

SEPARATE QUOTATIONS REQUIRED FOR ATTACHED 06 X IT SPECIFICATIONS

IT NO : IT/49/01/2024-25

IT SPECIFICATION OF SHORE ELECTRIC SUPPLY TO 06 X SHIPS

1.	System	Portable diesel generators for electric supply to ship.		
2.	Make/ Origin	Cummins/ Caterpillar/ equivalent.		
3.	Item Description	Portable diesel generator on portable trolley with sound proof canopy/ casing.		
4.	Technical Specs (if any)	02 x KASHMIR Class MPVs		
		Load requirements	210 kW average (for 01x MPV)	250 kW Max (for 01x MPV)
		Frequency	50 Hz	50 Hz
		04 x HINGOL Class MPVs		
		Load requirements	90 X kW average (for 01 x MPV)	110 kW Max(for 01x MPV)
		Frequency	50 Hz	50 Hz
5.	Scope of Wok	<p>a. 06 x Shore/ mobile DGs with all relevant accessories are required for feeding un interrupted power supply to 04 x HINGOL Class MPVs and 02 x KASHMIR Class MPVs berthed at KPT/ nominated Jetties; detail of the same is as follows:</p> <p>(1). 24/7 Hours per month for PMSS KOLACHI and KASHMIR</p> <p>(2). 24/7 Hours per month for PMSS BASOL, DASHT, HINGOL & ZHOB.</p> <p>b. Rental DGs will have portable trolley mounted arrangement. Moreover, shifting/ movement of DGs within KPT premises (that includes West Wharf and East Wharf Berths), KS&EW, SAPT as and when required by HQ PMSA/ SS will be arranged by firm at own expenses. HQ PMSA will only help in document work formalities.</p> <p>c. Contract for power supply will be done for period of 01 x year extendable upto 2 years or more but not exceeding 05 years with agreement of both parties.</p> <p>d. DGs and panels will be in sound proof canopy (less than 70 decibels of noise) and meet all safety conditions as applicable by National & international safety standards.</p> <p>e. Any damage to the jetty or surrounding including loss to public property caused by the DGs will be borne by the firm.</p> <p>f. DGs will be suitably covered to provide uninterrupted power supply to ships in all weather conditions (like rain, hail, storm, dust & other severe weather conditions)</p> <p>g. Provision of distribution box with circuit breakers as per international standards will be firm's responsibility.</p> <p>h. Maintenance and operation of DGs will be the sole responsibility of the firm.</p> <p>j. Firm will deploy at its cost, well trained mechanic from time to time, on need basis for carrying out periodic service/ maintenance and for rectifying any defects in DG sets, as may be required by customer on observations.</p>		

	<p>k. PQA (Power Quality Analysis) certificate with installed DGs before supplying supply to ship will be provided by firm</p> <p>l. All consumables will be responsibility of the firm.</p> <p>m. Filtered diesel to the rental DGs will be provided by PMSA Ships. Contractor and Ships are to maintain a proper record of the same for audit and accounting purpose. (See S No 11)</p> <p>n. Operators for non-stop operations of DGs and load management/ changeover will be firm's responsibility. Any damage to Ship safety & systems due operator watch keeping negligence will be firm's responsibility.</p> <p>p. Firefighting equipment will be placed with each DG. Moreover, operator/maintainer provided by firm will be well conversant with the firefighting techniques. Any damage incurred due fire to DGs/ Ship will be the responsibility of firm.</p> <p>q. Firm would be liable to any loss or damage occurred to the ships machinery/ equipment due to power supply fluctuation.</p> <p>r. 2 x Cable (one stand-by) of 3 core 40mm required for provision of supply to each ship will be provided by firm. Rep of firm will visit ships prior participation in tender and make out the length of cable required for ships while they are berthed in different conditions e.g alongside HINGOL Class MPVs, PNFT, PNS NASR or KASHMIR Class MPVs ships.</p> <p>s. DGs are to be in best health and new models (not less than 3 years old, at time of awarding contract. Any malfunction of DGs, fluctuation in DGs voltages/ cable fault or damage to ship board systems will be repaired/ rectified by the firm at their expense on priority.</p> <p>t. Entry permission of staff (maintainer/ operators of firm) and material to port area will be facilitated by HQ PMSA.</p> <p>u. Cleaning of DGs and neat marking of fuel tanks will be sole responsibility of firm. Firm will be responsible for cleaning and maintaining the occupied area in a well presentable situation at all times especially during VIP visits.</p> <p>v. Maintenance of canopies of rental DGs will be carried out timely by firm.</p> <p>w. In case of unscheduled/ prolonged maintenance of rental DG, firm will make alternate arrangement to ensure power supply to MPVs. In case maintenance period extends more than 24 hours, per day rent for each hour and/ or day will be deducted by HQ PMSA till power supply is restored.</p>
6. Eligibilities	<p>a. Firm having own DG sets and having at least 02 years of experience of providing power to bigger organizations.</p> <p>b. The Rental services being provided by the contractor must be self-owned and no further sub-contracting of the services is permitted.</p> <p>c. Firm must be registered with PMSA.</p>

