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Bangladesh Navy (BN), Khulna-9201
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Project-757/15

05 January 2026

INVITATION FOR EXPRESSION OF INTEREST (EOI)

Reference:

A. Invitation for Tender Number 23.02.2637.212.53.364.25-26.0960 Dated 17 December 2025.

1. Khulna Shipyard Ltd (KSY) invites Expression of Interest (EOI) from reputed supplier for 'Refurbishment of Propulsion System Including Major Overhauling of 3x Main Engine of BNS DURDHARSHA'. It shall be carried out according to the maintenance schedule to attain desired speed for BN as per reference A.

2. **Components of Propulsion System.** Propulsion system consists of the components mentioned in Article 2 of Enclosure-1.

3. **Existing Defects of the Propulsion System.** The propulsion system including Main Engine (ME), Engine Control System (ECS), Reduction Gear (RG), Shafting System with Fixed Pitch Propeller are to be refurbished/ serviced/ repaired for rectification of the following defects:

(1) The RPM of the engine cannot rise more than 950.

(2) If engine RPM is increased more than 950, exhaust manifold becomes Red Hot and the temperature of the lube oil and fresh water increases more than the maximum limit.

(3) Sensor's performance related to fresh water, sea water, lub oil temperature of the main engines and gearboxes are degraded.

4. **Scope of Works/ Supply.** The propulsion system including Main Engine, Propulsion Control and Monitoring System, Reduction Gears, Shafting System along with their auxiliaries are to be refurbished/ repaired/ serviced/ upgraded by the respective OEMs for regaining original condition as new one so that the Propulsion System can run trouble free for next 5 years. The scope of re-furbishing works under the title 'REFURBISHMENT OF THE PROPULSION SYSTEM OF BNS DURDHARSHA' is given in Annex A of Enclosure-1. Existing defects are to be rectified under this project.

5. **Eligibility of BIDDER.** The Bidder shall be competent and experienced in similar repair/ refurbishment work onboard ship. The Bidder shall be any of the followings:

(1) OEM of any of the systems (within the scope of works), or

(2) Any reputed company who is competent and experienced in similar repair/ refurbishment works onboard ship, or

(3) A reputed company who is authorized by OEMs of the systems (within the scope of works) or authorized by any reputed company who is competent and experienced in similar repair/ refurbishment work onboard ship.

6. **Spares Required.** All required spare parts for refurbishing/ overhauling of three Main Diesel Engines (Brand: DEUTZ, Model: TBD 620 V 16) will be supplied by the Supplier. In this regard a list of spare parts (which are to be procured) is attached at Annex B of Enclosure-1. Price of spare list is to be provided indicating item wise price.

7. **Special Tools.** BN Dockyard/ Mongla Dockyard/ the Ship will provide available tools for the project works. The Bidder/ Supplier will arrange all the special tools, if not held at BN Dockyard/ Mongla Dockyard/ Ship for the project work. The special tools are to be handed over to BN/ Ship on completion of the works. The Bidder, where necessary, may conduct survey to ascertain existing BN facilities at their own cost.

8. **Project Schedule/ Delivery Time.**

a. The project will commence on the date of signing the contract and will end upon signing the Sea Acceptance Trial (SAT) acceptance certificate. However, the ship must not remain non-operational for longer than the duration determined by BN.

b. In case of any delay caused by BN's inability to provide docking facilities, workshop facilities, access to the workplace, or customs clearance as per the bidder's project schedule, the delivery timeline will be extended by the duration of the delay.

c. A detailed project schedule is to be included in the technical offer based on the onboard investigation/ health check. The sequence of repair work and managing spare should follow the scope as described in Annexes A and B respectively. Any justified changes to be technical sequence must also be mentioned in the offer. The actual onboard work period will be coordinated between the supplier and BN Dockyard to minimize the ship's non-operational time.

d. The bidder shall submit a comprehensive project schedule covering initial evaluation, spare parts shipment, repair/ upgrade work, docking period, and tests/ trials. The repair sequence must planned to minimize impact on the ship's operational period, activities, and other ongoing repairs. Any logical technical sequence changes should be made in consultation with NHQ. Further details may be discussed during the pre-bid meeting.

e. The project should be managed to ensure that other ongoing repair work on the ship is not disrupted.

9. **Tender Specification.** A tender specification for necessary refurbishment/ repair/servicing/upgradation of the complete propulsion system of BNS DURDHARSHA including tender terms and conditions is enclosed herewith as Enclosure-1. The foreign company/ partner has to submit the offer fulfilling all the tender requirements as per Enclosure-1.

10. **Compliance Statement.** A clear and complete compliance statement fulfilling all the tender requirements is to be submitted with the offer as per tender specification (Enclosure-1).

