

**TENDER SPECIFICATION OF PORTABLE INDUSTRIAL DIESEL GENERATOR WITH ACCESSORIES- BN DOCKYARD (YARD SERVICE L) (300KW), BNS SHER-E-BANGLA AND BNS MONGLA (SICKBAY) (250KW)**

1. **Name of the Equipment.** Portable Industrial Diesel Generator (01 in no 300KW, 02 in no 250KW) with accessories.
2. **Purpose.** The 300 KW genset shall be used to provide continuous electric power to naval ships during refit/ docking. The 250 KW gensets shall be used to provide continuous electric power to the hospital facilities inside naval bases during power outage and other emergencies. All the generators shall be considered as sources of primary electric power. The gensets shall be installed outdoor and have to withstand coastal weather.
3. **Quantity.** 03 (Three) complete sets (01 in no 300KW, 02 in no 250KW).
4. **Original Equipment Manufacturer (OEM).** Name & Full address with telephone number and e-mail of OEM to be mentioned.
5. **Principal/ Supplier/ Bidder.** Name & Full Address with telephone number and e-mail of Principal/ Supplier/ Bidder is to be mentioned.
6. **Local Agent.** Name & Full Address with telephone number and e-mail of Local Agent is to be mentioned.
7. **Year of Manufacturing.** 2026.
8. **Qualification of Bidder.** Manufacturers of the Portable Industrial Diesel Generator sets or their authorized distributor/ agent can submit quotations through their authorized local agent enlisted in DGDP. In case of offer from foreign trading company/ distributor/ agent, certificate of dealership/ agency-ship from Original Equipment Manufacturer (OEM) is to be submitted with the offer. In this regard, the **following certificates are to be submitted with the offer** (if not OEM):
  - a. Authorization Certificate from OEM.
  - b. Supply Assurance Certificate from the OEM.
9. **Equipment Manufacturer and Reliability/ Requirement.** The newly installed items shall be brand new, unused and of recent model, proven reliability in the field of operation. The supplier shall ensure the continuity of the operation and availability of necessary spares for at least 15 years each in case of obsolete model over time. **Certification is to be attached with the offer.**
10. **Classification Standard.** The offered Gensets (Prime Mover and Alternator) and associated accessories supplied under the scope of the supply are to be designed, constructed/ manufactured and tested up to the requirement of IEEE/ IEC/ ISO or other equivalent internationally recognized standards. 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.
11. **Condition for Acceptance of Quotation.** The quotation has to have supporting documents (booklets, catalogues, brochures etc) with details about offered equipment/ item. If detailed information regarding specifications, manufacturer's manuals and catalogue for the quoted equipment/ items are not provided the quotation may not be accepted.
12. **Acceptance/ Rejection of Bid.** DGDP/ BN reserves the right to accept or reject any bid or to terminate the bidding process and reject all bids at any time prior to the contract award (without thereby incurring any liability to the BIDDER).
13. **Scope of Supply.** The Gensets are to be supplied as per the specifications enumerated in the subsequent paragraphs. The Generator set and associated accessories should be complete with all standard accessories, ready in all respect for operation after installation onboard. The scope of supply **each gensets** shall include (but not limited to):
  - a. 03 x Complete Gensets with Associated Accessories are as follows:
    - (1) Complete Gensets (As per Para 16a(1)).
    - (2) Prime Mover (Engine) (As per Para 16a(2)).
    - (3) Alternator (As per Para 16a(3)).
    - (4) Generator Control and Monitoring Panel (As per Para 16a(4)).
    - (5) Changeover Switch (04 Poles) (As per Para 16a(5)).
    - (6) Automatic Transfer Switch (ATS) (As per Para 16a(6)).
    - (7) Trailer (04 Wheel, 2 Rest) with Accessories (As per Para 16a(7)).



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(8) Standard Accessories (As per Para 16a(8)).

- b. Necessary Cables (Power and Control Cable) for connecting as necessary among gensets, Generator Control and Monitoring Panel (As per Para 16b).
- c. Certificates and Reports (As per Para 16c)
- d. Manuals/ Documents (As per Para 16d).
- e. Spares (Optional) (As per Para 17).
- f. Factory Acceptance Test (FAT) (As per Para 18).
- g. Local Training (As per Para 19).
- h. Installation, supervision and Setting To Work (STW) (As per Para 20).
- j. Test/ Trial and Acceptance (As per Para 21).

