Quantity 01 Justification i.e PMS/Failure/FWT  6. Work required/ Defect Overhauling of Chiller Seawater Cooling Pump No 2 along with fabrication of new pump body and impeller.  7. Detailed scope of work a. Fabrication of new impeller as per sample (Bronze) b. Fabrication of new impeller as per sample (Bronze) c. Replacement of old mechanical seal with high quality mechanical seal. d. Replacement of old worn out bearings with new SKF or other good quality bearing.  8. Replacement of old worn out bearings with new SKF or other good quality bearing.  9. Precise alignment of pump with motor.  10. Corroded/ damaged bolts and nuts to be replaced with new Stainless steel (316L) bolts and nuts.  11. Pump/ in way assembly removal and Re-installation.  12. Keplacement of old maged bolts and nuts to be replaced with new Stainless and nuts.  13. Pump/ in way assembly removal and Re-installation.  14. Reputable firm having working experience of overhaulling of sea water pumps.  15. EDC 05 days  16. EDC 05 days  17. All old/ vorrout gauge lines and adopters of pump needs to be replaced with new Stainless as steel (316L) bolts and nuts.  18. Technical specs As per OEM Manual/ Specs  19. Eligibility criteria Reputable firm having working experience of overhaulling of sea water pumps.  10. EDC 05 days  11. Warranty 01 year warranty for satisfactory operation of seawater pump v.r.t  20. Sea water leakage from pump / mechanical seal.  21. Locreased vibration/ noise/ hard to rotate (drawing extra current).  22. Decreased/ low discharge pressure.  23. Satisfactory discharge pressure of sea water pump.  24. Satisfactory discharge pressure of sea water pump.  25. Satisfactory operation without high vibration and noise.  26. Satisfactory operation of gauge affer installation of gauge lines and adopters (Replace with new if wornout).	J <del>. 10.</del> –		Chiller Plant	Chiller Plant				
3. Assembly equipment 4. Make  Jiangsu Zhenhua Pump Industry Co. Ltd.  Degraded performance PMS/Failure/FWT  Detailed scope of work  a. Fabrication of new pump body as per sample (Bronze) b. Fabrication of new pump body as per sample (Bronze) c. Replacement of old mechanical seal with high quality mechanical seal. d. Replacement of degraded seal rings with nickel/ phosphorus bronze material seal rings. e. Replacement of old worn out bearings with new SKF or other good qualit bearing. f. All old/ wornout gauge lines and adopters of pump needs to be replaced with new. g. Precise alignment of pump with motor. h. Corroded/ damaged botts and nuts to be replaced with new Stainless steel (316L) botts and nuts. j. Pump/ in way assembly removal and Re-installation. k. Firm must visit on sight to ascertain exact scope of work.  8. Technical specs As per OEM Manual/ Specs  9. Eligibility criteria Reputable firm having working experience of overhauling of sea water pumps  10. EDC 15 days 11. Warranty 10 (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. Priting/ Erosion in Pump body and Parts.  12. Acceptance criteria  a. Satisfactory operation without sea water pump. b. Satisfactory operation without sea water leakage. d. Precise alignment; impeller should be free to rotate. e. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).	2							
4. Make  Jiangsu Zhenhua Pump Industry Co. Ltd.  Justification Le PMS/Failure/FWT  Overhauling of Chiller Seawater Cooling Pump No 2 along with fabrication of new pump body and impeller.  Detailed scope of work  a. Fabrication of new pump body as per sample (Bronze) b. Fabrication of new pump body as per sample (Bronze) c. Replacement of old mechanical seal with high quality mechanical seal. d. Replacement of old mechanical seal with high quality mechanical seal. d. Replacement of old worn out bearings with nuckel/ phosphorus bronze material seal rings. e. Replacement of lod worn out bearings with new SKF or other good quality bearing. f. All old/ wornout gauge lines and adopters of pump needs to be replaced with new. g. Precise alignment of pump with motor. h. Corroded/ damaged bolts and nuts to be replaced with new Stainless steel (316L) bolts and nuts. j. Pump/ in way assembly removal and Re-installation. k. Firm must visit on sight to ascertain exact scope of work.  8. Technical specs As per OEM Manual/ Specs 9. Eligibility criteria Reputable firm having working experience of overhauling of sea water pumps 10. EDC 05 days 11. Warranty 01 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. 12. Acceptance criteria a. Satisfactory operation without high vibration and noise. c. Satisfactory operation without sea water leakage. d. Precise alignment; impeller should be free to rotate. e. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).								
Pump Industry Co. Ltd.  5. Quantity  O1 Justification i.e PMS/Failure/FWT  Overhauling of Chiller Seawater Cooling Pump No 2 along with fabrication of new pump body and impeller.  7. Detailed scope of work  a. Fabrication of new pump body as per sample (Bronze) b. Fabrication of new impeller as per sample (Bronze) c. Replacement of old mechanical seal with high quality mechanical seal. d. Replacement of old mechanical seal with high quality mechanical seal ings. e. Replacement of old worn out bearings with new SKF or other good quality bearing. f. All old/ wornout gauge lines and adopters of pump needs to be replaced with new. g. Precise alignment of pump with motor. h. Corroded/ damaged bolts and nuts to be replaced with new Stainless steel (318L) bolts and nuts. j. Pump/ in way assembly removal and Re-installation. k. Firm must visit on sight to ascertain exact scope of work.  8. Technical specs As per OEM Manual/ Specs 9. Eligibility criteria Reputable firm having working experience of overhauling of sea water pumps 10. EDC 11. Warranty 01 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. a. Satisfactory operation without sea water leakage. d. Precise alignment; impeller should be free to rotate. e. Satisfactory operation without bigh vibration and noise. adopters (Replace with new if wornout).					CLH80-65-9(Z)			
5. Quantity  01	7.							
6. Work required/ Defect Overhauling of Chiller Seawater Cooling Pump No 2 along with fabrication of new pump body and impeller.  7. Detailed scope of work  a. Fabrication of new pump body as per sample (Bronze) b. Fabrication of new impeller as per sample (Bronze) c. Replacement of old mechanical seal with high quality mechanical seal. d. Replacement of degraded seal rings with nickel/ phosphorus bronze material seal rings. e. Replacement of lot worn out bearings with new SKF or other good quality bearing. f. All old/ wornout gauge lines and adopters of pump needs to be replaced with new. g. Precise alignment of pump with motor. h. Corroded/ damaged bolts and nuts to be replaced with new Stainless steel (316L) bolts and nuts. j. Pump/ in way assembly removal and Re-installation. k. Firm must visit on sight to ascertain exact scope of work.  8. Technical specs As per OEM Manual/ Specs 9. Eligibility criteria Reputable firm having working experience of overhauling of sea water pumps 10. EDC 05 days 11. Warranty 01 year warranty for satisfactory operation of seawater pump w.r.t a. Sea water leakage from pump / mechanical seal. b. Increased /low discharge pressure. d. Pitting/ Erosion in Pump body and Parts. a. Satisfactory discharge pressure of sea water pump. b. Satisfactory operation without high vibration and noise. c. Satisfactory operation without be replaced with new stainless of the pump and pump and pump and pump. b. Satisfactory operation without be replaced with new stainless of the pump and pump. b. Satisfactory operation without be water pump. c. Satisfactory operation without be water pump. b. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).				-				
