TENDER SPECIFICATION OF MARINE AC DIESEL GENERATOR SET WITH ACCESSORIES (440V, 3PHASE, 60HZ, 90-100KW)- BNS JAMUNA

INTRODUCTION

- 1. For better understanding and to evaluate all the prospective BIDDERS on same platform, the tender specification has been divided into three parts:
 - a. Part-1: General Information and BIDDER'S Responsibility.
 - Part-2: Operational and Technical Specification.
 - c. Part-3: General Terms and Conditions.
- 2. Prospective BIDDERS are to comply with the requirements and terms & conditions mentioned in Part-1, Part-2, and Part-3 of the tender specification. BIDDERS are also to provide performance/ technical data, brochure, specific figures, and information as asked against each condition.
- 3. Prospective BIDDERs are to submit their offer in single envelopes (Technical and Financial Offer).
- 4. BIDDER shall comply all the terms and conditions of the tender documents as compliance statement by the Bidder under the following tabular format:

Tender Article No	Description of Terms and Conditions (as mentioned inPart-1, Part-2 and Part-3 of the Tender)	Compliance/ Remarks by Principal/ manufacturer (To be agreed/To be mentioned with detail explanations)
-------------------------	--	--

The financial quote is to be submitted separately in foreign currency on FOB basis, but compliance/remarks are to be indicated in the technical offer.

PART I: GENERAL INFORMATION AND BIDDER'S RESPONSIBILITY

- 5. Bangladesh Navy (BN) plans to procure one complete set of Marine AC Diesel Generator set with accessories (90-100 KW) cables and necessary accessories.
- 6. Qualification of Bidder. Manufacturers of Marine AC Diesel Generator set or their authorized distributor/ agent can submit quotations through their authorized local agent enlisted in NSSD Dhaka. In case of offer from authorized distributor/ agent, one additional certificate is to be submitted with the offer stating that the warranty and after sales support will be provided under the full responsibility of OEM. Authorization certificates and all relevant certificates from OEM are to be submitted with the offer.
- 7. <u>Standard</u>. The Marine AC Diesel Generator set (Prime Mover and Alternator) and associated accessories and items supplied under the scope of the supply are to be designed, constructed/ manufactured and tested up to the requirement of IEEE/ IEC/ ISO/ IMO/ marine internationally recognized classification society. The applicable classification standard(s) of offered items are to be mentioned and all the relevant certificates are to be submitted with the offer in English.
- 8. <u>Condition for Acceptance of Quotation</u>. 01 (One) set of brochure/ booklet, containing technical information of the offered Generator set (Prime Mover, Alternator, AVR, Governor etc.) is to be provided with the offer for evaluation and assessment. The brochure should contain in addition to other behaviors of the Generator set including characteristics/ performance curves, behavior when various loads are added or taken-off. Non-submission of said documents is to be treated as non-compliance or disqualification of the offer.
- 9. Scope of Supply. The Marine AC Diesel Generator set shall be supplied as per the specifications enumerated in the subsequent paragraphs. The Generator set with accessories shall be complete with all standard accessories, ready in all respect for operation after installation onboard. The scope of supply shall include:
 - 01 X Complete Marine AC Diesel Generator set with accessories.

Necessary Cables (Power cable and Control cable) between MCR, Local Control unit and Engine room.

Mandatory and Optional Spare.