14. **Additional Feature Offered by Bidder.** The bidders may suggest and offer additional features for the gensets. In this case, Bidders have to explain the detailed advantage of that/ those features of the Generator sets.

15. **Brochures/ Booklet.** 01 (One) set of original Brochures/ Booklets in English and authentic weblinks with detailed technical information about the quoted model of gensets, prime mover, and alternator are to be provided with the quotation for evaluation/ assessment. **Separate Technical offer and Brochures/ Booklet for 300KW & 250KW generator are to be provided.**

16. **Technical Specifications.**

a. **Complete Genset with Associated Accessories.**

(1) **Specification of Complete Gensets.**

Ser	Description	Remarks
(a)	Country of Origin and Manufacture (Assembler)	<b>Genset &amp; Control/ Monitoring and Other parts/ accessories.</b> Finland/ Sweden/ USA/ UK/ France/ Germany (To be mentioned)
(b)	Type	Industrial and Portable
(c)	Brand	Wartsilla/ Scania/ Caterpillar/ SEMT Pielstick/ MAN Diesel/ MTU/ Moteurs Baudouin (To be mentioned)
(d)	Model	To be mentioned
(e)	<b>Operating Environment of Generator Set.</b>	
	i. Ambient air temperature	+5 <sup>0</sup> C to + 50 <sup>0</sup> C
	ii. Relative humidity	Up to 95% (non-condensing)
(f)	Power factor	0.8 lagging or better
(g)	Output	415 V, 50Hz, 3 Phase, 4 wire, PRP: 300 KW 415 V, 50Hz, 3 Phase, 4 wire, PRP: 250 KW
(h)	RPM	To be mentioned
(j)	Overall Dimension and dry weight of Generator set	To be mentioned
(k)	Canopy	i. Shall be Sound and weather-proof ii. Ingress Protection: IP 54 or better (To be mentioned) ii. Noise level: To be mentioned at 1 m and 7m iv. Dimension of the gensets with canopy: To be mentioned v. Material: To be mentioned
(l)	Type of Coupling (Prime Mover and Alternator)	To be mentioned
(m)	Combined Base Frame	The prime mover and alternator shall be mounted on a common rigid base frame with anti-vibration mounts. Lifting eyes shall be provided for lifting the complete generator set with canopy.
(n)	Mounting	The generator set shall be elastically mounted on a common base frame and installed in the shed. Vibration isolation is to be provided



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Ser	Description	Remarks
(p)	<b><u>Loading Condition.</u></b>	
	(1) The generator shall maintain following steady state and transient performances (as per ISO 8528-5:2022 Table 4, for G3 standards):	
	Parameter	Unit      Operating Limit Values
	i. Steady state frequency band	% $\leq \pm 0.5$
	ii. Transient frequency difference from initial frequency	100% sudden power decrease
		Sudden power increase
		% $\leq +10$
		$\leq - (7 + \text{Frequency droop})$
	ii. Transient frequency deviation from rated frequency	100% Sudden power decrease P
		Sudden power increase
		% $\leq +10$
		$\leq -7$ (Moderate load variation)
		$\leq -15$ (Large load variation)
	iii. Frequency recovery time	s $\leq +3$
	iv. Steady state voltage deviation	% $\leq +1$
	v. Voltage unbalance	%      1
	vi. Transient voltage deviation	100% Sudden power decrease
		Sudden power increase
		% $\leq +20$
		$\leq -15$
	vii. Voltage recovery time	s $\leq +4$
	(2) The generator shall maintain above steady state and transient performances (as per ISO 8528-5:2022 Table 4, for G3 standards) under load changes from 0%-50%, 50%-100%, 100%-0% and during steady state.	
	<b>Note:</b> Graphs showing various characteristics and responses 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)	Manufacturer of Prime Mover shall be as following:  Wartsilla, Finland/ Scania, Sweden/ Caterpillar, USA/UK / SEMT Pielstick, France/ MAN Diesel, Germany/ MTU, Germany/ Moteurs Baudouin, France (To be mentioned).
(b)	Type	To be mentioned
(c)	Brand	Wartsilla/ Scania Marine Engine/ Caterpillar/ SEMT Pielstick/ MAN Diesel/ MTU/ Moteurs Baudouin (To be mentioned).
(d)	Model	To be mentioned
(e)	Country of Origin and Manufacture	Finland/ France/ Germany/ Sweden/ USA/ UK (To be mentioned)
(f)	Year of Manufacture	2026
(g)	Shut down system	Details to be mentioned (Including emergency shutdown)
(h)	Lube Oil (Type/ grade)	To be mentioned
(j)	Cooling system	Details to be mentioned
(k)	Starting System	Battery Started (New battery to be provided with the Genset. Battery brand, model, quantity and capacity in Volt and AH to be mentioned)
	<b><u>Maintenance Schedule/ Overhauling.</u></b>	
(l)	i. Major Overhauls	10000 hour or more (To be mentioned).
	ii. Top Overhauls	5000 hour or more (To be mentioned).
	iii. Other Maintenance routine	To be mentioned.
(m)	Fuel & Lube oil consumption	Specific fuel and lube oil consumption per hour at 25%, 50%, 75% and 100% load to be mentioned in litre per hours.
(n)	Safety Devices	Following or more safety protections are to be incorporated:



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Ser	Description	Remarks
		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)	Manufacturer of Alternator shall be as follows: Leroy Somer, France/ Stamford, UK (To be mentioned)
(b)	Type	Air cooled
(c)	Brand	To be mentioned
(d)	Model	To be mentioned
(e)	Country of Origin and Manufacture	France/ UK/ Italy/ Germany (To be mentioned)
(f)	Year of Manufacture	2026
(g)	Excitation	To be mentioned
(h)	Power factor	0.8 lagging or better
(j)	Rated voltage	415 V AC
(k)	Frequency	50 Hz
(l)	Number of Poles	To be mentioned
(n)	No. of phases	3 phase, 4 wire
(p)	Voltage Regulation	+1% or better
(q)	Overload Acceptance	110% overload of PRP for at least 1 hour in every 12 hours or better
(r)	Excitation Type	To be mentioned
(s)	AVR	Electronic Type. (Details to be mentioned, like Brand, Model, Country of origin, Country of manufacturer etc)
(t)	Insulation class	H or better
(u)	Protection class	IP 23 or better
(u)	Number of bearing	Double/ Single (To be mentioned)
(v)	Safety features	The following safety protections are to be incorporated: <ul style="list-style-type: none"> <li>i. Overload protection</li> <li>ii. Short-circuit protection</li> <li>iii. Under frequency protection</li> <li>iv. Under voltage protection</li> <li>iv. Excitation loss indicator</li> <li>v. Reverse power protection</li> <li>vi. Any others to be mentioned</li> </ul>

(4) **Specification of Generator Control and Monitoring Panel.**

(a) Following are to be incorporated:

- (i) Multifunction digital control with display.
- (ii) Both manual and automatic start & stop facility.
- (iii) Time required for automatic starting in the event of grid power failure is **to be mentioned**.
- (iv) Scrolling Digital LCD.
- (v) Others (if any) to be mentioned.

(b) **Digital Meter Panel.** Following are to be incorporated:

- (i) Generator Volt meter (Phase to Phase and Phase to Neutral).
- (ii) Generator Amps meter (for line current measuring).
- (iii) Generator Frequency meter.
- (iv) Engine oil pressure gauge.
- (v) Running hour meter.
- (vi) Battery voltage indicator meter.
- (vii) Others (if any) to be mentioned.

(5) **Changeover Switch (04 Poles) for Each Genset.**

Ser	Description	Remarks
(a)	Manufacturer	To be mentioned
(b)	Type	To be mentioned



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Ser	Description	Remarks
(c)	Brand	To be mentioned
(d)	Model	To be mentioned
(e)	Qty	01 (One)
(f)	Country of Origin and Manufacture	To be mentioned
(g)	Year of Manufacturer	2026
(h)	Rated voltage	380~440 V AC
(j)	Phases/ Pole	3 phase, 4 wire
(k)	Frequency	50 Hz
(l)	Ampere Rating ( <b>Must be compatible considering the maximum capacity of the genset</b> )	To be mentioned
(m)	Transition type	Non automatic (conventional two position)
(n)	Position of Line Terminals	Top In - Bottom Out, Bottom In - Top Out
(p)	Operating Mode	Front operated
(q)	Mounting Type	Designed to be fit anywhere
(r)	Ingress Protection	IP 23 or better
(s)	Mechanical Durability	10000 cycle
(t)	Maximum conductor per terminal	03 (Three)
(u)	Enclosure Type	Secure double door box (Stainless steel)
(v)	Enclosure Dimension (Maximum)	W x H x D. (To be mentioned)