7. Detailed scope of work  a. Fabrication of new pump body as per sample (Bronze) b. Fabrication of new impeller as per sample (Bronze) c. Replacement of old mechanical seal with high quality mechanical seal. d. Replacement of degraded seal rings with nickel/ phosphorus bronze material seal rings. e. Replacement of old worn out bearings with new SKF or other good qualit bearing. f. All old/ wornout gauge lines and adopters of pump needs to be replaced with new. g. Precise alignment of pump with motor. h. Corroded/ damaged bolts and nuts to be replaced with new Stainless steel (316L) bolts and nuts. j. Pump/ in way assembly removal and Re-installation. k. Firm must visit on sight to ascertain exact scope of work.  8. Technical specs As per OEM Manual/ Specs 9. Eligibility criteria Reputable firm having working experience of overhauling of sea water pumps 10. EDC 11. Warranty 11. Varranty 12. Acceptance criteria 23. Saisfactory 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. 24. Acceptance criteria 25. Satisfactory discharge pressure of sea water pump. 26. Satisfactory operation without high vibration and noise. 27. C. Satisfactory operation without sea water leakage. d. Precise alignment; impeller should be free to rotate. 28. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).	5.	Quantity	01	PMS/Failure/FWT				
b. Fabrication of new impeller as per sample (Bronze) c. Replacement of old mechanical seal with high quality mechanical seal. d. Replacement of old mechanical seal with high quality mechanical seal. Replacement of degraded seal rings with nickel/ phosphorus bronze material seal rings. e. Replacement of old worn out bearings with new SKF or other good quality bearing. f. All old/ wornout gauge lines and adopters of pump needs to be replaced with new. g. Precise alignment of pump with motor. h. Corroded/ damaged bolts and nuts to be replaced with new Stainless steel (316L) bolts and nuts. j. Pump/ in way assembly removal and Re-installation. k. Firm must visit on sight to ascertain exact scope of work.  8. Technical specs As per OEM Manual/ Specs 9. Eligibility criteria Reputable firm having working experience of overhauling of sea water pumps 10. EDC 05 days 11. Warranty 01 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. 12. Acceptance criteria a. Satisfactory operation without high vibration and noise. c. Satisfactory operation without sea water leakage. d. Precise alignment; impeller should be free to rotate. e. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).	6.	Work required/ Defect	pump body and imp	Overhauling of Chiller Seawater Cooling Pump No 2 along with fabrication of new pump body and impeller.				
9. Eligibility criteria Reputable firm having working experience of overhauling of sea water pumps  10. EDC 05 days  11. Warranty 01 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.  12. Acceptance criteria a. Satisfactory discharge pressure of sea water pump.  b. Satisfactory and smooth operation without high vibration and noise.  c. Satisfactory operation without sea water leakage.  d. Precise alignment; impeller should be free to rotate.  e. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).	7.	Detailed scope of work	a. Fabrication b. Fabrication c. Replaceme d. Replaceme material seal rings. e. Replaceme bearing. f. All old/ worr with new. g. Precise alig h Corroded/ c steel (316L) bolts ar j. Pump/ in w k. Firm must v	<ul> <li>a. Fabrication of new pump body as per sample (Bronze)</li> <li>b. Fabrication of new impeller as per sample (Bronze)</li> <li>c. Replacement of old mechanical seal with high quality mechanical seal.</li> <li>d. Replacement of degraded seal rings with nickel/ phosphorus bronze material seal rings.</li> <li>e. Replacement of old worn out bearings with new SKF or other good quality bearing.</li> <li>f. All old/ wornout gauge lines and adopters of pump needs to be replaced with new.</li> <li>g. Precise alignment of pump with motor.</li> <li>h Corroded/ damaged bolts and nuts to be replaced with new Stainless steel (316L) bolts and nuts.</li> <li>j. Pump/ in way assembly removal and Re-installation.</li> </ul>				
10. EDC  11. Warranty  01 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.  12. Acceptance criteria  a. Satisfactory discharge pressure of sea water pump.  b. Satisfactory and smooth operation without high vibration and noise.  c. Satisfactory operation without sea water leakage.  d. Precise alignment; impeller should be free to rotate.  e. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).								
11. Warranty  01 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.  12. Acceptance criteria  a. Satisfactory discharge pressure of sea water pump.  b. Satisfactory and smooth operation without high vibration and noise.  c. Satisfactory operation without sea water leakage.  d. Precise alignment; impeller should be free to rotate.  e. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).				ng working experience of over	nauling of sea water pumps			
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. a. Satisfactory discharge pressure of sea water pump. b. Satisfactory and smooth operation without high vibration and noise. c. Satisfactory operation without sea water leakage. d. Precise alignment; impeller should be free to rotate. e. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).								
<ul> <li>b. Satisfactory and smooth operation without high vibration and noise.</li> <li>c. Satisfactory operation without sea water leakage.</li> <li>d. Precise alignment; impeller should be free to rotate.</li> <li>e. Satisfactory operation of gauge after installation of gauge lines and adopters (Replace with new if wornout).</li> </ul>		Warranty	a. Sea water l b. Increased v c. Decreased d. Pitting/ Ero	eakage from pump / mechanic ribration/ noise/ hard to rotate r low discharge pressure. sion in Pump body and Parts.	cal seal. (drawing extra current).			
13. Any other information a. Damage/ defect to system during work is responsibility of contractor.	12.	Acceptance criteria	b. Satisfactor c. Satisfactor d. Precise alig e. Satisfactor	y and smooth operation withou y operation without sea water in gnment; impeller should be fre y operation of gauge after insta	it high vibration and noise. leakage. e to rotate.			
	13.	Any other information	a. Damage/ d	efect to system during work is	responsibility of contractor.			