- Installation, supervision & STW (Setting to Work).
- e. Test, trial and acceptance.
- f. Local Training.
- g. Documentation and Certification.
- 10. <u>Documentation</u>. Following documents and manuals in English shall be provided with the system free of cost at the time of item delivery:
 - a. 1 (one) set of drawings and instructions manual necessary for installation of the Generator set with all equipment are to be supplied within eight weeks of signing the contract.
 - Instruction and operation manual of the Prime Mover.
 - c. Maintenance manual and workshop level repair manual of the Prime Mover.
 - Parts catalogue of the Prime Mover.
 - e. Instruction and operation manual of the Alternator.
 - f. Maintenance manual and workshop level repair manual of the alternator.
 - g. Parts catalogue of the Alternator.
 - h. Instruction and maintenance manual and circuit diagram of the AVR.
 - Electrical wiring diagrams and faultfinding flow charts of the alternator.
- 11. <u>Certification</u>. Following certificates are to be provided by the supplier of the Generator set and associated equipment/ accessories:
 - a. Manufacturer's Authorization Certificate with the offer.
 - b. Inspection Certificate (in English) are to be provided at the time of item delivery.
 - c. Necessary marine class certification as per para 2.
 - d. Supply Assurance Certificate with the offer and at the time of item delivery.
 - e. <u>Quality Assurance Certificate</u>. The Quality Assurance Certificate (QAC) in respect of manufacturing and performance of the offered Genset with associated accessories is to be provided by the manufacturer at the time of delivery.
- 12. After Sales Service Support. The supplier is to give After Sales Service Support for at least 10 (Ten) years at a reasonable price. The bidder has to submit after sales service support certificate from OEM with the offer.
- 13. <u>Site Visit</u>. The bidder may visit the installation site (BNS Jamuna at Mongla Naval Area) of Generator set before submission of tender to avoid any difficulties/ confusion after placing order. In this regard, bidder shall have to submit the relevant personnel information and application to NSSD Dhaka for site visit 10 days prior to the said site visit.
- 14. Validity. The offer should remain valid up to 30 June 2025.
- 15. <u>Project Timeline</u>. The project timeline indication month-wise event is to be provided with the offer.
- 16. <u>User List</u>. List of users of the offered Generator set is to be mentioned with full address. The list shall provide the name of various users with respective model and brand of the system. The offered system should be widely used by various users. The user list will be used for the assessment of the offer.
- 17. <u>Compliance Statement</u>. A compliance statement fulfilling all the requirement of the tender is to be submitted for evaluation of the quotations. Stating mere 'Yes or No' will not suffice and detailed evidences with description/ information, brochures/ booklet, drawing and diagram as required is to be given. An incomplete compliance statement may attribute to cancellation of the offer. If any clause of this specification does not commensurate with offered Generator set, the deviation has to be spelt out clearly.

PART- II: OPERATIONAL AND TECHNICAL SPECIFICATION

- 18. Name of the Equipment. Marine AC Diesel Generator set with accessories (440V, 3Phase, 60Hz, 90-100KW).
- 19. Purpose. The Generator set will be used to generate electric power for the ship. The offered Generator set will replace the existing old Generator set fitted onboard naval ship. The Generator set shall be operated as per following:
 - Independently in prescribed loading condition.
 - Parallel load sharing with existing generator set (Existing Generator Brand: Moteurs Baudouin, Model 6W105S) during load transfer to ensure uninterrupted load shifting.
 - Parallel Continuous Load sharing option shall be mentioned as optional.

20. Quantity

01 (one) complete set.

21. **Type**

Marine AC Diesel Generator.

22. Brand

To be mentioned.

23. Model

To be mentioned.

24. Year of Manufacturing

2024 or later.

- 25. Name and Address Name and full address (including mobile number and email address) are to be provided for the following:
 - Manufacturer.
 - b. Genset Assembler.
 - c. Local Agent/ Supplier.
- 26. Technical Specifications.
 - a. Complete Generator set:

(1) Complete Assembly Genset:

Ser	Description	Remarks		
(a) Country of Origin and Manufacturer (Assembler)		Genset & Control/ Monitoring and Other parts/ accessories. Canada/ EU country/ Japan/ Turkey/ USA/ UK (Country to be mentioned).		
(b)	Brand	To be mentioned.		
(c)	Model	To be mentioned.		
(d)	Operating Environment:			
	and items are to be designed to operate in the following condition: i. Ambiant air +5°C + 50°C			
	température ii. Sea Water (SW) temperature	+5°C to +32° C.		
	iii. Relative humidity	Up to 95% (non-condensing)		
	iv. Salinity	Up to 34 gm/ltr		
	v. Quality of Sea Water (SW)			
	Maximum Allowable Inclinations. The Generator set and associated			
	accessories & items should be able to run when the ship (on which they will be installed) is subjected to following rolling/ pitching:			
	i. Roll	±30°.		
	ii. Pitch	±10°.		