11. **Terms of Payment.** Mode of payment shall be through bills/ documents submitted by the Supplier to KSY. Total Contract Price (TCP) (100%) shall be made in local currency. The payment schedule shall be as follows:

Ser	Description	Payment
a.	On submission of the documents mentioned in Paragraph 27(a) of Enclosure-1 (Evaluation Report and Work Plan) and on submission of a Bank Guarantee (BG) provided by the Bidder amounting 20% (twenty percent) of the contract value issued by any scheduled bank of Bangladesh. BG will be released prior to payment of next installment (20%)	20% of the TCP
b.	On delivery of required new spare and tools for rectification of defects mentioned in annex A and overhauling 3x Main Engines, 3x Gearboxes and 3x Shafting System with propellers and other relevant major components to the consignee	20% of the TCP
c.	On completion of all repair/refurbishment work under the scope of work/supply and carrying out setting to work (as per paragraph 34 of Enclosure-1)	40% of the TCP
d.	Final payment will be paid after satisfactory test/trial (HAT/SAT), local training and acceptance by BN and on submission of a bank guarantee for warranty amounting 5% (five percent) of the contract value issued by any scheduled bank of Bangladesh. The guarantee and warranty shall remain valid until expire date of warranty period.	20% of the TCP

12. **Scope of Supply for Supplier.**

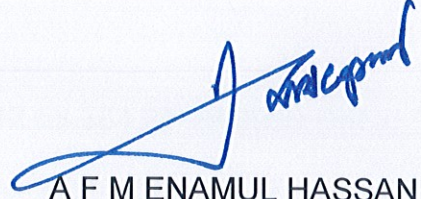
- a. Maintain liaison with Khulna Shipyard Ltd.
- b. Complete works for necessary refurbishment/ repair/ servicing/ upgradation of the complete propulsion system of BNS DURDHARSHA as per tender specification (Enclosure-1).
- c. If it is required to open the LC by KSY, in that case, all expenses related to LC Charges, LC amendment Cost, LC Confirmation Cost (if any), Marine Insurance, Custom Duty, C&F Agent Commission, Port charges, Transportation cost, etc will be borne by Supplier/ Principal/ Manufacturer.
- d. Supplier/ Principal/ Manufacturer will furnish Performance Guarantee (PG), Bank Guarantee (BG) as per payment terms, BG for Warranty, etc through scheduled Bank of Bangladesh as per contract if awarded. PG must be submitted before signing the contract.
- e. Supplier/ Principal/ Manufacturer will submit 1% (one percent) BG of TCP value as Tender Security to KSY before submission of tender offer to BN. Tender Security will be released after submission of PG for the contract.
- f. During implementation of the project, the amount of Liquidated Damage (LD) imposed on KSY from BN due to delay in delivery of the items (if imposed) is to be borne by the Bidder/ Supplier.

- g. The amount of speed penalty imposed on KSY from BN due to less speed as mentioned in the technical specification (if imposed) is to be borne by the Bidder/ Supplier.
 - h. All charges related to accommodation, fooding, medical support, and transportation etc. of OEM Engineers/Foreign & Local Experts/technicians.
 - i. Any other expenses for successful completion, test/ trial and delivery of the project.
 - j. The refurbishment work is to be completed with the supervision of OEM Engineers / Foreign Experts.
 - k. Warranty of the project as per technical specification (Enclosure-1).
 - l. Authorization letter from Foreign Partner is to be submitted with the tender offer.
13. **Scope of Supply for KSY.** KSY scope of supply will be as follows:
- a. KSY will maintain liaison with BN and the Bidder for successful completion of the project as appropriate if awarded.
 - b. Responsible for Bid Bond as tender security.
 - c. KSY will sign the tender document and relevant papers in order to submit tender documents to BN.
 - d. If it is required to open the LC by KSY, in that case, all expenses related to LC Charges, LC amendment Cost, LC Confirmation Cost (if any), Marine Insurance, Custom Duty, C&F Agent Commission, Port charges, Transportation cost, etc will be borne by Supplier/ Principal/ Manufacturer.
 - e. KSY will not have any types of monetary involvement throughout the project.
 - f. KSY will provide shipyard facilities and services at mutual agreement with the Bidder as per cost to cost basis.
14. **Selection Criteria.** The participants are to submit both technical and financial offer in complete in single envelope (02 Sets). The technically suitable offer will be considered for financial selection process. However, company profile and experiences will also be a factor to select the suitable Bidder. Upon submission of complete documents, the final bidder (most responsive) will be selected based on both technical and financial offer.
15. Interested Bidder/ Supplier is hereby requested to contact following person:
- Lt Cdr Rashad Mahmud, (E), BN
Officer-In-Charge (Repair Section)
Design & Planning Department
Khulna Shipyard Ltd., Bangladesh Navy, Khulna-9201
Cell: +8801769-784616 (whatsapp)
Email: plans@khulnashipyard.gov.bd
16. Interested Bidder/ Bidder's Principal/ Manufacturer/ Supplier will have to submit within the following deadline:

- a. Technical offer documents with seal and sign by 15 January 2026 @ 12.00 PM at email: **plans@khulnashipyard.gov.bd**
- b. Financial offer documents with seal and sign by 15 January 2026 @ 12.00 PM only at email: **ksygmndp@gmail.com**

17. **Offer Validity.** The offer should remain valid up to 09 April 2026.

18. For any queries on the tender document, please send in details by email (plans@khulnashipyard.gov.bd) before 10 January 2026.