### IT NO: IT/26/06/2024-25

### PMSS HINGOL

IT SPECIFIC	CATIO	NS
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٠٥	Description	
1.	Parent Equipment	GENSET
2.	Sub Equipment	Inter cooler and heat exchanger
3.	Assembly Component	Inter cooler core, heat exchanger core
4.	Model	C9Z05163
5.	Make	Caterpillar C9 Marine GENSETs
6.	Quantity	02
7.	Justification	Servicing required as per PMS No.5-1120-0002 MOP-035 & 038
8.	Work required/Defect	Servicing of intercooler and heat exchanger core
9.	Scope of work	a. Removal of Intercooler & heat exchanger and all associated fittings.
	ļ	b. Turn the intercooler core on one side in order to remove debris and back mush
		the core with cleaner.
		c. Steam clean the cooler in order to remove any residue. Flush the fins of the
		intercooler core and remove any other trapped debris.
		d. Wash the core with hot, soapy water.
		e. Flush the core thoroughly in order to remove residue and remaining debris. Flush
		the core with clean, fresh water until the water that is exiting the core is clear and free of
		debris.
		f. Dry the core with compressed air.
		g. Assembling and installation followed by successful trials.
).	Technical	a. Bore: 120 mm
	Specifications	b. Stroke: 149 mm
		c. Aspiration: Sea water Cooled
		d. Flywheel rotation: Counterclockwise
		e. Power: 200 kW
		f. Compression: 16.1:1
11.	Eligibility Criteria	a. Any registered and security wise cleared local contractor who has working
		experience onboard MPVs
		b. Firm must visit site for understanding the exact nature of defect/hindrances
		involved in job prior quoting to avoid inconvenience on later stage after award of Work
		Order.
12.	EDC	3 Days
13.	Warranty	O1 Year
14.	Acceptance	a. Intercooler to be pressure tested after servicing/cleaning up to 30 psi pressure
	Criteria	b. Satisfactory Test/ Trials of GENSET No 1 up to at least 80% load up to 24
		hours.
		c. Temperature to be monitored within standard limit upto 80% load
15.	Any Other Relevant	+ ····································
	Information	
<u> </u>		

### <u>IT NO : IT/26/07/2024-25</u>

# IT SPECIFICATION FOR DEFECT RECTIFICATION OF LEAKAGE FROM STERN SEALS - PMSS BASOL

S No	Description						
1	Parent Eqpt	Engine Shafts No 2 & 4					
2.	Sub Eqpt	CSMB-235 type Stern Tube sealing device					
3.	Assembly Component	Spring Assembly					
4.	Make	Dongtai Oceangoing Marine Fittings Co. Ltd					
5.	Model	CSMB-235					
6.	Qty	02 (01 per Shaft)					
7.	Justification	O-Rings of static and dynamic dials detailed to be					
		O-Rings of static and dynamic disks deteriorated. Spring assembly of static disk needs replacement.					
8.	Work Required	Replacement of spring assembly along with O. D.					
9.	Detailed Scope of Work	Replacement of spring assembly along with O-Rings and dowel pins.  Following work required on each shaft:					
		a. Replacement of 01 v Spring Assombly					
.'		<ul><li>a. Replacement of <u>01 x Spring Assembly</u>.</li><li>b. Replacement of O-Rings.</li></ul>					
Ť		c. Repair/ Replacement of Splash Guard.					
		d. Provision of any other spars remaind to					
		d. Provision of any other spare required during repair/ replacement.					
		Complete assembling of stern tube sealing devices after requisite repair/ replacement.					
	1	f. Satisfactory test/ trials					
		g. All tools and test equipment will be arranged by					
10		contractor.					
10.	Technical Specs	As per OEM Manual/ Specs.					
11.	Eligibility Criteria	Reputable local contractor having working experience of main engine					
10		repairs onboard 6HT MPVs.					
12.	EDC	2 x Days upon availability of spares					
13.	Warranty	One Year Stern Tube sealing device warranty regarding assured					
		leakage in Static and dynamic conditions after test/ trials or as					
	_! 	recommended by OEM.					
14.	Acceptance Criteria	a. OEM Certified spares to be used.					
		b. Upon scrutiny of item and provided decreased					
		b. Upon scrutiny of item and provided documents i.e. technical specifications.					
	}						
		c. Satisfactory operation without leakage in static and dynamic conditions.					
15.	Any other relevant						
	information	a. Occurrence of damage/ defect in system during work will be the responsibility of contractor.					
		b. Dismantling/ assembling/ installation and in way removal work					
L		will be responsibility of contractor.					

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### IT NO: IT/26/08/2024-25

### IT SPEC FOR REPAIR/ MAINTENANCE OF CONTROL MODULE OF ASME - PMSS BARKAT -

1.	Ship's Name	PMSS BARKAT				
2.		en AFT STBD MAIN ENGINE				
3.	Sub Equipment/ system	Engine Control System				
4.	Assembly/Equipment	CONTROL MODULE				
5.	Make	MEBAY				
6.	Model	DC 40D MK II				
7.	Qty	01 x CONTROL MODULE				
8.	Justification	Aft Stbd main Engine control system module observed malfunctioned during SOCs Main Engine fail to start/stop.				
9.	Work Required	ASME control module defect to be rectify by repairing/replacing for SAT operation of the system.				
10.	Detailed Scope of Work	Following work is required to be undertaken for the repair/ maintenance of control system:  a. Repair/ replacement of control module.  b. Feed all safeties, alarms and trips limit  c. Repair/ renewal of wires, lugs, switches to be carried out  d. All cables should be marked properly w.r.t control diagram.  e. All associated cable of Engine control system and supplies should be properly secured as per marine standard.  f. Any work during warranty/ guarantee period required will be the responsibility of the firm.  g. The firm will be arranged all spares, tools, accessories etc required for said job.  h. The firm will be responsible for any damage, defect and wear tear occur during the removal and installation.  j. The firm will be responsible for requirement of external services and removal of all associated accessories.  k. The firm will be responsible for removal, repair and installation work as per standard SOPs/ OEM Manual.				
11	Technical Specs	a. 27VDC,				
12.	Eligibilities	<ul> <li>a. The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work.</li> <li>b. The Firm must have experience of same kind of work.</li> <li>c. The firm should be NTN /GST registered</li> </ul>				
	EDC	10 x working days after issuance of work order				
14	Warranty	01 Year				
15.	Acceptance criteria	<ul><li>a. Satisfactory work done by the firm as per IT Specs.</li><li>b. Acceptance by SS.</li></ul>				
16	Any other Information					