(6) **Automatic Transfer Switch (ATS) for Each Genset.**

Ser	Description	Remarks
(a)	Manufacturer	To be mentioned
(b)	Type	To be mentioned
(c)	Brand	To be mentioned
(d)	Model	To be mentioned
(e)	Quantity	01 (One)
(f)	Country of Origin and Manufacture	To be mentioned
(g)	Year of Manufacture	2026
(h)	Rated voltage	380~440 V AC
(j)	Phases/ Pole	3 Phase, 4 Wire
(k)	Frequency	50Hz
(l)	Ampere Rating ( <b>Must be compatible considering the maximum capacity of the genset</b> )	To be mentioned
(m)	Transition type	Break – before –make or better
(n)	Switching time	1 sec or better
(p)	Monitoring	Under and over voltage, 1-phase monitoring
(q)	Transition Type	Automatic
(r)	Position of Line Terminals	Top In - Bottom Out, Bottom In - Top Out
(s)	Operating Mode	Front operated user friendly LED display, Diagnostic function to be included.
(t)	Mounting Type	Designed to be fit anywhere.
(u)	Protection Class	IP 54 or better
(v)	Mechanical Durability	10000 cycle
(w)	Maximum conductor per terminal	03 (Three)
(x)	Enclosure Type	Secure double door box (Stainless steel)
(y)	Enclosure Dimension	W x H x D
(z)	Standard	IEC 60947-6-1



(7) **Trailer (04 Wheel, 2 Rests) with accessories (Locally Supplied) for Each Genset.**

Ser	Description	Remarks
(a)	Feature	The trailer shall have 04 (four) wheel with 02 (two) rest, hand brake and arrangement to pull truck/ jeep (Details to be mentioned including braking system) which is able to carry and suitable for the offered genset and 50mtr cable considering max. load and dimension
(b)	Load Capacity ( <b>Must be capable to carry the genset with accessories</b> )	8 ton or above
(c)	Steering	4-wheel double turntable
(d)	Platform material	Wood coating, treated with preservative
(e)	Type of tyre	To be mentioned
(f)	Year of Manufacturer	2026
(g)	Weight & Dimension	To be mentioned
(h)	Finish	Painted
(j)	Wheel type	Solid rubber
(k)	Wheel width	To be mentioned
(l)	Wheel diameter	To be mentioned
(m)	Colour	To be mentioned
(n)	Steering	Radius 35° or better
(p)	Towing eyelet diameter	To be mentioned
(q)	Product type	Industrial trailers
(r)	Supplied	Assembled
(s)	Platform length	To be mentioned
(t)	Platform width	To be mentioned
(u)	Loading height	To be mentioned
(v)	Weight	To be mentioned

(8) **Standard Accessories.** Standard accessories must include every item and accessories, which are essential to make the offered gensets 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 the offer mentioning item wise price.

(9) **Mandatory Spares.** The following spares are to be provided at the time of delivery and price is to be quoted separately:

Ser	Name of Item	Qty	Unit Price and Total Price
(a)	Oil Filter	12	To be mentioned
(b)	Fuel Filter	12	
(c)	Air Filter	06	
(d)	Belt (all types)	06	

b. **Cables.** The supplier is to provide necessary high-quality Power and Control Cable for Generator sets for all power & control/ monitoring connections. Details of various cable specification and unit price (per meter) is to be quoted separately. the cables shall have the following configuration:

Ser	Description	Remarks
(1)	Brand (Power cable)	To be mentioned
(2)	Model (Power cable)	To be mentioned
(3)	Country of origin and manufacture (Power cable)	To be mentioned
(4)	Power Cable type	i. 04 in no single core cable of 50 m length (for 03 x Phase and 01 x Neutral) ii. Flexible rubber insulated (EPR) cable or better iii. Extra flexible copper conductor (Class 5 or better) iv. RM to be mentioned