A F M ENAMUL HASSAN
Captain BN
For Managing Director

Enclosures:

1. Tender Specification (Ref A) - 01 (One) Set.

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TENDER SPECIFICATION FOR REFURBISHMENT OF PROPULSION SYSTEM INCLUDING MAJOR OVERHAULING OF 3X MAIN ENGINE OF BNS DURDHARSHA

1. **Preamble.** Necessary refurbishment (including major overhauling of 03 main engine of propulsion system of BNS DURDHARSHA shall be carried out according to the maintenance schedule to attain desired speed.
2. **Components of Propulsion System.** Propulsion system consists of the following components:

Equipment	Brand and Model	Country	Qty	Year	Manufacturer's Address
ME (Main Engine)	DEUTZ Model: TBD 620V16	Germany	03	1988	DEUTZ AG Ottostrasse 1 51149 Colonge-Porz (Eil) Tel: +49 (0) 221 822 0 Fax: +49 (0) 221 822 5850 Email: info@deutz.com
ECS (Engine Control System)	Noris	Germany	03	2002	Noris Automation Far East Pte. Ltd. No. 42 Toh Guan Road East #01-80 Enterprise Hub Singapore 608583 Singapore Phone: + 65 62 67 85 36 Fax: + 65 62 67 85 37 Email: singapore@norisautomation.com
RG (Reduction Gearbox)	Type: WVS930	Germany	03	1988	Reintjes GmbH, Eugen-Reintjes-Straße 17 31785 Hameln Germany Tel: +49 (0) 5151 1040 Fax: +49 (0) 221 822 5850 Email: info@reintjes-gears.com
Shafting System with Fixed Propeller	EXALTO B.V	Netherlands	03	2002	Biensma 41 City: 9001 XZ Grou Country: Netherlands Phone1: (31) 184 615 800 Fax: (31) 184 614 045 Web: http://www.exalto.com

3. **Existing Defects of the Propulsion System.** The propulsion system including Main Engine (ME), Engine Control System (ECS), Reduction Gear (RG), Shafting system with fixed pitch propeller are to be refurbished/ serviced/ repaired for rectification of following defects:

- a. The RPM of the engine cannot rise more than 950.



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b. If engine RPM is increased more than 950, exhaust manifold becomes Red Hot and the temperature of the lube oil and fresh water increases more than the maximum limit.

c. Sensor's performance related to fresh water, sea water, lub oil temperature of the main engines and gearboxes are degraded.

4. **Scope of work.** The propulsion system including Main Engine, Propulsion Control and Monitoring System, Reduction Gears, Shafting system with propeller along with their auxiliaries are to be refurbished/ repaired/ serviced/ upgraded by the respective OEMs for regaining original condition as new one so that the propulsion system can run trouble free for next 5 years. The scope of re-furbishing works under the title 'REFURBISHMENT OF THE PROPULSION SYSTEM OF BNSDURDHARSHA' is given in Annex A. Existing defects as mentioned in article - 3 needs to be rectified under this project.

5. **Spares Required.** All required spare parts for refurbishing/ overhauling of three Main Diesel Engines (Brand: DEUTZ, Model: TBD 620 V 16) will be supplied by the Supplier. In this regard a list of spare parts (which are to be procured) is attached at Annex B. **Price of spare list is to be provided indicating item wise price.**

6. **Health Check & Spares Inspection.** The supplier will carry out the necessary health checks of the propulsion systems as well as an inspection of the spares available on the ships and in the Naval Stores Depot, Chattogram. **The supplier may make changes to Annex A and Annex B depending on the outcome of the health checks and spares inspection. These changes must be confirmed before starting the refurbishment and must be done in consultation with BN. Additionally, any spare parts not used from the final spare list will be returned to BN.**

7. **Special Tools.** BN Dockyard/ Mongla Dockyard/ the Ship will provide available tools for the project works. The Bidder/ Supplier will arrange all the special tools, if not held at BN Dockyard/Mongla Dockyard/Ship for the project work. **The special tools are to be handed over to BN/Ship on completion of the works. The BIDDER, where necessary, may conduct survey to ascertain existing BN facilities at their own cost.**

8. **Documentation.** An evaluation of propulsion system covering all components and sub systems is to be done by the BIDDER with a detail report prior commencement of the refurbishment work. BIDDER is to submit a report on completion of refurbishment work attaching all records and document related to changes, repair works and modifications. Detail documentation requirement is laid down in paragraph 27.

9. **Eligibility of the BIDDER.** The BIDDER shall be competent and experienced in similar repair/ refurbishment work onboard ship. The BIDDER shall be any of the followings:

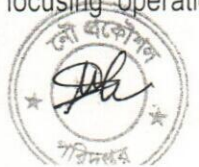
- OEM of any of the systems (within the scope of works) or
- Any reputed company who is competent and experienced in similar repair/ refurbishment work onboard ship or
- A reputed company who is authorized by OEMs of the systems (within the scope of works) or authorized by any reputed company who is competent and experienced in similar repair/ refurbishment work onboard ship.

10. **Eligibility of Technicians.** All technicians should be skilled and from the well-known relevant work field. The Technician should also be led and guided by subject matter expert (SME). The credentials, travel itinerary, passport, bio-data and other relevant documents including VISA of the technicians are to be submitted prior 01 (one) month of commencement of the actual works for approval of the PURCHASER. After vetting necessary credentials and security clearance form concerned authority The PURCHASER will notify the BIDDER about clearance of the technicians visit.