### IT NO: IT/26/09/2024-25

IT SPECIFICATIONS - REPAIR/ MAINTENANCE OF YANMAR ENGINE RIGID HULL BOAT - PMSS HINGOL S No. Description Parent Equipment STBD 6.5M Rigid Hull Boat 2 Sub-equipment Yanmar Engine 3. Assembly equipment Fuel Injectors, Inter Cooler, Turbo charger, Shaft Bearing 4. Make YANMAR Model 4LHA-STP Quantity/Spares 5. Nil Justification i.e a. Boat engine does not achieve designated maximum RPM i.e 3500 ERPM PMS/Failure/FWT b. Shaft bearing inside the coupler is observed hard in operation 6. Work required/ Defect Inspection/ servicing and testing of fuel injectors a. b. Chemical cleaning of inter cooler C. Pressure test of inter cooler Inspection of turbocharger and servicing d. Replacement of output shaft bearing e. Replacement of batteries f. Overhauling of astern drive. g. Inspection of control system and sensors. h. Replacement of trim operating button i. 7. Detailed scope of work All in way accessories to be removed by the firm a. Removal of fuel injectors for servicing/repairing and adjustment b. C. Turbo charger to be checked for fair wear and tear d. Intercooler to be dismantled for chemical cleaning & pressure test. Fuel pump to be serviced e. f. Tappet clearance/ adjustment to be carried out Shaft bearing inside coupler to be dismantled and replaced g. Removal of stern drive for overhauling. Removal of old batteries and installation of new batteries Replacement of trim button with new button. All accessories to be fitted back by the firm after repair k. Growth work will be solely responsibility of firm. To avoid complications on later stage, firm is to be visit ship before quoting for understanding removal/ installation and maintenance scope. 8. Technical specs No of cylinder: Bore x stroke(mm): 100 x 110 Injection system: Direct injection Rotation: Counter - clockwise(From flywheel side) Starting system: Electric starting (12V-2.5kw) Starting system: Electric starting (12V-2.5kw) Battery capacity: 12Vx120Ah High idling RPM: 3700 Low idling RPM: 750 Stern drive NSN: 1940PV1020006 Turbocharger Model No: RHC61W(IHI made) 9. Eligibility criteria Reputable, qualified, registered and security wise clear firm having working experience on Rigid Hull Boat Yanmar Engines 10. EDC 10 days <u>11.</u> Warranty 01 Year 12. Acceptance criteria Satisfactory operation/ running of the boat upto maximum Engine RPM i.e 3500 a. b. Satisfactory and soft operation of trim button C. Easy starting of engine on first push after replacement of batteries. d. Smooth rotation of the shaft after replacement of shaft bearing Satisfactory operation of stern drive e. 13. Any other information Nil

### IT NO: IT/26/10/2024-25

## IT SPECIFICATION FOR REPAIR/ REPLACEMENT OF CHILLER PANEL ASSOCIATED ELECTRICAL COMPONENTS – PMSS BASOL

S No.	Description						
1.	Parent	Air Conditioning System JTLS-168 (IV) Marine Light Water Chiller					
	Equipment		, , , , , , , , , , , , , , , , , , ,				
2.	Sub Equipment		I Components				
3.	Assembly Comp.	Contacto	ors, Relays, Fuses,	PLCs, Switches and Cab	ling		
4.	Make	Jiangsu	Josun Air Conditior	ner Co., Ltd			
5.	Model		(I) Water Chiller M				
6.	Qty	S No	Part No	Item Description	Qty		
	'	a.	5925PV1000523	Air Switch	04		
		b.	5935PV1000059	Contactor (LC1- D32M7C)	04		
		C.	5935PV1000059	Relay (LRD-32C)	04		
		d.	5920PV0020003	Fuses Seat	04		
		e.	5920PV0010009	Fuses (RL98-16 4A)	04		
		f.	6ES72162BD23 0XB8	Controller Module CPU226	01		
		g.	6145PV0010015	Marine Cabling	15m		
		h.	7025PV0020026	Display panel (HMIGXO3502M)	01		
		j.	5925PV400002	Power Monitor (MWVA 84873025	01		
		k.	4120PV1030003	Thermal resistance module (EM2314RTD) (6ES72317PC22OXA O) ·	01		
7.	Justification			system of chilled water electrical components	er Plant due		
8.	Work Req/ Defect			s mentioned at Para 6, a	bove		
9.	Detailed Scope of Work	<ul> <li>a. Removal and replacement of panel wiring/ cabling.</li> <li>b. Inspection/ repair of Chilled Water Plant display unit.</li> <li>c. Inspection/ repair of Control System breakers.</li> <li>d. Replacement of 04 x LP/ HP safeties and 04 x Water Flow Switches with new (OEM specified only).</li> <li>e. Replacement of electrical components at Para 6, above.</li> <li>f. Provision of R-404A gas by firm with in warranty period.</li> <li>g. Replacement of 04 x flexible hoses of the system.</li> <li>h. Satisfactory full load test/ trials.</li> <li>j. All tools and test equipment or any spares required to conduct said scope of work will be arranged by firm/ contractor and no growth work will be acceptable.</li> <li>k. System will be pre checked before start of work. All work including system isolation, blanks (if required), cleaning, servicing, dismantling and reassembling will be responsibility of firm.</li> </ul>					

10.	Technical	As per OEM Manual/ Specs
	specs	
11.	Eligibilities	Reputable local contractor having working experience onboard MPVs
12.	EDC	03 x Days after availability of spares.
13.	Warranty	One year complete system (all associated electrical components) warranty after satisfactory test/ trials. Defects/ malfunction related to any component (software/ hardware) within warranty period will be responsibility of firm.
14.	Acceptance Criteria	<ul> <li>a. OEM Certified spares only (as mentioned with part numbers).</li> <li>b. Satisfactory operation of main CWP electrical panel.</li> <li>c. Satisfactory operation without refrigerant leakage.</li> </ul>
15.	Any other Information	Relevant firm will have to contact SS visit onboard for clear understanding of scope of work.