		d. Firm to provide documentary proof for providing services to reputed firms/ organizations.	
7.	Rental Rates to be quoted for	24/7 Rental rate for PMSS KOLACHI/ KASHMIR (Operational time)	Rent per day
		24/7 Rental rate for PMSS KOLACHI/ KASHMIR (Standby time; only when ship is at sea).	
		24/7 Rental rate for 6HT MPV (Operational time).	Rent per day
		24/7 Rental rate for 6HT MPV (Standby time; only when ship is at sea).	
8.	EDC/EDD	DGs installation work, sound proofing of DG noise and operationability to be completed within period of 30 x days from the date of signing this contract.	
9.	Validity	01 x year (extendable to 5 years).	
10.	Acceptance Criteria (if any)	As described in terms and conditions. Moreover, shortcomings/ anomalies highlighted by ship to HQ PMSA may be addressed by firm within 24 hours or else per day rent be deducted.	
11.	Any other relevant information	<p>Firms are requested to submit 02 x separate commercial quote as follow:</p> <p>a. Rental Diesel Generators <u>without Fuel (Diesel)</u></p> <p>b. Rental Diesel Generators <u>with Fuel (Diesel)</u></p>	

**IT SPECIFICATION FOR PROCUREMENT OF STBD AND PORT MDEs REDUCTION
GEARBOX LUBE OIL COOLERS- PMSS RAFAQAT& SABQAT**

1.	Parent Equipment	Main propulsion (Stbd & port)
2.	Sub Equipment	Reduction gearbox (Stbd & port)
3.	Assembly Component	Lube oil coolers
4.	Make	ZF Germany/ ZF-750 BW
5.	Model	ZF-750 BW
6.	Qty	04
7.	Justification i.e. PMS /Failure/ FWT etc	Stbd & port gearbox lube oil level observed decreasing during normal operation at sea and observed abnormal noise.
8.	Work Required/Defect	procurement of Stbd & port gearbox coolers
9.	Detailed scope of work	Procurement of Stbd & port MDEs Reduction gearbox coolers include under mentioned jobs. i. Removes from Stbd & port MDEs Reduction gearbox. ii. Pressure test the coolers at 15 to 20 bar. iii. Install new zinc anodes in lube oil coolers iv. Install the new coolers with new O rings and gasket. v. Prove system leak free. vi. All material, spares, tools, special equipment/ tools, accessories etc required for said work are to be arranged by the contractor. vii. Any damage occurs during the course of removal and installation work will be done by firm without any liability/responsibility on part of the ship/PMSEA viii. Requirement of external services, if any will be responsibility of the firm without any liability on the part of ship. ix. Repair defective items are same hand over to SS.
10.	Technical specification	i. As per OEM manual
11.	Eligibility Criteria	i. The firm should visit onboard and carry out inspection to establish the extent of required work. ii. The firm should have experience of the same kind of work. iii. The firm should be NTN/GST registered.
12.	EDC	07 days
13.	Warranty	1 year after installation
14.	Acceptance Criteria	i. OEM certified material ii. Leakage free. iii. Satisfactory running trials at harbor and sea.