Ser	Description	Remarks
(5)	Current carrying capacity in air of the power cable (Must be suitable for the maximum capacity of the genset)	To be mentioned
(6)	Length of each single core cable	50 meter or more
(7)	Brand (Control/Signal cable)	To be mentioned
(8)	Model (Control/Signal cable)	To be mentioned
(9)	Country of origin and manufacture (Control/Signal cable)	To be mentioned
(10)	Control/Signal cable type	To be mentioned
(11)	Length of Control/Signal cable	As required

c. **Certificate and Reports.**

(1) Following certificates and reports are to be provided in English for each item including associated equipment/ accessories **with the offer**:

- (a) Certificates by OEMs of alternator, prime mover and the complete genset mentioning respective country of manufacture.
- (b) All necessary standard/classification certificates mentioned in the offer (as per para 10).
- (c) Authorization Certificate (as per para 8.a).
- (d) Supply Assurance certificate (as per para 8.b).
- (e) Guarantee (as per para 9 and 24.c) and warranty certificates (as per para 24.a).
- (f) After sales service support certificate (as per para 24.d).

(2) Following certificates and reports are to be provided in English for each item including associated equipment/ accessories **during delivery**:

- (a) All necessary standard/classification certificates mentioned in the offer (as per para 10).
- (b) 'Quality assurance certificates' for each item and their associated equipment and instruments from OEM is to be provided.
- (c) 'FAT certificates' (as per para 18).
- (d) Certificate of genuine product and brand-new item.
- (e) Authorization Certificate (as per para 8.a).
- (f) Supply Assurance certificate (as per para 8.b).
- (g) Guarantee (as per para 9 and 24.c) and warranty certificates (as per para 24.a).
- (h) After sales service support certificate (as per para 24.d).

d. **Manuals/ Documents.** 01 (One) set of following documents and manuals in English is to be provided at free of cost at the time of delivery:

- (1) Operating Manual of the Prime Mover and Alternator.
- (2) Technical Manual with Circuit Diagram.
- (3) Maintenance Manual of the prime mover and alternator.
- (4) Parts Catalogue of the Prime Mover and alternator.
- (5) AVR Manual/Data sheet with diagram.
- (6) Technical Manual, parts catalog, Electrical wiring Diagrams and faultfinding flow charts of the alternator.



17. **Spare (Optional).** A list of the following spares (optional) 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	Quantity	Unit Price
a.	AVR	01	To be mentioned
b.	ACB with appropriate ratings	01	
c.	Oil Filter	01	
d.	Fuel Filter	01	
e.	Air Filter	01	
f.	Belt (As applicable)	01	

18. **Factory Acceptance Test (FAT).** Following FAT(s) criteria to be carryout in OEM or manufacturer of prime mover/ alternator/ assembler premises for the offered gensets:

a. FAT shall be carried out by a team of 02 (Two) BN members for 05 (five) working days in OEM premises at the buyer's expense. Both way air fare, accommodation and food for the FAT team shall be borne by BN. All types of movement/ transportation (air/sea/road) of the team within the manufacturer's country, reception and arrangement for entry into the country/ concerned area for the FAT are to be arranged by the supplier. The supplier shall inform the buyer about the date of FAT (schedule) and FAT criteria at least 08 (eight) weeks prior to the date of FAT. FAT procedure shall be forwarded to the buyer 6 (six) weeks prior to the date of commencement of the FAT to the concerned directorate for approval of BN. Seriai No of Prime Mover and Alternator are to be provided eight weeks before FAT. The cost of FAT in this respect is to be quoted in the offer.

b. On return from the country of manufacturer, the FAT team will submit the report to concerned Directorate at Naval Headquarters. Naval Headquarters will, in turn, forward final decision along with FAT report, basing on which DGDP will render clearance for shipment of stores to the supplier concerned. The supplier will not make shipment of any item of the contract without clearance from DGDP.

c. The FAT shall be carried out at manufacture's factory premises following approved FAT protocols. In this regard, the FAT protocol is to be approved by BN well in advance.

d. During FAT, tests shall be carried out to fulfill the required condition mentioned in technical specification of the offered system. Various tests for checking performance are to be carried out and recorded. After FAT, a joint test report shall be prepared and signed by both the seller and buyer's representative.

e. The FAT criteria in details is to be submitted, which shall include the following:

(1) **Generator Load Tests.** Generators load test shall be carried out to fulfil the required condition mentioned at Para 16.a.(1).(p). Recording of voltage, frequency, transient voltage and frequency variation and recovery time shall be made to ascertain the specified condition.