### IT NO: IT/26/11/2024-25

## IT SPECIFICATION : DEFECT RECTIFICATION OF HEAT EXCHANGER AND OIL COOLER CORE PMSS ZHOB

1.	Parent equipment	GENSET No 1,2 & 3					
2.	Sub-equipment	coolant system and lube oil system					
3.	Assembly Component	Heat exchanger a	Heat exchanger and oil cooler core				
4.	Make	CATERPILLAR	CATERPILLAR S. Model C9				
6.	Quantity	06 Injectors	7.	Justification i.e PMS/ Fallure/ FWT	PMS routine		
8.	Work Required/ Defect		n of	f heat exchanger an atisfactory operation	nd oil cooler core Genset no of all Genset		
9.	Detailed Scope of Work	a. Contractor is to visit ship and carry out detailed inspection of Gensets while running at load.  b. Contractor is to identify and rectify reason for increase in temperatures and parameters.  c. Contractor is to replace heat exchanger and oil cooler core available onboard, if deemed necessary and carry out tappet clearance and other settings.  d. Repair/ replacement of any other part is sensors atc. if required will be treated as growth work.  a. Firm to use OEM genuine spare parts.					
10.	Technical Specs	As per OEM Manu		Genset load trials			
11.	Enginity Criteria				AT C9 GENSETs in PMSA		
12.	EDG	03 Days					
13.	Warranty	01 Year after SATs					
-4-	Acceptance Criteria	(a) Zero alarm upon completion of defect rectification (b) Visual inspection/ Satisfactory report of all Genset running on load, generated by OEM's Diagnostic tool (c) Full Power Trials , HATs & SATs					
15.	Any other information	Firms are requested to visit site before quoting for further information					

### REPAIR/ MAINTENANCE OF FSME TURBO CHARGERLUBRICATION SYSTEM-PMSS BARKAT

	Chiefe Name	PMSS BARKAT
1	Ship's Name	Main Engine
2.	Parent equipment/system	Turbo charger
3.	Sub equipment	Turbo charger lubrication system
4.	Assembly/ equipment	MTU
5.	Make	16V-396 TB93
6.	Model	01
7.	Qty	Turbo charger observed leak during normal operation. Oil
8.	Justification	Same defect is decreasing the efficiency of Engine and
9.	Work requisition	Repair/Maintenance of FSME Turbo Charger lubrication system
10.	Detailed scope of work	a. Repair/Maintenance of FSME Turbo Charger lubrication system b. Dismantle Turbo Charger from FSME c. Dismantle the lubrication system lines and seals d. Inspect the Turbo Charger seals, lines and packing clamps repair/replace if required e. New nuts and bolts (Stainless steel) to be used for installation. f. All spares (must be genuine) tools special equipment /accessories required for said Repair Maintenance are to be arranged by the firm g. Any damage/ defect/wear tear occurred during course of removal, repair and installation of system/equipment will be repaired /met by firm h. Requirement of external services, if required will be responsibility of firm i. If any Repair/ Maintenance work goes beyond the defined scope of works will be processed accordingly
11.	Technical spec	a. The firm must visit onboard and carry ou
12.	Eligibilities	diagnoses/inspections to establish the extent of requirements.  b. The firm must have sufficient experience of same kind of work and experienced.  The firm should be NTN /GST registered.
13.	EDC	07 X days after issuance of work/confirmation order
13.	Warranty	01 Year
13. 14. 15.	EDC Warranty Acceptance criteria	

### IT NO: IT/26/13/2024-25

### PMSS KASHMIR

- 2		SYSTEM			
d.	System	Firefighting Systems	THE STATE OF THE S		
2.	Sub system	CO2 Drenching & AFFF System	176		
3.	Assembly Component	Misc			
4.	Make	a. CSSC JIUJIANG FIRE EQUIPMENT CO. LTD     b. SHANGHAI PUZAN INDUSTRIAL CO. LTD			
5.	Model	a. CDE2 b. PHP32/2			
6.	Quantity	02			
7.	Justification i.e PMS/ Failure/ FWT etc	PMS Routines (3-5932-0000 & 3-7604-0000)			
8.	Work Required/ Defect	Conduct of Misc PMS routines related to CO2 Drenchin	g & AFFF System		
9.	Scope of Work	a. PMS No: 3-5932-0000 i. Nozzles Inspection ii. Verification Signal Whistle iii. Check Control Pipes and Fire Extinguishing iv. Check Pressure Signal Transmitter v. Replace the O-Ring Seal of Discharge Valve vi. Maintenance and Test after Release of Pneur vii. Testing of N2 Bottles b. PMS No: 3-7604-0000 i. Inspect Foam Nozzle and Foam Pump ii. Test Insulation Resistance	(MOP-013) (MOP-015) (MOP-016)		
10.	Technical Specs	As per relevant TPIs & JICs			
11.	Eligibility Criteria	a. Have experience to work onboard ships (preferably PMSA ship     b. Company must be certified with HQ PMSA.     c. Company must be Income and Sales tax registered.			
12.	EDC	04 weeks after confirmation of order	The state of the s		
13.	Warranty	01 x year	11 (8)		
14.	Acceptance Criteria	Satisfactory trials both systems for 30 Days			
15.	Any other relevant information	Firm must visit onboard before providing quotation to work as per JIC (Contact: 0321-3000503)	verify exact scope o		