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11. **Work Shop Facility.** The workshop facility will be decided by BN in coordination with the supplier, utilizing available facilities at BN Dockyard or Mongla Dockyard where possible.
12. **Project schedule / Delivery Time.**
- a. The project will commence on the date of signing the contract and will end upon signing the Sea Acceptance Trial (SAT) acceptance certificate. However, the ship must not remain non-operational for longer than the duration determined by BN.
 - b. In case of any delay caused by BN's inability to provide docking facilities, workshop facilities, access to the workplace, or customs clearance as per the bidder's project schedule, the delivery timeline will be extended by the duration of the delay.
 - c. A detailed project schedule is to be included in the technical offer based on the onboard investigation/health check. The sequence of repair work and managing spares should follow the scope as described in Annexes A and B respectively. Any justified changes to the technical sequence must also be mentioned in the offer. The actual onboard work period will be coordinated between the supplier and BN Dockyard to minimize the ship's non-operational time.
 - d. The bidder shall submit a comprehensive project schedule covering initial evaluation, spare parts shipment, repair/upgrade work, docking period, and tests/trials. The repair sequence must be planned to minimize impact on the ship's operational period, activities, and other ongoing repairs. Any logical technical sequence changes should be made in consultation with NHQ. Further details may be discussed during the pre-bid meeting.
 - e. The project should be managed to ensure that other ongoing repair work on the ship is not disrupted.
13. **Accommodation and Transportation.** The supplier will provide necessary accommodation and transport facilities for the foreigner and local engineers. Transportation for carrying spares, good and components to and from the workshop/ship are to be provided by BN.
14. **Overall Coordination among the Multiple Work Groups.** The project may involve different experts from different countries/ companies. Their individual scope of work may be unique and different as well. Despite this difference, they will work simultaneously on the same platform to achieve the common objective i.e., repair/refurbishment work of propulsion system of the ship. For this mutual cooperation, coordination, information sharing, resource sharing etc. BIDDER or local agent on his behalf is to act as overall coordinator for such purpose.
15. **Supervision of Works.** The repair/refurbishment of propulsion system shall be done by the BIDDER'S technicians in presence of Ship and BN Dockyard personnel. The BIDDER shall deploy required number of expert technicians for successful completion of the project. The BIDDER is to appoint a competent 'Project Manager/ Supervisor' on his behalf for supervising and coordinating all project works on site at BIDDER's arrangement. The Project Manager/Supervisor shall carry out survey of the Ship and Dockyard facilities within 01 (one) month of signing the contract. Project Manager/Supervisor shall be on site for total duration for which the actual work take place on site.
16. **Support from BN Dockyard/ Mongla Dockyard.** All administrative, logistic and transport facilities for the work on site are to be provided by the BIDDER. BN will provide available crane and forklift support within the naval premises. All repair/maintenance/installation materials, cablings, spares, tool set are to be provided by the BIDDER. BIDDER may use general workshop facilities available BN Dockyard/ Mongla Dockyard. BIDDER may mention supports necessary from BN Dockyard/ Mongla Dockyard in the offer.
17. **Certificate.** A warranty certificate for the said refurbishing work will be issued by the performing entity (OEM where applicable, or the authorized bidder/repairer) and will be submitted to BN after acceptance of the work.
18. **Training.** Local training in Bangladesh for a group of operators/technicians (10 Personnel) has to be provided for 10 (ten) working days. The training will be conducted by competent foreign engineers/technicians after installation is completed (before/during HAT and SAT). Training should cover both practical and classroom session and should encompass whole propulsion systems (ME, gearbox, FPP and shaft support system) focusing operation, maintenance, and troubleshooting. Necessary training handout is to be provided by the BIDDER.



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19. **Quality Assurance Certificate.** Quality assurance certificate in respect of the associate spares in regards to its manufacturer should be provided by supplier.

20. **Test, Trial and Acceptance.** On completion of the said repair/ refurbish works, Harbor Acceptance Trial (HAT) and Sea Acceptance Trial (SAT) shall be carried out by the supplier in presence of ship and BN Dockyard representative. If test/trial is satisfactory, acceptance certificate will be signed jointly. The supplier is to submit the detail procedure of HAT and SAT to BN at least 1 month prior the test/ trial. The procedures are to include condition of test/trial, test procedure and desired standard parameters for the test. The procedure will be finalized incorporating the BN comments as technically viable. Following tests must be included in the HAT/SAT procedure:

- a. All engines shall be tested for their current running parameters at harbor (Harbour acceptance trial) on completion of work.
- b. All Engines shall be clutched in individually, in pair in different combinations and simultaneously all together for correctness of various operation parameter, load distribution and calibration. Engine BHP is to be measured by the BIDDER at full load condition with suitable measuring device (measuring the torque). Minimum allowable BHP is 90% of maximum rated continuous power of 2031 KW.
- c. All replaced/renewed/ repaired sensors shall be checked for correct functioning.
- d. All main engines shall be operated for a reasonable period to verify that the known issues mentioned in Article 3 have been rectified specifically, the inability to reach the rated maximum RPM, any parameters exceeding allowable limits, and the "red hot" exhaust condition to confirm that none of these issues persist.
- e. Operating tests and performance checks for overhauled engines should also include:
 - (1) Progressive Speed Trial (Ahead, Astern) with full power trial.
 - (2) One Shaft Speed Test.
 - (3) ME starting & control air system check.
 - (4) Operating Test for propulsion shaft seal and bearing.
 - (5) Integrated Operating Test for propulsion system.
 - (6) Operating Test for shafting system with propeller at sea.
 - (7) Ship's Endurance Test.
 - (8) Fuel oil consumption test (indicative test only).
 - (9) Analog and digital parameters synchronization of complete propulsion system.
 - (10) Parameter monitoring and comparison with ideal values.
- f. **Desired Parameters.** Considering existing operational conditions of the ship, followings are the desired parameters after completion of the repair/ up gradation project:

Criteria	Desired Parameter
Speed at maximum continuous rating (at 1610 rpm) (Allowable limit 90%)	28 knots at standard displacement
Endurance	Not less than 1,000 NM at cruising speed

- g. Stock of spares held onboard and supplied by the BIDDER are to be inspected, compared and listed.
- h. After satisfactory test and trial, BN will provide an acceptance certificate within two weeks.
- j. Necessary arrangements including all petroleum oil lubricants (POL) of the trial will be done by the ship
(BN)
- k. RG/Gearbox performance is to be checked, monitored and recorded for correct functioning.
- l. Propulsion Control and Monitoring System are to be tested for correct calibration and functioning.



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21. **Insufficient Speed and Power.** Speed guarantee and continuous includes the followings:

- a. The BIDDER shall have to give guarantee that the repair/up-gradation will enable the ship to achieve the desired maximum continuous speed 28 knots (at standard load condition) and 90% of 2031 kW and endurance.
- b. In case, the ship fails to achieve the maximum continuous speed and power as stated in the specification then penalties shall be imposed on the BIDDER for non compliance of the contract as per the following:

Ser	Speed Deviation from the Desired Speed	Penalty Counted in % of LC value
1.	Upto 0.25 knots	1.25%
2.	0.25 to 0.50 knots	2.5%
3.	0.50 to 0.75 knots	3.75%
4.	0.75 to 1.0 knots	5%
5.	1.0 to 1.25 knots	6.25%
6.	1.25 to 1.50 knots	7.5%
7.	1.50 to 1.75 knots	8.75%
8.	1.75 to 2.0 knots *	10%

- c. If the deficiency in actual maximum continuous speed of the ship is more than 2 (Two) full knots below the speed guaranteed in the Contract, then BN, at its option, may, subject to the BIDDER'S right to effect alternations or corrections, cancel the Contract.

22. **On-site Inspection.** The BIDDER may inspect the Ship to assess the existing operational state of the ship before submitting their offer at BIDDER'S own cost.

23. **Warranty.** The Supplier shall provide warranty of 12 (twelve) months from end of the schedule (date of signing the acceptance certificate of SAT). However, the warranty of stores shall not be more than 36 months from the date of shipment of the stores (defined as "Initial warranty period"). The stores and services will be free of substantial defects in materials and workmanship. During warranty period, all necessary service/ repair/ up-gradation/ replacement of defective modules/ components of the propulsion system (within scope of work) shall be done by Supplier without any charge/payment. If any defect arises within these 12 months, Supplier will rectify the defect by replacing the component or repairing the respective module at free of additional charges.

24. **Guarantee for Warranty.** The BIDDER shall furnish to DGDP a bank guarantee for warranty amounting 5% (Five percent) of the Contract value after satisfactory test/trial (HAT/SAT), local training and acceptance by BN which shall remain valid until expiry date of the warranty period.

25. **Shipment and Delivery.**

- a. The Supplier shall arrange shipment of all items by sea/air to Chattogram as per the scheduled timeline to the following address:

The Commanding Officer
Naval Stores Depot
New Mooring, Chattogram, Bangladesh

- b. All items shall be delivered in suitable protective packing to ensure safe transit.
- c. 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.