0.8 Lagging.



Power factor

(f)	Output	440V, 60Hz, 3 Phase, 90 - 100 KW, 180 RPM.
(g)	Dimension	Dimension of the offered Genset (Prime Mover and Alternator combined) not more than 2300mm x 920mm x 1600mm (LxBxH) (Dimension is to be mentioned).
		Note: Overall dimension of the existing Generator set of the ship (Prime Mover and Alternator combined) are as follows:
		i. Length: 2187mm. ii. Breadth: 800mm. iii. Height: 1216 mm.
(h)	Type of Coupling (Prime Mover and Alternator)	The Alternator shall be flanged to the Prime Mover (Engine) through SAE standard, bell housing via flexible coupling. The flexible
		coupling will be according to the final Torsional Vibration Calculation (TVC). The details is to be mentioned in offer.
(j)	Combined Base Frame	The Prime Mover and the Alternator are to be elastically mounted on a combined base frame to be rigidly fixed to the Generator seating. Lifting eyes are to be provided for
		lifting the complete Generator set as a whole, and also the Prime Mover and the Alternator separately. The supplier is to supply standard shock and anti vibration mountings along with holding-down bolts.
(k)	General Features	i. Generator shall be suitable to operate at low load condition (25% loads) without hampering itself.
		ii. Maintenance/ Overhauling Schedule:
		(a) Time between top overhauls: To be mentioned.
		(b) Time between major overhauls: To be mentioned.
		iii. Loading Condition:
		1. The Generator and AVR system must be highly responsive. However the generator should meet the following transient condition as per ISO 8528-5 (Class G2) (Certificate is to be provided with the offer in this regards):
	a say the said of the said	a. <u>Voltage</u> .
		(1) Voltage transient tolerance: +25% to -20% or better (To be mentioned).
		(2) Voltage transient recovery time: Max 6 sec or better (To be mentioned).
		(3) Voltage Regulation: Within ±5% or better (To be mentioned).
		b. <u>Frequency</u> .
		(1) Frequency transient tolerance: +12% to -10% or better (To be mentioned).
	to the second se	



STATES OF THE ST	(2) Frequency transient recovery time: Max 5 sec or better (To be mentioned).
	The above transient Conditions must be maintained under following load change:
905 310 mm 377	a. Load Changes from 0 to 50%.
200.90 341 341 920513 . 100× 1.	b. Load Changes from 50% to 100%.
1844 TO 1844 T	c. Load Changes from 100 to 0%.
	d. Sudden addition of largest 3 phase induction motor available onboard ship while generator running at 50% load. The Ship largest motor is of 14 KW (AC compressor motor).
ing one results	Note: Graphs showing various characteristics and response of transient voltage and frequency variation are to be submitted with the FAT Report.

(2) Specification of Prime Mover (Engine):

Ser	Description	Remarks		
(a)	Manufacturer (OEM)	To be mentioned.		
(b)	Туре	To be mentioned.		
(c)	Brand	To be mentioned.		
(d)	Model	To be mentioned.		
(e)	Country of Origin and Manufacturer	USA and EU Countries (To be mentioned).		
(f)	Year of Manufacture	2024 or later.		
(g)	Overload Rating	110% of max continuous rating (1 hour within 12 hours).		
(h)	Number of Cylinders and arrangement	To be mentioned.		
(j)	Specific Fuel and Lube oil Consumption	To be mentioned.		
(k)	Fuel and Lub Oil to be used	To be mentioned.		
(1)	Governor	Electronic.		
(m)	Turbo Charger	Make and Model are to be specified.		
(n)	Shut down system	Details to be mentioned (Including emergency shutdown).		
(p)	Starting System.	The prime movers shall be started by battery. The engines will be fitted with self-starter and dynamo for charging the batteries (To be mentioned). Necessary batteries are to be provided (Battery Brand, Ratings and capacity are to be mentioned).		
(q)	Safety Devices	Following safety protections are to be incorporated: i. Engine over speed. ii. High Engine temperature. iii. Low Engine oil pressure. iv. Others to be mentioned (if any).		