### IT NO: IT/26/14/2024-25

# IT SPECS/ SCOPE OF WORK FOR REPAIR/ REPLACEMENT OF HP PUMP OF ME 3 – PMSS BASOL

S No.		Description
1.	Parent Eqpt	MAIN ENGINE MTU V16 4000M73L
2.	Sub Eqpt	Injection Pump/ HP Pump
3.	Assembly Component	Fuel High Pressure Pump Part No. X59507300031
4.	Make	Woodward (Germany)
5.	Model	Woodward L'ORANGE
6.	Qty	01
7.	Justification	I To the second
8.	Work required/ Defect	Fuel HP Pump leaky due to defective pressure plug & plunger roller
9.	Detailed Scope of Work	Replacement of fuel HP pump  a. Replacement of 01x Injection pump/ HP pump  b. Provision of any other spare required during
		b. Provision of any other spare required during repair replacement     c. Complete assembling of HP pump including spares     d. Pressure testing for any leakages     e. Satisfactory test/ trials     f. All tools and test equipment will be arranged by contractor
10.	Technical Specs (if any)	As per OEM Manual/ Specs
11.	Eligibility Criteria	Reputable local contractor having working experience of Main Engine repairs onboard MPVs
12.	EDC	As early as possible.
13.	Warranty	01 x Year Fuel HP Pump warranty after test/ trials or as recommended by OEM without following defects:  a. High vibration and noise  b. Fuel/ lube oil leakage
14.	Acceptance Criteria	a. OEM Certified spares.     b. Upon scrutiny of item and provided documents i.e. technical specifications     c. Satisfactory operation without high vibration and noise.     d. Satisfactory operation without fuel/ lube oil leakage.
15.	Any other relevant Information	Damage/ defect occurred to system during work will be responsibility of contractor.     Dismantling/ assembling/ installation and in way removal work will be responsibility of contractor.

### IT NO: IT/26/15/2024-25

### MT(DTE)

### IT SPECIFICATION COMERCIAL REPAIR CASE OF VEHICLE NO 100401 MS HINO BUS

1.	SYSTEM	COMERCIAL	REPAIR	
2.	MAKE	HINO BUS		
3.	MODEL	2010		
4.	VEHICLE NO	100401 MS		
92		Following items will be repair/replaced		
		S No	Work Description Repair/Replace	
		a.	Roof repair through fiber coating and roof paint work after fiber coating	
		b.	02X roof doors replacement	
5	5. ITEM DESCRIPTION	C.	Front kamani repair through replacement	
<b>.</b>		d.	Fuel tank repair and fuel pipe replacement	
		e.	Speedometer, temperature gauge, oil pump gauge, battery gauge and wiring repair through replacement	
		f.	Pressure horn replacement	
		g.	Wheel alignment and greasing	
		h.	Interior cleaning and service	
6.	TECHNICAL SPESIFICATINOS	MATERIAL AS PER EXISTING		
7.	PRELIMINARY INVESTIGATION BY SHIPS'S STAFF	D(MT) / MTO	STAFF	
8.	ELIGIBILITY	REGISTERE	D CONTRACTOR	
9.	EDD	30 DAYS		
10.	WARRANTY	WARRANTY	12 MONTHS.	
11.	ACCEPTANCE CRITERIA	STAGE INSP	PECTION BY END USER	
12.	ANY OTHER RELEVANT INFORMATION	N/A		

### IT NO: IT/26/16/2024-25

### MT(DTE)

# IT SPECIFICATIN COMERCIAL REPAIR CASE VEHICLE NO 150324 MS TOYOTA DOUBLE CABIN

1	SYSTEM	COMERCIA	AL REPAIR		
2.	MAKE	TOYOTA D	OUBLE CABIN		
3.	MODEL	2015			
4.	VEHICLE NO	150324 MS			
5.	ITEM DESCRIPTION	Work Description			
	The second from	Following	items will be repair/replaced:		
		S No	Work Description Repair/Replace		
		a.	Pressure plates set		
		b.	Clutch plate		
		C.	Clutch bearing		
		d.	Wheel through		
		e.	Break Pads & Oil		
		f.	Break disc polish		
		g.	A/C Gas Charging		
		h.	Wiper change		
		j.	Clutch Cylinder Replace		
		k.	Front Screene Buff		
		L.	Complete labour charges		
6.	TECHNICAL SPESIFICATINOS	MATERIAL	AS PER EXISTING		
7.	PRELIMINARY INVESTIGATION BY SHIPS'S STAFF	D(MT) / MT	O STAFF		
8.	ELIGIBILITY	REGISTER	ED CONTRACTOR		
9.	EDD	30 DAYS	•		
10	WARRANTY	WARRANT	Y 12 MONTHS		
11.	ACCEPTANCE CRITERIA	STAGE INS	PECTION BY END USER		
12.	ANY OTHER RELEVANT INFORMATION	N/A			