(2) **Prime-Mover Test.** Factory Test Reports of prime mover are to be provided.

(3) **Tests of Alarm and Safety Devices.** Various tests for checking temperature, pressure, fuel oil consumption etc. with recording of alarm and shutdown steps are to be carried out.

(4) **Test Report.** Test reports are to be prepared in English which will include test results and other relevant information. Test report is to be submitted to BN before shipment.

f. **Location of FAT.** Location of FAT with full address is to be mentioned.

19. **Local Training** The supplier is to send one qualified representative who will provide operation and maintenance training in Bangladesh to BN personnel for duration of 03 (Three) working days for each genset after test, trial and commissioning of Gensets on separate training schedule for BN Dockyard (Yard service L) at Chattogram, BNS Sher-E-Bangla at Patuakhali and BNS Mongla (Sickbay) at Mongla Naval Area. During training, emphasis shall be given on operation, maintenance and faultfinding of Prime Mover, Governor, Alternator, AVR and Generator sets Controller procedure and Control Circuit etc. Cost of transportation, accommodation and food of the supplier representative shall 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 (If required), operation and configuration for smooth conducting of all the tests.
- c. Repair and maintenance procedure.

20. **Installation, Supervision & Setting to Work (STW).** Installation, Supervision, and Setting to Work (STW) shall be done as following:

a. **Installation Site.** BN Dockyard (300KW) in Chattogram, BNS SHER-E-BANGLA (250KW) in Patuakhali and BNS MONGLA (250KW) in Mongla, Bagerhat

b. **Installation Material and Accessories.** All installation materials, test equipment/ instruments, tools, cables, cable gland and other necessary accessories required for the installation, STW and supervision are to be provided by the supplier.

c. **Bidder/ Supplier's Responsibility.**

(1) Installation of gensets with standard accessories and software installation (if required/ necessary) is to be done by the supplier. As such, any accessories required for the operation and maintenance shall be provided by the supplier.

(2) The offered gensets and other accessories are to be installed in BN Dockyard (300KW) in Chattogram, BNS SHER-E-BANGLA (250KW) in Patuakhali and BNS MONGLA (250KW) in Mongla, Bagerhat and to be commissioned by the qualified OEM Engineers.

(3) Qualified OEM Engineers are to be employed for the installation, Setting-to-Work (STW), and commissioning. All types of expenses related to both-way airfare (to and from Bangladesh (installation site)), food, accommodation and internal travel of the OEM engineer during installation are to be borne by the supplier.

d. **Purchaser's Responsibility.** Purchaser (BN) shall provide available assistance (if required) for installation under the direct supervision of the OEM Engineer. BN Dockyard (300KW) in Chattogram, BNS SHER-E-BANGLA (250KW) in Patuakhali and BNS MONGLA (250KW) in Mongla, Bagerhat shall provide available work/ facility (if required) for installation. Support equipment may be provided (if available) from the user side upon request prior to installation.

21. **Test/ Trial and Acceptance.** Test, Trial and Acceptance requirements are as follows:

a. **General.** The supplier's engineer shall ensure satisfactory tests, trial and functioning/ commissioning of the equipment at the purchaser's premises after all necessary replacements. Necessary software installation (if required) shall be done before the test/trial. After delivery, the genset shall be tested at BN Dockyard (Chattogram and Mongla- as suitable) in presence of the supplier's engineer and user according to para 16.a.1.p. After completion of Setting-to-Work in BN Dockyard (300KW) in Chattogram, BNS SHER-E-BANGLA (250KW) in Patuakhali and BNS MONGLA (250KW) in Mongla, Bagerhat, SAT shall be conducted. All instruments and consumables for the initial tests in BN Dockyard (Chattogram and Mongla- as suitable), and for the SAT (Site Acceptance Test), are to be provided by the supplier.

b. **SAT Protocol.** The SAT protocol/ procedures, including schedule, are to be submitted to BN 04 (four) weeks prior SAT. The SAT protocol shall clearly mention duration, load steps, list of parameters to check with rated values, required equipment etc.

c. **SAT.** Site Acceptance Test (SAT) shall be carried out after completion of Setting to Work (STW).

d. **Acceptance.** On completion of satisfactory Test/ Trial, final acceptance shall be given by CINS/ ACINS.