(3) Specification of Alternator:

Ser	Description	Remarks		
(a)	Manufacturer (OEM)	To be mentioned.		
(b)	Туре	Self excited (To be mentioned).		
(c)	Brand	To be mentioned.		
(d)	Model	To be mentioned.		
(e)	Country of Origin and Manufacturer	France/ UK (To be mentioned).		
(f)	Year of Manufacturer	2024 or later.		
(g)	AVR	Electronic Type.		
(h)	Insulation Class	F or Better.		
(q)	Rotor	Dynamically balanced.		
(r)	Stator	Durable winding in star configuration.		
(s)	Connection	3 wire, star connection, neutral ungrounded.		
(j)	Safety Devices	Following safety protections are to be incorporated: i. Over load protection. ii. Short circuit protection.		
		iii. Under frequency indicator.		
	Orași,	iv. Excitation loss indicator.		
		v. Reverse power protection.		
		vi. Any others to be mentioned.		

(4) Engine Local Control and Monitoring Panel.

(a) The engine local control and monitoring panel will be marine standard and flexibly mounted on the generator set to match inclination requirement. Necessary arrangement should be arranged so that the generator will be started from this panel. The panel will also be equipped with following digital/ analog meters and gauges:

i. Meters:

- RPM tachometer.
- Hour counter.

ii. Gauges:

- a. Lube oil pressure gauge (in & out).
- Seawater pressure gauge.
- c. Lube oil temperature gauge.
- Fresh water temperature gauge.
- e. Exhaust temperature gauges (Combined).
- Lube oil filter differential pressure gauge.
- Fuel filter differential pressure gauge.
- 8. Additional analogue duel scale Lube oil pressure & temperature and seawater pressure gauge will be fitted with prime mover.
- (b) <u>Safety Devices</u>. Following safety devices are to be provided for each Generator:
 - i. Low lube oil pressure alarm- audio and visual.
 - ii. High cooling water temperature alarm- audio and visual.



- iii. High lube oil temperature alarm- audio and visual.
- iv Low lube oil pressure shutdown device with audio and visual alarm.
- v. Prime Mover over speed alarm and auto shut down device/ over speed trip gear (with manual resets).
- vi. Reverse power protection system.
- vii. Over current protection system.
- viii. Over voltage/ under voltage protection system.
- ix. Over speed protection system.
- x. All safety warning and fault warning are to be shown in the Generator control panel.
- (5) <u>Switchboard monitoring panel</u>. Switchboard Monitoring Panel of the Generator set will be of marine standard and is to be fitted in the existing switchboard. Necessary modification in this regard is to be done by the bidder. The following components with Digital/ Analog meters to be included in the panel with **each genset**:
 - (a) 01 x Kilowatt meter.
 - (b) 01 x Voltmeter with phase selector switch.
 - (c) 01 x Frequency Meter.
 - (d) 01 x Amps meter with phase selector switch.
 - (e) 01 x Ohm/ insulator meter.
 - (f) Alternator droop kit.
 - (g) 01 x RPM decrease/ increase button.
 - (h) 01 x Air Circuit Breaker. Air Circuit Breaker is to be provided by bidder mentioning appropriate ratings on completion of site visit.
 - (j) Lamp for bus-bar alive indication, Generator circuit breaker non-close, Generator air circuit breaker abnormal trip, Generator running indication green lamp.
 - (k) Earth Testing Facility is to be incorporated.
 - (I) Any other device/ meter necessary for control/ monitor the generator.