### IT NO: IT/26/17/2024-25

### **PMSS KASHMIR**

embly Component e el ntity	Misc a. SHANGHAI MARINE DIE b. JINZHOU NORTH NAUT c. JINZHOU HANGXING SI OEZ-24Z102 a. Propulsion Control Syst b. Rudder Telegraph Syst c. Bridge Control Console PMS Routines (5-6125-0000, 5  Conduct of Misc PMS routines a. PMS No: 5-6125-0000; i. Annual maintenance ii. Equipment Overhau b. PMS No: 5-6117-0000; i. Check the Insulatio ii. Check the Relay/ Co	ESEL ENGINE RESERCH TICAL INSTRUMENT CO HIP TECHNOLOGY CO. tem: 02 tem: 02 tem: 02 tem: 01 5-6117-0000 & 5-5705 Misc Control Systems te of the Device	H INSTITUTE, CSIC D., LTD. -0000) (MOP-005) (MOP-006)
embly Component e el ntity ification i.e PMS/ ure/ FWT etc k Required/ Defect	a. SHANGHAI MARINE DIE b. JINZHOU NORTH NAUT c. JINZHOU HANGXING SI OEZ-24Z102 a. Propulsion Control Syst b. Rudder Telegraph Syst c. Bridge Control Console PMS Routines (5-6125-0000, 5  Conduct of Misc PMS routines a. PMS No: 5-6125-0000; i. Annual maintenance ii. Equipment Overhau  b. PMS No: 5-6117-0000; i. Check the Insulatio ii. Check the Relay/ Co	tem: 02 tem: 02 tem: 02 tem: 01 5-6117-0000 & 5-5705 Misc Control Systems tem: 02 tem: 01	-0000) (MOP-005) (MOP-006)
el ntity ification i.e PMS/ ure/ FWT etc k Required/ Defect	b. JINZHOU NORTH NAUT c. JINZHOU HANGXING SI DEZ-24Z102 a. Propulsion Control Syst b. Rudder Telegraph Syst c. Bridge Control Console PMS Routines (5-6125-0000, 5  Conduct of Misc PMS routines a. PMS No: 5-6125-0000; i. Annual maintenance ii. Equipment Overhau  b. PMS No: 5-6117-0000; i. Check the Insulatio ii. Check the Relay/ Co	tem: 02 tem: 02 tem: 02 tem: 01 5-6117-0000 & 5-5705 Misc Control Systems tem: 02 tem: 01	-0000) (MOP-005) (MOP-006)
ification i.e PMS/ ure/ FWT etc k Required/ Defect	a. Propulsion Control Syst b. Rudder Telegraph Syst c. Bridge Control Console PMS Routines (5-6125-0000, 5  Conduct of Misc PMS routines a. PMS No: 5-6125-0000; i. Annual maintenance ii. Equipment Overhau  b. PMS No: 5-6117-0000; i. Check the Insulatio ii. Check the Relay/ Co	tem: 02 e: 01 5-6117-0000 & 5-5705 Misc Control Systems : e of the Device	(MOP-005) (MOP-006)
ification i.e PMS/ ure/ FWT etc k Required/ Defect	b. Rudder Telegraph Syst c. Bridge Control Console PMS Routines (5-6125-0000, 5 Conduct of Misc PMS routines a. PMS No: 5-6125-0000: i. Annual maintenance ii. Equipment Overhau b. PMS No: 5-6117-0000: i. Check the Insulatio ii. Check the Relay/ Co	tem: 02 e: 01 5-6117-0000 & 5-5705 Misc Control Systems : e of the Device	(MOP-005) (MOP-006)
ure/ FWT etc k Required/ Defect	Conduct of Misc PMS routines  a. PMS No: 5-6125-0000: i. Annual maintenance ii. Equipment Overhau  b. PMS No: 5-6117-0000: i. Check the Insulatio ii. Check the Relay/ Co	Misc Control Systems : e of the Device	(MOP-005) (MOP-006)
	a. PMS No: 5-6125-0000: i. Annual maintenance ii. Equipment Overhau b. PMS No: 5-6117-0000: i. Check the Insulatio ii. Check the Relay/ Co	e of the Device	LOGY CO., LTD.  & 5-5705-0000)  Systems  De (MOP-005) (MOP-006)  (MOP-008)  Device (MOP-009) (MOP-011)  (MOP-011)  (MOP-008)  Innes will be provided by firm of thips (preferably PMSA ships).
pe of Work	i. Annual maintenance ii. Equipment Overhau b. PMS No. 5-6117-0000 i. Check the Insulatio ii. Check the Relay/ Co	e of the Device al	(MOP-006)
	iv. Overhaul Breakers  c. PMS No: 5-5705-0000 ii. Functional testing of iii. Replacement of But	ontactor Power Supply Device It of system Ittons	(MOP-008) (MOP-011) (MOP-008)
	e. Any growth work will b		De provided by min
			forebly DMCA ables?
ibility Criteria	rtified with HQ PMSA. come and Sales tax reg		
C		order	
rranty	01 x year		11000
ceptance Criteria	Satisfactory trials of all control	systems for 30 Days a	at sea
	C rranty	e. Any growth work will be hinical Specs As per relevant TPIs & JICs  a. Have experience to with the company must be certificated by the company must be lined. Company must be lined to the c	e. Any growth work will be bear by firm  hnical Specs As per relevant TPIs & JICs  a. Have experience to work onboard ships (pre b. Company must be certified with HQ PMSA. c. Company must be Income and Sales tax reg  C 04 weeks after confirmation of order  rranty 01 x year  Satisfactory trials of all control systems for 30 Days a

### IT NO: IT/26/18/2024-25

## IT SPECIFICATION FOR REPAIR/ MAINTENANCE OF STBD REDUCTION GEAR BOX LUB OIL COOLER PMSS SABQAT

1	Parent equipment	STBD MDE
2.	Sub equipment	Gear box Lub oil cooler
3.	Assembly component	Oil cooler
4.	Make	ZF MARITIMUS Word Wide
5.	Model	BW 750/755
6.	Qty	01
7.	Justification i.e PMS/failure/FWT etc	Chocked and Leaky
8.	Work required/ defect	Repair/ maintenance of lub oil cooler STBD gear box
9.	Detailed scope of work	Repair/ maintenance of lub oil cooler STBD gear box  a. Remove lub oil cooler from ship (gear box). b. Repair of core assemblies
10.	Technical specification	Part No 0501002839
11.	Eligibilities	i. The firm should be NTN/GST registered. ii. The firm should have experience of same kind of work. iii. The firm should visit onboard and carry our inspection to establish the extent of required work.
12.	EDD	30 days
13.	Warranty	01 year
14.	Acceptance criteria (if any)	Successful inspection as per requirement.     Satisfactory running trial.     Achievement of desired temperature and pressure as per OEM book
15.	Any other relevant information	NA

### IT NO: IT/26/19/2024-25

## SPECIFICATIONS FOR OVERHAULING OF SHAFT COOLING SEA WATER PUMP NO.3: PMSS KOLACHI

S No	Description	
1.	Parent Equipment	Propulsion
2.	Sub Equipment	Sea Water Pump
3.	Assembly Equipment	a. Shaft b. Pump Plate c. Mechanical Seal d. Impeller e. Pump Base f. Motor Bearings
4.	Make	Jiangsu Zhenhua Pump Industry.
5.	Model	CLH80-50-7(Z)
6.	Required Quantity	01
7.	Justification	Replacement of above mentioned items is required for Shaft Cooling Sea Water Pump.
8.	Detailed scope of work	Repair/ Replacement of following parts:     a. Shaft     b. Pump Plate     c. Mechanical Seal     d. Impeller     e. Pump Base     f. Motor Bearings     2. Successful HATs
9.		As per OEM specifications/ Manual
10.	Eligibility Criteria	Reputable local contractor having working experience with PMSA
11.	EDC	15 Days after award of contract
12.	Warranty	01 Year
13.	Acceptance Critéria (if any)	a. OEM Certified item b. Technical specifications should be mentioned c. Impeller size as per designed size d. No motor Overheating e. Discharge pressure should be as per Manual technical sheet. Contact MEO (0300-5267326)
14.	Any other relevant information	Contact MEO (0300-3201320)