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- d. The Supplier shall arrange transportation of all supplied items to NSD Chattogram.
- e. **Port of Shipment.** Any port of the manufacturing country.
26. **Certificate.** The BIDDER is to furnish following certificates:
- Guarantee Certificate.
 - Warranty Certificate.
 - In case, BIDDER himself is not accomplishing the repair or refurbishment work, necessary authorization certificate or proof of partnership from the company/ OEM/ organization doing the refurbishment/repair work are to be submitted with the tender.
27. **List of Documents.** Following documents shall be submitted by the Supplier:
- Prior to Starting Modification/ Repair work:
 - Evaluation report on propulsion system and work plan before commencement of the work.
 - Complete report on the refurbishment work with necessary information, data and records.
 - Complete wiring diagram, installation diagram and operating manual of the control system.
 - During/ After the Modification/ Repair work:
 - Complete report of repair works (On site work quality plan) are to be provided on completion of the project.
 - HAT and SAT procedure document (before 1 months of test/trial).
 - Parts Catalogue for newly installed components and spare parts of ME.
 - Documents related to trouble shooting, if something newly installed.
28. **Maintenance of Existing Operational State.** In any case, the existing operation state of the propulsion system must not be degraded. Necessary checks shall be carried out prior to commencement of the project to assess and evaluate the existing operation state in presence of all concerned.
29. **Custom Duties and Taxes.** The spare parts, tools and other accessories to be purchased for repair/ refurbishing of propulsion system (including 3 X Main Engines) of BNS DURDHARSHA will, in general, be considered as Defence Stores. These Defence Stores shall be used by the Defence Forces of Bangladesh only and hence are exempted from payment of custom duties, supplementary duties and sales taxes etc. Bangladesh Navy shall take necessary steps to arrange exemption from payment of custom duties, supplementary duties and sales taxes etc. The said charges are not included in the contract price. If any custom duty, supplementary duties etc. is charged considering luxurious item, the relate cost in this regard shall be borne by Bangladesh Navy.
30. **Completion Period.** The overall completion period will be determined by BN based on the bidder's proposed schedule and operational requirements, ensuring minimal downtime for the ship.
31. **Price Quotation.** The BIDDER is to offer full itemized price for supplies, spares, services and training for each of the components of the propulsion system. The PURCHASER will have the right to procure particular supplies, spares, services and training from the offered price quotation depending on actual requirements and OEM recommendations.



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32. **Price.** If the item is imported against this order, price to be quoted without import duties.

33. **Terms of Payment.** Mode of payment shall be through bills/ documents submitted by the SUPPLIER to BN. Total Contract Price (TCP) (100%) shall be made in local currency. The payment schedule shall be as follows:

Ser	Description	Payment
a.	On submission of the documents mentioned in Paragraph 27(a) (Evaluation Report and Work Plan) and on submission of a Bank Guarantee (BG) provided by the BIDDER amounting 20% (Twenty percent) of the Contract value issued by any scheduled bank of Bangladesh. BG will be released prior to payment of next installment (20%)	20% of the TCP
b.	On delivery of required new spare and tools for rectification of defects mentioned in annex A and overhauling 3x Main Engines, 3x Gearboxes and 3x Shafting system, with propellers and other relevant major components to the consignee	20% of the TCP
c.	On completion of all repair/refurbishment work under the scope of work/supply and carrying out setting to work (as per paragraph 34)	40% of the TCP
d.	Final payment will be paid after satisfactory test/trial (HAT/SAT), local training and acceptance by BN and on submission of a bank Guarantee for Warranty amounting 5% (Five percent) of the Contract value issued by any scheduled bank of Bangladesh. The Guarantee and warranty shall remain valid until expiry date of the warranty period.	20% of the TCP

34. **Setting to Work.** Shall mean the following:

a. **Propulsion Control & Monitoring System.** The system should be ready to operate the propulsion system satisfactory after necessary repair/ replacement/ refurbishment. Necessary functional test is to be carried out and system is to be made fully operational.

b. **Main Engines (ME).** Running In is to be carried out by operating engine at different rpm. The engine should be ready for on load test/trial (HAT/SAT).

c. **Shafting System with Propeller.** Functional test of shafting system with fixed pitch propeller at different engine RPM is to be carried out and ready for test/trial.

d. **Reduction Gearbox (RG).** Fully functional and ready for on load test/trial.

35. **Force Majeure.** The completion of refurbishment will be subject to force majeure for which the consideration will be for:

a. War, rebellion, political unrest, labour strike, fire, explosion affecting Suppliers infrastructure, natural calamities, e.g. unusual weather condition, earth quake, flood, etc, accident delay in payment and/or such other reasons or circumstances which are beyond the control of the Supplier during the construction of the said air conditioning plants.

b. In the event of completing repair/ refurbishment work being delayed by any of the above-mentioned cases, notice in writing shall be given to the BN as early as possible intimating the force majeure case or cases and asking for extension of the completion period.



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Enclosure:

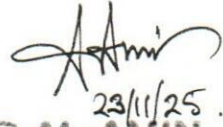
1. Annex A- 01 (one) page.
2. Annex B- 03 (three) page.


23/11/25

Member/ Secy
Date:



DNS (Rep) HABIB
Lt Commander BN
Staff Officer (NS-2)
Naval Headquarters
Banani, Dhaka-1213


23/11/25

A R ALAMIN
Lt Commander BN
Staff Officer (Plans-II)
Naval Headquarters
Banani, Dhaka 1213



MD SHAHRIAR ALAMA K M
Captain BN
Director of Naval Armament
Inspection and Supply
NHQ, Banani, Dhaka-1213


24/11/25

MD MD DRUL QADIR
Captain BN
Director of Naval Info & Tech
Naval Headquarters
Banani, Dhaka-1213


12-12-25

MOHAMMAD ABDUL KADER
Commander BN
Director of Naval Engineering
Naval Headquarters
Banani, Dhaka-1213



HASNAT MAHFUZ
Commander BN
Director of Naval Weapons
and Electrical Engineering
NHQ, Banani, Dhaka-1213

WORK LIST OF REFURBISHMENT OF PROPULSION SYSTEM:

Ser.	Maintenance Group	Maintenance Operation	Remarks
1.	Cylinder Head Driving Mechanism Crankcase	(a) Check flexible coupling (b) Check and service all cylinder units (cylinder liners, pistons, connecting rod bearing, valves, valve drive) (c) Renew crankshaft bearing (d) Check engine alignment and flexible bearing (e) Clean venting (f) Service drain bore in V-space (g) All the cylinder head to be serviced with cylinder head repair kit (h) All the piston and liner to be pulled out de-carbonized and calibrated (i) Upon condition piston connecting rod to be replaced as required (k) All the piston rings to be replaced (l) All the big end bearing to be replaced (m) Cylinder liner to be replaced which found to be out of limit (n) All the Crank pin has to be calibrated	
2.	Exhaust and Suction system	(a) Renew vacuum limiter (b) Service air intake filter (c) Clean water and air side of charge air cooler (d) Service exhaust turbo charger	
3.	Fuel System	(a) Service injection pump (b) Check start of drawing process (c) Service filter (d) Service injection valve (e) All fuel pump to be serviced by BOSCH and performance to ensure (f) All the fuel injector to be check, pressure test and replace as required	
4.	Lubricating Oil System	(a) Change oil (b) Service single, double or easy-change filter (c) Clean water and oil side of cooler (d) Service centrifugal filter (e) Lub oil cooler to open, check, clean, pressure, test as required (f) Check lub oil pump, repair as required.	
5.	Coolant System	(a) Check coolant state	



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		(b) Service coolant pump (c) Renew coolant thermostat, check casing (d) Check preheating system (e) Check untreated water pump (f) Service attached re-cooler (g) Clean honeycomb cooler (h) Renew untreated water thermostat insert (i) Clean untreated water filter (k) Sea water and fresh water-cooling systems all pumps, valve and pipeline repair/renew. (l) Check heat exchanger. Repair if required.	
6.	Mounting Pad	Spring damper as check & replace all the mounting pad	
7.	Pneumatic System	(a) Carry out pressure test on compressed air container in accordance with the classification regulation (b) Clean dirt collector in compressed air line (c) Clean dirt collector in front of starter (d) Service starter	
8.	Gearbox and Shafting System	(a) Health Check (b) Cooler/Heat Exchanger Test/ Repair (c) All sensors check and calibrate/replace	
9.	Monitoring and Control System Sensors	All the monitoring and control system sensors to be repaired.	
10.	Others	Any addition or subtraction in this works list can be offered after physical visit onboard.	



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**ANNEX B TO
TENDER SPECIFICATION
DATED**

LIST OF SPARE PARTS FOR REFURBISHMENT OF PROPULSION SYSTEM (INCLUDING 3X MAIN ENGINES)

Ser.	Parts/ Part./Group No.	Description	Deno	Qty Per Engine	Qty For 03 Engine	Qty stored at NSD CTG/ SHIP	To be procured
1.	1202 8085	Gasket	No	01	03	01 NSD	02
2.	1202 9427	Rot. Shaft Lip Seal	No	01	03	02 NSD	01
3.	1230 4077	Gasket	No	01	03	06 NSD	-
4.	0111 8727	Sealing Ring.	No	05	15	00	15
5.	1230 2184	Gasket	No	16	48	01NSD+24 Ship	23
6.	0115 3878	O'Seal	No	01	03	12 NSD	-
7.	0115 4288	Hose	Mtr	01	03	00	03
8.	1230 2404	Gasket	No	08	24	00	24
9.	1203 2892	Gasket	No	16	48	22 NSD+48Ship	-
10.	1230 5600	Tube	No	02	06	00	06
11.	1202 7574	Bearing Bush	No	18	54	00	54
12.	0118 1928	'O' Seal	No	32	96	96 Ship	
13.	1230 5157	Cylinder Liner	No	16	48	00	48
14.	0110 2146	Sealing Ring	No	76	228	20 NSD	208
15.	0112 4011	Sealing Ring	No	04	12	02 NSD	10
16.	1202 8088	Gasket	No	01	03	05 NSD	-
17.	1202 8087	Gasket	No	01	03	05 NSD	-
18.	1202 8089	Gasket	No	02	06	12 NSD	-
19.	1202 8066	Gear Rim	No	01	03	00	03
20.	1213 7125	Slip Ring.	No	01	03	00	03
21.	1230 2034	Stop Ring,	Pair	02	06	02 NSD	04
22.	1202 8051	Locating Pin	No	04	12	00	12
23.	1230 0378	Main Bearing	Pair	09	27	09 NSD	18
24.	1230 0384	Big End Bearing	Pair	16	48	48 Ship	-
25.	1230 4496	Connecting Rod	No	02	06	00	06
26.	1230 2653	Piston	No	04	12	08 NSD	04
27.	1230 3205	Set of Piston Rings	Set	16	48	48 Ship	-
28.	0117 5742	Split Pin	No	16	48	00	48
29.	0115 1187	Plain Washer	No	16	48	00	48