27. Optional Requirement for Parallel Operation.

a. The offered generator shall have the arrangement to run in parallel condition with existing generator using existing arrangement and synchronizing panel or additional arrangement. Additional components/ arrangement like AVR, Governor Control PCB, Synchronizing panel, etc where necessary is to be provided and quoted separately. The buyer may select this optional facilities (if deemed suitable). Existing Generator set Brand and Model are as follows:



Ser	Description	Remarks
1.	Complete Genset and Prime Mover	Model: 6W105S
2.	Alternators	Brand: Leroy Somer, France Model: LSAM44.2 L12
3.	No of poles	4 (four)
4.	No of stroke	4 (four)
5.	No of cylinder	6 (six)

b. Generator shall be suitable to operate at low load condition (25% loads) without hampering itself.

- 28. Paralleling Requirement for only Load Shifting. The existing synchronizing par (size: 560 mm X 560 mm) (L X H) has facilities to parallel the existing genset. The offered generator shall run parallel with existing generator for auto load sharing/ load transfer. The existing synchropanel shall be modified or new panel shall be offered (If deemed necessary) or necessary arrangement shall be done for such parallel operation during only load transfer condition of new genset with existing one. Besides for smooth parallel operation, other necessary components like AVR, governor control PCB, accessories, etc (if needed) shall be offered.
- 29. Fuel Oil System. Fuel oil system should consist of the followings but not limited to:
 - a. Prime Mover driven fuel oil feed pump including a ready use tank mounted on or beside the prime mover (if required).
 - b. Duplex type fuel filter with changeover valve. Filter elements are to be replaceable during operation Duplex type fuel filter with changeover valve. Filter elements are to be replaceable during operation.
 - c. Pressure regulating valve.
 - d. Leak oil fuel system.
 - e. Flame proof hose lines for fuel pipe work to and from Prime Mover.
 - f. Details of arrangement including those for pumps and fittings to be specified.
- 30. <u>Lubricating Oil System.</u> The Prime Mover is to be of wet sump type. The lub oil system should consist of the followings:
 - a. Prime Mover driven lub oil pump (gear type) with relief valve on pump discharge.
 - b. Lub oil pump for extracting oil from wet sump.
 - c. Duplex type lub oil filter with cartridges. Filter cartridges are to be changeable during running.
 - d. Pressure gauges.
 - e. Flexible connections/ hoses.
 - f. Details arrangement including pumps and fittings are to be specified.
- 31. <u>Cooling Water System</u>. Prime Mover internal cooling shall be done by fresh water. Fresh water-cooling shall be done by seawater. Seawater is muddy in the harbor, where the ships will usually be berthed and operated. The Prime Mover cooling water system should include the following:
 - a. Engine driven self priming seawater and fresh water circulating pumps with discharge pressure gauges. Water pumps with rubber impellers will not be acceptable. Impeller material is to be mentioned.
 - Any type of fresh water cooler, external to the Prime Mover.
 - c. Fresh water and seawater pressure gauges.
 - d. Galvanized steel fresh water pipe external to the Prime Mover with flexible pipe connection.
- 32. Exhaust System. The existing exhaust system (length:3720 mm, Inner Diameter:82.50 mm, Outer Diameter: 420mm) will be used for the new Generator set. The exhaust system of the offered Generator set should match with the existing exhaust system of the ship from Generator outlet to ships outlet through funnel. If cannot be matched, exhaust pipes from Generator outlet to ship's outlet will have to be supplied and installed by the supplier. However, following may be included in the exhaust system:
 - a. Combined exhaust temperature gauge for both bank.
 - b. Stainless steel expansion bellows with flange between the Turbo charger/Engine exhaust manifold outlet and the main exhaust pipe.
 - Exhaust silencers.