22. **Delivery.**

a. **Delivery and Installation Time.** Item delivery and installation shall be completed within 12 (Twelve) months and breakdown of said timeline is appended below:

(1) **Delivery Time.** The items shall be delivered to the 'Place of Delivery' within **09 (Nine)** months after signing the contract.



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(2) **Installation Time.** The Gensets shall be installed within **03 (Three)** months after delivery of the items.

b. **Place of Delivery.** NSD Chattogram and NSD Khulna.

c. In case of CFR the supplier shall carry the items from any sea port/ air port (as applicable) to NSD, Chattogram and NSD, Khulna at the cost and risk of supplier.

23. **Shipment.**

a. **Source of Raw Material.** To be mentioned.

b. **Source of Supply.** The source of supply of the offered gensets shall be mentioned. It shall be from the country of manufacturer or country of origin.

c. **Port of Shipment.** To be mentioned. The port of shipment shall be from the country of manufacturer or country of origin.

d. **Consignee.** The supplied item shall be the following consignee:

The Commanding Officer Naval Stores Depot New Mooring, Chattogram, Bangladesh BIN-002349278-0503	or	Officer In Charge Naval Stores Sub Depot Dhaka Naval Unit Khilkhet Namapara, Dhaka-1229, Bangladesh	or	Officer In Charge Naval Stores Depot Khulna Khalishpur, Khulna, Bangladesh
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e. All items shall be brand new and to be delivered in seaworthy packing to ensure safe transit by sea. Certificates in this regard are to be provided during delivery.

f. All packages shall have packing notes showing their contents in detail and all packages shall be marked with the name and address of the consignee and gross weight.

24. **Warranty, Guarantee and After Sales Service.**

a. **Warranty.**

(1) 12 (Twelve) months manufacturer's warranty for trouble-free operation shall be provided for the item from the date of acceptance by the purchaser. If any component of the supplied items becomes defective during the warranty period, the overall warranty shall be extended automatically for the period during which the subject component remains defective.

(2) For warranty repair/ replacement, the supplier shall collect the defective item from NSD, Chattogram/ NSD, Khulna/ 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.

b. **Bank Guarantee (BG) for Warranty.** The BIDDER shall issue a Bank Guarantee (BG) during submission of last 20% payment for a value of **@ 05% (Five percent) of the total CFR value** from any scheduled bank in Bangladesh in favour of The Senior Finance Controller (Navy), Sailors Colony, Lalasarai, Mirpur-14, Dhaka-1206, representing Bangladesh Navy, Peoples Republic of Bangladesh, information to The Directorate General Defence Purchase, Ministry of Defence, Peoples Republic of Bangladesh. This BG shall remain valid until the warranty period of the supplied Gensets and other items (notwithstanding minor deficiencies which would be mutually settled and agreed between PURCHASER and BIDDER) in Bangladesh, and it shall expire on receipt of **Warranty Completion Certificate**. If the contractual obligation warrants the extension of the validity of the BG, the BIDDER shall remain liable to do so at its own cost. In case of material failure of the BIDDER to fulfil its contractual obligation as per the terms and conditions of the contract, the BG in full or part thereof may be forfeited at the discretion of the PURCHASER.

c. **Guarantee.** The supplier is to give a guarantee of continued supply of spares for at least 10 (Ten) years at a reasonable price (not exceeding 3% per year). Certificate is to be submitted with the offer.

d. **After Sales Service.** After sales service shall be available with the local agent of the supplier and is to be provided as and when required for an indefinite period or at least 15 years after the installation. If any system, equipment, etc. becomes obsolete or out of production



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during or after the installation period (at least up to 15 years), the supplier is to submit an alternative of the same/ improved version for selecting a suitable replacement.

25. **Validity.** The offer is to remain valid till 30 June 2026.