IT SPECS FOR ENGINE S.NO CAE 880787 – DEFENDER AIRCRAFT

S No	Description																																																																																				
1.	Ship's Name	93 SQN																																																																																			
2.	Parent Equipment	BN-2T Defender Aircraft																																																																																			
3.	Sub Equipment	Allison 250-B17C Turboprop Engine																																																																																			
4.	Assembly Equipment	Self																																																																																			
5.	Make	Rolls Royce (USA)																																																																																			
6.	Model	Allison 250-B17C Turboprop Engine (Part No 23038150)																																																																																			
7.	Quantity	01																																																																																			
8.	Justification	Major Overhaul has become due on hourly basis																																																																																			
9.	Work Required/ Defect Work Required	<p>Major Overhaul (MoH) of Allison 250-B17C Turboprop Engine as per under mentioned details:</p> <p>a. Major Overhaul (MoH) of Engine and components are to be undertaken by OEM or OEM Authorized Maintenance Centre (AMC):</p> <table><thead><tr><th>Component Description</th><th>S No</th><th>Life consumed (Hrs)</th></tr></thead><tbody><tr><td>Engine</td><td>CAE-880787</td><td>3424:20</td></tr><tr><td>Accessory Gear Box</td><td>CAG-80909</td><td>3424:20</td></tr><tr><td colspan="3">Compressor CAC81493</td></tr><tr><td>1st Stage Wheel</td><td>KRL107756</td><td>3424:20</td></tr><tr><td>2-3 Stage Wheel</td><td>KR109527</td><td>3424:20</td></tr><tr><td>4 Stage Wheel</td><td>E81792</td><td>3424:20</td></tr><tr><td>5 Stage Wheel</td><td>KR108676</td><td>3424:20</td></tr><tr><td>6 Stage Wheel</td><td>KR107431</td><td>3424:20</td></tr><tr><td>Impeller</td><td>KR111467</td><td>3424:20</td></tr><tr><td>Spur Adaptor</td><td>UG21782</td><td>3424:20</td></tr><tr><td>Tie Bolt</td><td>UG20418</td><td>3424:20</td></tr><tr><td colspan="3">Turbine CAT80924</td></tr><tr><td>1st Stage Wheel</td><td>X614353</td><td>1715:20</td></tr><tr><td>2nd Stage Wheel</td><td>X622445</td><td>1715:20</td></tr><tr><td>3rd Stage Wheel</td><td>X547317</td><td>3424:20</td></tr><tr><td>4th Stage Wheel</td><td>X548400</td><td>3424:20</td></tr><tr><td>Tie Bolt</td><td>NM88499</td><td>3424:20</td></tr><tr><td>2nd Stage Nozzle</td><td>MA228687</td><td></td></tr><tr><td>Diaphragm</td><td></td><td></td></tr><tr><td>Over speed Governor</td><td>WF12014761</td><td>733:50</td></tr><tr><td>Prop Gear Box</td><td>Due for Overhaul</td><td></td></tr><tr><td>Combined Governor</td><td>Due for Overhaul</td><td></td></tr><tr><td>Fuel Control Unit</td><td>Due for Overhaul</td><td></td></tr><tr><td>Fuel Pump</td><td>Due for Overhaul</td><td></td></tr><tr><td>Fuel Nozzle</td><td>Due for Overhaul</td><td></td></tr><tr><td>Bleed Valve</td><td>Due for Overhaul</td><td></td></tr></tbody></table> <p>b. General Engine</p> <table><tr><td>(1) Standard Work</td><td>(a) Disassembling of engine modules, cleaning of all parts, NDT, detail inspection of all main build kits/ accessories including PC filter, anti-icing valve, mountings, piping, turbine and brackets for chaffing, cracks or breaking. Inspection of control cables, harness assembly/</td></tr></table>	Component Description	S No	Life consumed (Hrs)	Engine	CAE-880787	3424:20	Accessory Gear Box	CAG-80909	3424:20	Compressor CAC81493			1 st Stage Wheel	KRL107756	3424:20	2-3 Stage Wheel	KR109527	3424:20	4 Stage Wheel	E81792	3424:20	5 Stage Wheel	KR108676	3424:20	6 Stage Wheel	KR107431	3424:20	Impeller	KR111467	3424:20	Spur Adaptor	UG21782	3424:20	Tie Bolt	UG20418	3424:20	Turbine CAT80924			1 st Stage Wheel	X614353	1715:20	2 nd Stage Wheel	X622445	1715:20	3 rd Stage Wheel	X547317	3424:20	4 th Stage Wheel	X548400	3424:20	Tie Bolt	NM88499	3424:20	2 nd Stage Nozzle	MA228687		Diaphragm			Over speed Governor	WF12014761	733:50	Prop Gear Box	Due for Overhaul		Combined Governor	Due for Overhaul		Fuel Control Unit	Due for Overhaul		Fuel Pump	Due for Overhaul		Fuel Nozzle	Due for Overhaul		Bleed Valve	Due for Overhaul		(1) Standard Work	(a) Disassembling of engine modules, cleaning of all parts, NDT, detail inspection of all main build kits/ accessories including PC filter, anti-icing valve, mountings, piping, turbine and brackets for chaffing, cracks or breaking. Inspection of control cables, harness assembly/
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		wirings.
		(b) Reassembling of engine (Include labor only)
		(c) Test Cell Run (Include induction and final test)
(2) New Replacement Material	(a)	Main built kit
	(b)	Final finish kit (include all consumable and 100% replacement parts required to re-assemble engine)
	(c)	Fire Over Detector element Part No 3001-47-450/190C-3M
c. Compressor Module		
(1) Standard Work		Disassembling, cleaning, NDT, detailed inspection and reassembly.
(2) Standard Replacement		Compressor 100% build kit: Impeller, Spur Adaptor Gear Shaft and Coupling Adaptor
(3) Standard Rework		Standard rework of Front Shroud, Rear Support, Diffuser Vane, Diffuser Scroll, Compressor case and Compressor Wheel coating.
d. Accessory Gear Box Module		
(1) Standard Work		Disassembling, cleaning, NDT, detailed inspection and reassembly.
(2) Standard Replacement		Standard 100% Main build kit
(3) Standard Rework		Standard rework of Gear Box Cover and Hosing
e. Turbine Module		
(1) Standard Work		Disassembling, cleaning, NDT, detailed inspection and reassembly.
(2) Standard Replacement	(a)	Turbine 100% build kit
	(b)	Stage 1 turbine wheel
	(c)	Stage 2 turbine wheel
	(d)	Stage 3 turbine wheel
	(e)	Stage 4 turbine wheel
		CEB-1345 to be complied along with replacement of 3 rd and 4 th Stage Nozzles along with modification kit for defender BN-2T to be offered
	(f)	Tie bolt (TP CEB 1319A R2)
	(g)	Stage 1 Nozzle Shield (TP CEB A 1318)
	(h)	Stage 1 and 2 Nozzle (TP CEB A 1212)
	(i)	Energy observing ring (TP CEB A 1214)
(3) Standard Rework	(a)	PT inner and outer shaft
	(b)	GP support
	(c)	PT support
	(d)	Sump cover (TP CEB 1342)
	(e)	Exhaust collector
	(f)	Stage 2 Nozzle
f. All applicable mandatory inspections/ CEBs/ CSLs/ ADs and modifications regarding engine modules are to be accomplished.		