- 33. Shutdown System. Genset shutdown system should include the following:
 - a. Normal shutdown is to be provided from Local control panel and Switch board.
 - b. Emergency shutdown (push button to be protected with open able cover).
- 34. Standard Accessories. Standard accessories must include every item and accessories, which are essential to make the offered system operational with full functionality, whether those are mentioned in the specification or not are to be supplied by the bidder within the scope of the supply. Any such accessories, kit and items associated to operate the said equipment in full functionality are to be mentioned clearly with purpose and submit with offer mentioning item wise price.
- 35. <u>Power Supply for Control System.</u> The required power supply for control system is to be mentioned. The existing control system power supply of ship is 24V DC.
- 36. <u>Cables</u>. The supplier is to provide necessary high quality Power and Control cables for Generator set (as per IEC 60092-353 and IEC 60092-350 standard) for all power & control/ monitoring connections. Actual requirement of cable are to be assessed by the supplier on site visit and to be submitted with the offer (if existing power supply cable from generator to switchboard are useable then separate power supply cable not be quoted). Details of various cable specification and unit price (per meter) is to be quoted separately.
- 37. Software and Firmware. All necessary software and firmware of Generator set controller, Engine speed controller, AVR and other control circuit are to be provided. Method and items required for loading the software and firmware are also to be provided.
- 38. <u>Mandatory Spare</u>. The following mandatory spares are to be provided at the time of delivery and unit price is to be quoted separately with the offer:

Ser	Name of Item	Qty	Unit Price	Remarks
1	Oil Filter	02	To be mentioned	
2	Fuel Filter	02	To be mentioned	doin isnuari
3	Air Filter	01	To be mentioned	Carlot (in the

39. Optional Spare. A list of the following optional spares is to be quoted separately with item wise unit price. The buyer may select the any of the spares as required from the list:

Ser	Name of Item	Unit Price	Remarks
1.	AVR	To be mentioned	Nitras Told
2.	Oil Filter	To be mentioned	N 1012 20110
3.	Fuel Filter	To be mentioned	is one titled
4.	Air Filter	To be mentioned	the soulf ending
5.	Belt (As applicable)	To be mentioned	Total Care
6.	ACB (200Amps)	To be mentioned	

40. Installation, Supervision & STW (Setting to Work).

- a. Technical documents (Installation drawings, Installation instruction, specifications etc) required for installation of the generator set with existing switchboard fitted on board different ship are to be supplied by the manufacturer well in advance.
- b. Installation of the item will be done by the supplier following standard practice. BN will provide welding-cutting, drilling and lifting assistance (if necessary).
- c. A qualified manufacturer's/ supplier engineer is to supervise the installation works and setting to work.
- Cost of installation works, setting to work and test trial are to be quoted separately.
- e. Any damage to onboard existing systems, items, equipment and machineries due to cable laying shall be compensated by bidder to make damage items operational.
- f. Installation Materials. All Installation materials, like junction's boxes, brackets, nuts, bolts, securing tie clips, slips, channels etc are to be provided by the supplier. Bidder may visit the installation site prior submitting the offer.

41. Test, Trial & Acceptance.

- a. Test, trials and commissioning of generator set in accordance with the instructions provided by the supplier. The supplier is to provide items required for conducting test, trial commissioning.
- b. After satisfactory test trials (HAT and SAT) an acceptance certificate will be provided by the purchaser.
- c. HAT & SAT procedure shall be forwarded to the buyer 04 (Four) weeks prior to the date of commencement of the HAT & SAT for BN approval.
- 42. Local Training. The supplier is to send one qualified representative who will provide onboard operation and maintenance training in Bangladesh to BN personnel for duration of 03 (Three) working days after test, trial and commissioning of each Generator set. During training, emphasis is to be given on operation, maintenance and faultfinding of Prime Mover, Governor, Alternator, AVR, Engine and Generator set Controller including software/ firmware installation procedure and Control Circuit etc. Cost of transportation, accommodation and food of the supplier representative is to be borne by the supplier. Cost of onboard training is to be quoted separately. A set of detail training content is to be provided by bidder to BN 02 (Two) weeks prior to the said training. The training should include (but not limited to) the following:
 - a. System composition, configuration, principle of operation and troubleshooting.
 - b. Software installation, operation and configuration for smooth conducting of all the tests.
 - c. Theoretical concept and procedure of tests (practical).
 - d. Repair and maintenance.
- 43. <u>Labeling</u>. Circuit breakers, control switches, instruments, indicating light and terminal blocks, etc are to be clearly labeled to identity their purpose and function.
- 44. <u>Technical Support.</u> Technical support is to be provided to solve any maintenance and operational problem arising with the item within the warranty period. An assurance agreement in this respect is to be submitted with the offer.