26. **Terms of Payment.** Payment shall be made through an Irrevocable Letter of Credit (LC). LC shall be opened at the expense of the PURCHASER and **100% LC** value shall be made operative in favor of Supplier. CFR value being the value of the supplied goods, payment shall be made as follows:

a. **1<sup>st</sup> Installment.** 80% of CFR value shall be paid **after shipment of the Gensets with associates and standard accessories** and on submission of the following documents to the bank:

(1) Original Airway Bill (AWL)/ Bill of Landing (BL) must be issued by air lines/ shipping lines or authorized agent of shipping lines/ air lines against DGDP contract reference (after signing the contract). LC number, and Bangladesh bank registration number are to be mentioned in AWL/ BL. Freight amount must be shown separately otherwise, only FCA value shall be paid. All documents to be submitted (01) original with at least (05) five copies, other than the bill of lading shall be (03) three original with (03) three copies. In addition to this, the following shall also be considered:

(a) Name of the carrier must be indicated in AWL/ BL.

(b) Must be signed by the carrier or a named agent for/ on behalf of the carrier.

(2) 'Supplier's Signed Commercial Invoice' for (freight/ services amount to be shown separately (if applicable)) representing 80% of the CFR value as stated in the contract.

(3) 'Packing List' signed by the authorized representative of the shipping company or exporter.

(4) 'Certificate of Origin' signed by the Manufacturer's Authorized Person/Authorized Official of the exporting country.

(5) 'Manufacturer's Certificate' Signed by the MANUFACTURER/ SUPPLIER. Certifying that product has been produced as per technical data/ analytical data and specification as per contract.

(6) 'Manufacturer's Warranty Certificate' Signed by the MANUFACTURER/ SUPPLIER.

(7) 'Factory Acceptance Test (FAT) Completion Certificate' signed by the SUPPLIER.

(8) 'Quality Assurance Certificate' (QAC) signed by the SUPPLIER.

(9) 'Shipment Clearance Letter' Signed by DGDP (Directorate General Defense Purchase, Dhaka, Bangladesh) as PURCHASER.

b. **2<sup>nd</sup> Installment.** 20% of CFR value shall be paid **after successfully commissioning** and on submission of the following documents to the bank:

(1) 'Supplier's Signed Commercial Invoice' for representing 20% of CFR value as stated in the contract.

(2) 'Final Acceptance Certificate' issued by the PURCHASER after successful completion of installation, HAT and commissioning.

(3) The bidder shall submit the relevant document of 5% BG of the CFR value, which shall be released on submission of the warranty completion certificate.

c. **Installment of Factory Acceptance Test (FAT), Local Training and Services.**

(1) **Factory Acceptance Test (FAT).** 100% cost of FAT shall be paid **after successful completion of FAT** and on submission of the following documents to the bank:

(a) 'FAT report'- signed by the PURCHASER for the successful completion of the 'FAT' in OEM premises.



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(b) 'Supplier's Signed Commercial Invoice' for 100% of the FAT value as stated in the contract.

(2) **Local Training.** 100% cost of Local Training shall be paid **after successful completion of local training** and on submission of the following documents to the bank:

(a) Certificate Signed by the PURCHASER for the successful completion of 'Local Training' in Bangladesh.

(b) 'Supplier's Signed Commercial Invoice' for 100% of the Local Training value as stated in the contract.

(3) **Installation and Final Acceptance.** 100% cost of 'Installation shall be paid after successful completion of Installation and Final Acceptance on submission of the following documents to the bank:

(a) Certificate signed by the PURCHASER for the successful completion of the 'Installation and Final Acceptance' in Bangladesh.

(b) 'Supplier's Signed Commercial Invoice' for 100% of the Installation and Final Acceptance value as stated in the contract.

27. **Price.** Price of the item of the total offer is to be shown separately (e.g. price of the main equipment, additional accessories, Installation, local training, warranty/ guarantee etc.) and then grand total of the foreign currency to be shown on the original offer submitted by the bidder. Moreover, if the item is imported against this tender, the price is to be quoted without import duties.

28. **Compliance Statement.** A compliance statement fulfilling all the requirements of the tender is to be submitted for evaluation of the quotations. Stating mere 'Yes or No' shall not suffice, and detailed evidence with description/ information, brochures/ booklet, drawing and diagram as required is to be given. An incomplete compliance statement may lead to the cancellation of the offer. If any features of the offered item deviate from this specification, it has to be clearly spelt out.