### IT NO: IT/26/20/2024-25

### IT SPECIFICATION FOR REPAIR/REPLACEMENT OF WARD ROOM FRIDGE-PMSS BARKAT

	Ship's Name	PMSS BARKAT
2.	Parent equipment/system	Portable Fridge
3.	Sub equipment	Refrigerator PEL
4.	Assembly/ equipment	Refrigerator
5.	Make	PEL
6.	Model	
7.	Qty	01
8.	Justification	Refrigerator performance degraded and body is deteriorated due FWT
9.	Work requisition	Repair/Replacement of Ward Room pantry Refrigerator
10.	Detailed scope of work	a. Repair/Replacement ward room pantry refrigerator b. All spares (must be genuine) tools special equipment /accessories required for said Repair Maintenance are to be arranged by the firm c. Any damage/ defect/wear tear occurred during course of removal, repair and installation of system/equipment will be repaired /met by firm d. Requirement of external services, if required will be responsibility of firm e. If any Repair/ Maintenance work goes beyond the defined scope of works will be processed accordingly
	Technical spec	220 V 50 Hz, 18 Cubic ft., PEL refrigerator
11.		
11.	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.
	Eligibilities	The firm must visit onboard and carry out diagnoses/inspections to establish the extent of required work.     The firm must have sufficient experience of same kind of work and experienced.
12.		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     07 X days after issuance of work/confirmation order     01 Year
12.	EDC	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  07 X days after issuance of work/confirmation order.

Note: 100% Payment after completion by CNA

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#### **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 aresult of this IT shall mean the agreement entered into between the parties that is buyer and the supplier will be in accordance with the PPRA rules 2004 or any amendment issued from time to time. Therefore all open tender inquiry will be uploaded on PPRA Website and publish on print media as the case may be.

### 2. SUMBISSION OF TENDER:

Firms shall submit their offers in two separate envelopes clearly marked as "**Commercial Offer**" and "**Technical Offer**" for open tender. Both envelops shall be properly sealed bearing the signature of the bidder. Thereafter both these envelopes shall be placed in one bigger envelope. This envelope should bearthe 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 anddate 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 areto be indicated separately.
- c. **BID SECURITY**: All registered firms are exempted from provision of bid security upto Rs.500,000/- and unregistered firms have to provide bid security equals to 02% for bids amounting upto Rs.500,000/- in the shape of Pay Order in favor of "IT Sale Account DG PMSA". Furthermore, firms are required to deposit bid security not exceeding 05% of the bid price for bid value amounting more than Rs.500,000/-. Moreover, following guidelines will be followed:
  - i. 2% from registered firms.
  - ii. 5% from un-registered firms.
- d. Total price of the items quoted against the tender is to be clearly mentioned. It should also contains a **pay order 2% or 5% in the shape of pay order of the offered value** as earnest money. Cross cheque or cash is not acceptable in this case. The offer received without earnest money will be rejected.
- e. **SPECIAL INSTRUCTIONS:** Tender documents and its conditions may please be read point to point and understood properly before quoting. All tender conditions should be responded properly. In case of any deviation due to non-acceptance of tender conditions, the same should be highlighted alongwith changed offer / conditions. Tender may however be liable to be rejected.

### PREPARATION OF OUOTATION

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

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

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

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

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

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

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

### 4. TENDER OPENING:

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

### 5. **VALIDITY OFFER:**

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

### 6. **OUOTING OF RATES:**

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

S No Description Qty U/Price GST/SST/Taxes Total Price

### 7. ATL/ GST/ SST/ INCOME TAX NUMBER:

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

#### 8. RETURN OF EARNEST MONEY:

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

### 9. TENDER FEE:

Each technical offer must be accompanied with Cash of **Rs.1,000**/- nonrefundable as tender fee (In favour of IT Sale Account DG PMSA) (**Separate Quotations required for each IT Specification**).

### 10. INSPECTION AUTHORITY:

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

### 11. CONDITION OF STORES:

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

#### 12. **DOCUMENTS REQUIRED:**

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

a. OEM / Authorized Dealer/Agent Certificate alongwith OEM Dealership Evidence as applicable.

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

### 13. SECURITY DEPOSIT / BANK GUARANTEE:

To ensure timely and correct supply of stores the firm will furnish an unconditional Bank Guarantee (BG) from a schedule bank for an amount of **10%** of the contract value (excluding taxes, duties / freight handling charges on a stamp paper of the value of (Rs.100/00) as per prescribed format in the shape of Bank Guarantee. Format of Bank Guarantee is at Annex "B". Furthermore, it is imperative to mention that deposit of PBG for HMI and Core Exchange cases will be equal to the total value of engine.

### 14. CURRENT BANK STATEMENT:

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

### 15. INTEGRITY PACT:

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

### 16. **CORRESPONDENCE:**

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

### 17. PRE SHIPMENT INSPECTION:

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

#### 18. AMENDMENT IN CONTRACT:

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

#### 19. **DISCREPANCY**:

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

### 20. PRICE VARIATION:

Price offered against IT are to be firm and final.

### 21. LIOUIDATED 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 becancelled 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. **DISOUALIFICATION:** Offers are liable to be rejected if:-

- a. Received after time and date specified in the IT.
- b. Offers are found conditional or incomplete in any respect.
- c. There is any deviation from the General / Special / Technical Instructions contained in this tender.
- d. Taxes and duties, Freight, Transportation and Insurance charges not indicated separately as per required price breakdown mentioned above.
- e. Pay Order with Commercial Offer and Cash with Technical Offer is not received.
- f. Multiple rates quoted against one item.
- g. Manufacture's relevant Brochures and technical details on major equipment, assemblies are not attached in support of specification.
- h. Offers (Technical / Commercial) are containing amendments / corrections / overwriting etc.
- j. National Tax No (NTN) and GST/SST No are not indicated on technical and commercial offer.
- k. If validity of offer is not quoted as required in IT or made subject to confirmation late.