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Ser.	Parts/ Patt./Group No.	Description	Deno	Qty Per Engine	Qty For 03 Engine	Qty stored at NSD CTG/ SHIP	To be procured
30.	1203 2893	Ring Gasket	No	16	48	31 NSD+48Ship	-
31.	1230 2000	Sealing Plate	No	16	48	31 NSD+48 Ship	-
32.	1230 2001	Sealing Plate	No	16	48	25 NSD+48 Ship	-
33.	1230 4754	Inlet Valve	No	32	96	40 NSD	56
34.	1203 2859	Valve Rotator	No	64	192	176 NSD	16
35.	1202 8029	Valve Spring Retain	No	64	192	128 NSD	64
36.	1203 0159	Valve Collet	No	128	384	68 NSD	316
37.	1213 4406	Valve Spring	No	64	192	12 NSD	186
38.	1203 2866	Valve Guide	No	32	96	00	96
39.	1203 0153	Valve Guide	No	32	96	40 NSD	56
40.	1230 3494	Valve Seat Insert	No	32	96	48 NSD	48
41.	1230 3495	Valve Seat Insert	No	32	96	32 NSD	64
42.	0117 9104	O' Seal	No	64	192	190 NSD+192 Ship	-
43.	1230 0235	Exhaust Valve	No	32	96	78 NSD	18
44.	1203 0151	'O' Ring	No	16	48	32 NSD+48 Ship	-
45.	0117 9353	'O' Seal	No	16	48	23 NSD+48 Ship	-
46.	1230 3286	Protecting Tube	No	04	12	29 NSD	-
47.	0117 8326	O' Seal	No	16	48	16 NSD+48 Ship	-
48.	1203 1068	Rot. Shaft Lip Seal	No	01	03	00	03
49.	0117 6106	O' Seal	No	01	03	06 NSD	
50.	0118 0788	O' Seal	No	01	03	01 NSD	02
51.	0115 3807	O' Seal	No	01	03	02 NSD	01
52.	1202 7574	Bearing Bush	No	01	03	00	03
53.	0115 1319	Sealing Ring	No	03	09	176 NSD+108 Ship	-
54.	0115 3874	O' Seal	No	35	105	04 NSD+48 Ship	53
55.	0117 3375	O' Seal	No	06	18	15 NSD+06 Ship	-
56.	0117 4311	O' Seal	No	16	48	56 NSD+ 48 Ship	



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Ser.	Parts/ Patt./Group No.	Description	Deno	Qty Per Engine	Qty For 03 Engine	Qty stored at NSD CTG/ SHIP	To be procured
57.	1202 9621	Gasket	No	16	48	10 NSD+48 Ship	-
58.	1230 5008	Gasket	No	32	96	24 NSD+96 Ship	-
59.	1230 0185	Compensator	No	12	36	12 Ship	24
60.	1230 4040	Gasket	No	02	06	00	06
61.	1230 3749	Compensator	No	02	06	00	06
62.	1213 7669	Clip	No	32	96	24 Ship	72
63.	1202 9606	Gasket	No	16	48	48 Ship	
64.	0115 1298	Gasket	No	02	06	00	06
65.	1230 6973	Hole Type Nozzle	No	16	48	00	48
66.	1216 1879	Tubing Connection	No	02	06	10 NSD	-
67.	0116 6424	Hose Clip	No	04	12	12 NSD	-
68.	1213 7453	Plug	No	16	48	48 Ship	-
69.	0111 8760	Sealing Ring	No	01	03	00	03
70.	0111 8718	Sealing Ring	No	02	06	00	06
71.	0115 3845	O' Seal	No	02	06	31 NSD	
72.	0117 6807	O' Seal	No	02	06	00	06
73.	0117 6819	O' Seal	No	01	03	00	03
74.	0115 3845	O' Seal	No	02	06	31 NSD	
75.	0101 6120	Packing Compound	No	02	06	00	06
76.	1230 2586	Thermostat	No	04	12	14 NSD+06 Ship	-
77.	1246 5014	Conical Mounting	No	06	18	00	18
78.	1203 0090	Flat Gasket	No	04	12	04 NSD+06 Ship	02
79.	1230 2352	Gasket	No	01	03	03 NSD+ 12 Ship	-
80.	1230 2166	Oil Filter	No	02	06	00	06
81.	1215 4599	Sealing Ring	No	02	06	137 NSD	
82.	0115 1306	Filter Element	No	02	06	00	06
83.	0126 2535	Sealing Ring	No	01	03	50 NSD	-
84.	1202 7411	Sealing Ring	No	02	06	34 NSD	-
85.	0117 6816	O' Seal	No	02	06	00 NSD	-
86.	0117 6724	Gasket	No	02	06	08 NSD	-
87.	1230 4771	Flat Gasket	No	02	06	00	06
88.	1230 4761	Compensator	No	02	06	00	06



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Ser.	Parts/ Part./Group No.	Description	Deno	Qty Per Engine	Qty For 03 Engine	Qty stored at NSD CTG/ SHIP	To be procured
89.	1230 0810	Gasket	No	02	06	00	06
90.	To be mentioned	Sensors	No	As Required	As Required	-	-

Note: Existing spare parts need to be mentioned from the list (if stored at NSD Ctg or ship). New spare parts to be filled in the gap of **To be procured** column.



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