PART III: TERMS AND CONDITIONS

45. Warranty.

- a. Manufacturer's warranty for repair/ replacement at supplier's cost for the supplied Generator set (Prime Movers, Alternators and other accessories) for a period of minimum 12 months after final acceptance by BN on completion of installation and necessary test/ trial onboard the ship is to be provided. The warranty shall cover all parts and service costs/ charges throughout the warranty period. Certificate from OEM regarding warranty is to provided with the offer.
- b. If for defect of any unit or sub unit of the supplied items, the Generator set or any supplied items remain non-operational for a certain period within warranty, the warranty will be extended by the same period.
- c. For warranty repair/ replacement, the supplier will collect the defective item (portable) from NSD, Chittagong/ NSSD, Dhaka (as applicable) and re-supply the same to collecting place after warranty repair or for replacement within 90 (ninety) days from the date of defect at no cost to the purchaser.

46. Guarantee.

- a. The suppler will guarantee to supply the spares (from manufacturer) for at least 10 years with reasonable price. Yearly increase of price of spares should not be more than 5% of the list of spares with price to be supplied with the quotation.
- b. The suppler is to provide performance guarantee of 10% of the total contract price for satisfactory performance of the supplied items.

47. Shipment & Delivery.

The supplied items are to be delivered within 06 (Six) months after signing the contract to the following Consignee:

The Commanding Officer **Naval Stores Depot** New Mooring, Chattogram, Bangladesh BIN-002349278-0503

Officer In Charge Naval Stores Sub Depot Dhaka Naval Unit Khilkhet Namapara, Dhaka-1229, Bangladesh

- Place of Delivery: NSD, Chattogram. b.
- Incase of CFR, the supplier will carry the items from any sea port/ air port (as applicable) to NSD Chattogram at the cost and risk of supplier.
- To be mentioned. The Port of shipment is to be from Port of Shipment. manufacturing country of prime mover/ alternator/ genset.
- To be mentioned. The Source of supply be from Source of Supply. is to manufacturing country of prime mover/ alternator/ genset.
- 100% Payment will be made in local currency after satisfactory Terms of Payment. 48 acceptance by BN.
- Price of the each item of the total offer is to be shown separately (e.g. price of the 49. Price. main items, Mandatory & Optional spares, installation & Setting to Work, training, Warranty/ Guarantee etc) and then grand total of the foreign currency to be shown on the original offer submitted by the bidder. Format of the price details is shown as follows:

Ser	Nomenclature	A/U	Qty	Unit Price	Total Price
1.	Main Equipment/ AC Diesel Generator	Set	-	To be mentioned	To be mentioned
2.	Essential accessories	Set	-	To be mentioned	To be mentioned
3.	Cables	Unit	-	To be mentioned	To be mentioned
4.	Mandatory Spares			To be mentioned	To be mentioned
5.	Optional Spares	Set	-	To be mentioned	To be mentioned
6.	Installation, Commissioning a	To be mentioned			
7.	Test, Trial and Acceptance	To be mentioned			
8.	Local Training	To be mentioned			
9.	Total Price in BDT				-

VIBNE NAZIM er (Flantring) Member Secyal Weapon Date 160/2024

MSAMI Lt Commander RN Staff Officer (N. 1) DNS (Bedquarters

Member Date

KAISER MAHMUE Lt Commande: 3N Staff Office (P) ans-11 NavMembenuarto.

24.10.24

Ban Date haka-1213

DNAI&S A.K.M. Memberhossain Captain Revel Armament Director Grateval Armament Inspection and Supply NHQ, Banani, Dhaka-1213

M DNBIA Capiner S Banani, Dhaka M DNWSEE apt Wember Weapons and Date an Engineering A H M RAFLOU Commodore BN Director of Naval E NavaDhazdquarte ISLAM Banapresider bate 0.