10.	Technical specs (if any)	-
11.	Eligibilities	<p>a. All requisite, Documents i.e. Airworthiness Certificate, Certificate of Conformity along with detail of work accomplished on Engine duly signed and stamped would be required</p> <p>b. FAA/ EASA certification of the firm is to be provided</p> <p>c. Itemized cost of MoH and overhauling of components (item wise) are to be quoted separately</p> <p>d. Firms have to provide authorization letter of their principal firms and bank statement of last 01 year of their firm</p> <p>e. Firms must have at least 02 years' experience of procurement/repair/overhaul of Aviation components/ spare parts. Experience certificate of Aviation related contracts by contracting agency in Pakistan is mandatory</p> <p>f. Firms need to include freight charges/ insurance for transportation of the engine</p> <p>g. Firms need to get import/ export licenses from respective abroad firms/ agencies</p> <p>h. Engine must be cleared for service till its HMI/ MoH becomes due</p> <p>j. Firms need to provide assurance that the item shall be received from 93 PMSA SQN and will be transported to MRO for overhaul at their own responsibility. Same will also be delivered back at 93 PMSA SQN after requisite rectification at their responsibility</p> <p>k. In case of failure to meet acceptance criteria or defect during physical/ operational inspection of items, firm is liable to get the items replaced/ repaired on FoC basis in shortest possible time</p> <p>l. During initial disassembling/ stripping phase and final test cell running phase, 03 x PMSA reps are to be invited on-site for evaluation/ monitoring work extent/ material review and to monitor satisfactory performance (Final test run), respectively. During stay of PMSA reps, complete boarding/ lodging will be responsibility of firm (both visits)</p> <p>m. Offered quotes are to be firm and final. No adjustments against Foreign Exchange rate variations will be accommodated</p> <p>n. Firm may quote Custom duties/ taxes (as applicable) for transportation of the engine. However, final decision for responsibility of customs (PMSA or supplier) will be finalized prior contract</p> <p>p. Any additional work required due to findings of Induction test cell run, inventory check, stripping of Engine or Inspection may not be undertaken until approved by HQ PMSA</p> <p>q. In case, cost of MOH increases beyond 60% of the total cost of overhauled engine, firm is bound to provide core exchange offer in lieu and offer suitable offer for Engine S No 880582-787</p> <p>r. Firm is bound to provide Inspection report after 12 weeks of receipt of engine and accordingly, ensure conduct of MRB</p> <p>s. The firm is to provide detailed MRB report covering details of Labor/ Man Hours along with itemized rework detail. This should be supported by financial estimation</p>
12.	EDC	24 weeks after award of contract
13.	Warranty	At least 01 year or 500 Hrs (whichever is earlier)
14.	Acceptance Criteria	As per eligibilities mentioned at Para 9 and 11 above
15.	Growth Work	Growth work after Engine Tear Down and Inspection should be limited to 15% of the contracted value
16.	Any Other Relevant Information	<p>a. Firms are requested to provide original quote of AMC (without price) along with their respective technical quote. Technical quote of firm will not be accepted without provisioning of AMC original quote</p> <p>b. Quotation from Rolls Royce MRO's (M250 Engines) namely M/s H & S, UK and M/s Standard Aero, Singapore will not be entertained</p>

IT SEPCIFICATION DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NET METERING BASED SOLAR PV SYSTEM FOR HQ PMSA BUILDING

S No	Description	
1.	Parent Equipment	Power generation and distribution
2.	Sub Equipment	Power Supply
3.	Assembly Component	Solar PV System Complete
4.	Make	Pakistan/ China
5.	Model	Solar PV System with branded equipment
6.	Quantity	01 x Solar PV System with branded equipment
7.	Justification i.e PMS/ Failure/ FWT etc	New solar PV System to be installed at Headquarter PMSA
8.	Work Required	Solar PV System to be installed by AEDB approved firms in accordance with AEDB approved bidding documents (Design, Supply, Installation, Testing, Commissioning, Operation and Maintenance of net metering based Solar PV System).
9.	Technical Specification	Net Metering based Solar PV System as per following load capacity: i. 300 KW ii. 350 KW
10.	Scope of Work (Salient)	<p>Following work is required to be undertaken for Design, Supply, Installation, Testing and Commissioning, of net metering based Solar PV System for HQ PMSA i.a.w T&C of contract agreement:</p> <ul style="list-style-type: none">i. Design, Supply, Installation, Testing and Commissioning on Net Metering Based PV System for HQ PMSA according to load.ii. Bidders shall bear all cost associated with preparation and submission of their respective bids/ proposals without any liability for PMSA.iii. Bidders to visit and examine the site of the project and obtain all information for preparing the bid and design/ installation without any liability to procuring agency.iv. Bidders to evaluate requirement of any modification/ replacement in exiting power generation and distribution system to meet solar system requirement.v. Procuring agency will permit to enter its premises and lands for the purpose of inspection and feasibility.vi. Bidders to provide proposed construction schedule, method of performing the project, list of sub-contractors and copy of PPIB certificate.vii. The pre bid meeting if convened will be held at HQ PMSA.

- viii. Solar PV module shall be of Tier-1 manufacturer as per latest Bloomberg New Energy France (BNEF).
- ix. The PV technology shall be half cut mono-PERC.
- x. Each module shall have IP 65 rated junction box which shall be dust and vermin proof having copper bus bar terminals.
- xi. EPDM rubber gasket, reverse blocking diodes and IEC standards 62790 to be complied.
- xii. The power rating for each PV module shall be more than 540 W/P under STC condition.
- xiii. The PV module must be tight tested based on IEC standards 61215.
- xiv. The PV module shall be SRO 604 issued by Govt of Pakistan.
- xv. Each PV module shall have a unique barcode identification tag issued by the manufacturer.
- xvi. Inverter shall be 3 phase grid tied with minimum IP 65 protection having CEC efficiency not less than 98.5% and output frequency of 50 HZ.
- xvii. Under all conditions DC to AC ratio of the inverter shall not be more than 1.1 percent.
- xviii. The Operating temperature range of inverter shall be between -25 C to 60 C.
- xix. Inverter must have diesel generator synchronization module for seamless integration with generators and shore base supply.
- xx. Inverter shall have AC over current protection, residual current monitoring, DC reverse polarity protection, DC insulation resistance detection.
- xxi. Inverter shall have a built-in data logger, communication, interface protection and remote monitoring capabilities.
- xxii. Mounting structure shall be UV resistant lightweight aluminum/ fiber structure.
- xxiii. Spacing from parapet wall must be 3 feet.
- xxiv. The structure shall withstand wind speed of 150 KM/H.

- xxv. Complete civil work for mounting structure installation be carried out as per requirement.
- xxvi. For roof top areas with additional slabs, rawal bolts base anchoring shall be followed in combination with water proofing treatment.
- xxvii. Copper cables with purity of 99.9% or more with XLPO insulation and rated for 1500 V shall be used.
- xxviii. The minimum size for DC cables shall be 4mm².
- xxix. Under all conditions for DC cables, voltage drop shall be less than 0.5% at STC and for AC Cables voltage drop shall be less than 1% at STC.
- xxx. Separate DC and AC earthing with 3 Ohm shall be achieved.
- xxxi. Perforated cable trays of 16 gauge or thicker and UPVC pipes shall be installed.
- xxxii. Circuit, breakers, protection devices and non-isolated lighting arrestors shall be installed as required.
- xxxiii. MCB/MCCB circuit breaker shall be rated for more than 1.5 times than STC current rating.
- xxxiv. Energy generation, power production and level monitoring of voltage and current for monitoring and control system to be ensured.
- xxxv. Net Metering application and installation of bidirectional meter as per regulation by NEPRA to be ensured.
- xxxvi. Civil Work w.r.t installation/ Framing of solar PV plates/ Batteries stowage and rigging of wiring/ cable to be carried out.
- xxxvii. Location for installation of solar plates and battery rooms will be identified by the HQ PMSA.
- xxxviii. All accessories/ equipment i.e DC beaker, charge controller, AC breaker, inverters, bus bars and change over switches are to be installed i.a.w load.
- xxxix. All electric wires/ cables to be concealed to avoid from any damages/ deterioration.
- xl. Solar PV system is to be installed as net metering based system.

		<ul style="list-style-type: none"> xli. All parameters for monitoring of load and systems to be installed. xlii. All spares, tools, special equipment/ accessories etc required for installation for said work to be arranged by the firm. xliii. Any damage/ defect/ wear tear occur during the course of installation will be repaired/ met by the firm.
11.	Eligibility Criteria	<ul style="list-style-type: none"> i. Approved firms by AEDB. ii. The firm must visit on site for feasibilities/ inspection to establish the extent of required work. iii. The firm not undertaking the visit on site to see extent of work will not technically qualify. iv. The firm must have sufficient experience of same kind of work with net metering based PV System. v. Firm must fulfill all requirements/ conditions mentioned in AEDB approved Bidding Document (Design, Supply, Installation, Testing and Commissioning of net metering based Solar PV System).
12.	EDC	45 x Days after awarding agreement/ contract.
13.	Warranty	<ul style="list-style-type: none"> i. Each module shall have 12 years material and workman ship warranty and 25 years performance warranty. ii. Warranty shall be issued by the third party. iii. Inverter shall have minimum 10 Years of replacement warranty.
14.	Acceptance Criteria	<ul style="list-style-type: none"> i. Power Output of Solar as per design. ii. Satisfactory performance a per end user.
15.	Maintenance	12 x Months Maintenance Period from commissioning.
16.	Performance Guarantee	Solar System shall have performance guarantee of 12 x Months from date of commissioning.
17.	Any other relevant information	For any information w.r.t Solar System installation. Lt Cdr Fahad Tahir PN (Cell No. 0319-2901565) will be POC.

IT SPECIFICATION FOR REPLACEMENT OF SMD

S.No	Description	Remarks
1.	System	SMD
2.	Make	As per acceptance criteria
3.	Model	SMD (Latest)
4.	Dimensions	1x wall of 10.6ft (Width) x 6.5ft (Height)
5.	Technical specification	Pixel Pitch: 1.86mm GOB (Glue on Board)
		Module Resolution: W: 172*H : 86dots
		Module Size: W320*H160mm
		Pixel Density: 266.256 dots/m ²
		Pixel configuration: 1R1G1B
		Min. Viewing Distance: ≥1.8m
		Brightness ≥ 500 cd/m ²
		Viewing angle Hz: 160° V≥140°
		Driving Mode: 1/16 scan
		Lifespan ≥100,000 hours or 10 years (whichever comes later)
		Video frame rate: 60 frames/s
		Operating Temperature: -20°C~+60°C
		Operating Humidity: 10-80% no condensation
		Prior to acceptance a functional demonstration of the propose SMD will be provided to PMSA for evaluation and satisfaction
6.	Eligibilities	Have relevant experience on SMDs.
7.	Warranty	10 year replacement warranty.
8.	Acceptance Criteria (if any)	a. Satisfactory test/ trials after installation onboard b. Relevant diagrams/ documents to be provided c. Relevant specifications as'per IT d. Proposal for 3x variants (latest)
9.	EDC	(Immediate) 02 weeks after award of contract
10.	Any other relevant information	SS may be contacted for any further query/ requirement.

IT SPECIFICATION FOR REPLACEMENT OF SMD

IT SPECIFICATION FOR REPLACEMENT OF SMD			
S.No	Description	Remarks	
11	System	SMD	
12	Make	As per acceptance criteria	
13	Model	SMD (Latest)	
14	Dimensions	1x wall of 16ft (Width) x 07ft (Height)	
15	Technical specification	Pixel Pitch:	1.86mm GOB (Glue on Board)
		Module Resolution:	W: 172"H : 86dots
		Module Size:	W320"H160mm
		Pixel Density:	266.256 dots/m²
		Pixel configuration:	1R1G1B
		Min. Viewing Distance:	≥1.8m
		Brightness	≥ 500 cd/m²
		Viewing angle Hz:	160° V≥140°
		Driving Mode:	1/16 scan
		Lifespan	≥100,000 hours or 10 years (whichever comes later)
		Video frame rate:	60 frames/s
		Operating Temperature:	-20°C ~ +60°C
		Operating Humidity:	10-80% no condensation
		Prior to acceptance a functional demonstration of the propose SMD will be provided to PMSA for evaluation and satisfaction	
16	Eligibilities	Have relevant experience on SMDs.	
17	Warranty	10 year replacement warranty.	

18.	Acceptance Criteria (if any)	a. Satisfactory test/ trials after installation onboard b. Relevant diagrams/ documents to be provided c. Relevant specifications as per IT d. Proposal for 3x variants (latest)
19.	EDC	(Immediate) 02 weeks after award of contract
20.	Any other relevant information	SS may be contacted for any further query/ requirement.

Note: 100% Payment after completion by CNA

Director General

Pakistan Maritime Security Agency

Plot No 34-A, Dockyard Road

KARACHI

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

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

PREPARATION OF QUOTATION

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

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

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

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

Without this format quotation will not be accepted.

3. DATE AND TIME FOR RECEIPT OF TENDER:

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

attend tender opening. **The tender received through Fax, E-Mail will not be acceptable.**

4. TENDER OPENING:

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

5. VALIDITY OFFER:

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

6. QUOTING OF RATES:

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

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

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

8. RETURN OF EARNEST MONEY:

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

9. TENDER FEE:

Each technical offer must be accompanied with Cash of **Rs.5,000/-** nonrefundable as tender fee (In favour of IT Sale Account DG PMSA).

10. INSPECTION AUTHORITY:

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

11. CONDITION OF STORES:

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

12. DOCUMENTS REQUIRED:

Following documents are required to be submitted 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 vogue.

13. SECURITY DEPOSIT / BANK GUARANTEE:

To ensure timely and correct supply of stores the firm will furnish an unconditional Bank Guarantee (BG) from a schedule bank for an amount of **10%** of the contract value (excluding taxes, duties / freight handling charges on a stamp paper of the value of (Rs.100/00) as per prescribed format in the shape of Bank Guarantee. Format of Bank Guarantee is at Annex „B“.

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.

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 / Transpiration and Insurance charges not indicated separately asper 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 arenot 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.