

**TENDER SPECIFICATION - VHF TRANSCEIVER (WALKIE TALKIE) (5 WATT) WITH SPARE BATTERY AND SECURITY FEATURES IN TRANSMISSION AND 2 WIRE SURVEILLANCE KIT, WITH AUDIO TRANSLUCENT TUBE**

1. **Name of Equipment.** : VHF Transceiver (Walkie Talkie) (5 Watt) with spare battery and security features during transmission and 2 wire surveillance kit, with audio translucent tube.
2. **Purpose.** : Secure voice point-to-point communication as well as communication via existing IP linking repeater stations Motorola, Mototrbo SLR 8000.
3. **Quantity.** : 200 (Two hundred) complete sets with all standard accessories and 200 spare battery.
4. **Country of Origin** : JAPAN/ USA/ UK/ any EU country.
5. **Name & Full address of Original Equipment Manufacturer (OEM)** : Name & Full address with e-mail of OEM is to be mentioned.
6. **Country of Manufacturer.** : JAPAN/ USA/ UK/ Malaysia/ Turkey/ any EU country.
7. **Brand.** : To be mentioned.
8. **Model.** : To be mentioned.
9. **Year of Manufacture.** : 2025 or later.
10. **Date of Introduction of the Offered Model in the Market.** : To be mentioned.
11. **Environmental Standard.** : The offered VHF Transceiver (Walkie Talkie) has to be complied with IP54/55/67 and MIL-STD-810 (tested with latest method and procedure) standard equivalent or higher and must be suitable for operation in marine environment.
12. **Technical Specification.** : The offered VHF Transceiver (Walkie Talkie) must have following features:

Ser	Name	Description
<b><u>General</u></b>		
a.	Range coverage	To be mentioned.
b.	Frequency range	136-174 MHz.
c.	Type of emission	16K0F3E, 14K0F3E, 11K0F3E, 8K50F3E, 4K00F1E, 4K00F1D or to be mentioned
d.	Channel capacity	16 programmable Channel or more.
e.	Antenna impedance	50 Ω.
f.	Power supply requirement for charging	115-240V AC.
g.	Operating temperature range	Minimum – 20°C to + 50°C.
h.	Dimensions (WXHXD) mm	To be mentioned.



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j.	Weight	To be mentioned.
k.	Battery power and charge life	Minimum 2600 mAh or higher and backup 24 hrs or more
l.	Display	Offered item must have display to indicate channel, charging amount & any other features (If any).
m.	Operating mode	Offered Walkie Talkie should be able to operate in both analogue and digital mode.
n.	Life Expectancy	To be mentioned
p.	Compatibility	The offered model shall be capable to communication through BN's existing IP linking VHF Repeater Motorola, Mototrbo SLR 8000 and directly with existing Walkie Talkie sets in both digital and analogue mode.
q.	Inbuilt voice scrambler facility	Offered item must have inbuilt voice scrambler facility by which user can establish secure voice communication as and when required with set having similar facility. User also must be able to communicate with other set which doesn't have scramble facility. Same scramble facility must be available in group communication via repeater.
r.	Protocol (FDMA/TDMA/CDMA)	Compatible for Motorola, Mototrbo SLR 8000 Repeater or to be mentioned.
s.	Hum & Noise	≤ 50 dB.
t.	Life Expectancy of the Equipment	To be mentioned.
<b><u>Transmitter</u></b>		
u.	Output power	5/3/1 W (High/ mid/ low).
v.	Frequency stability	Less than ±2.5 ppm
w.	Modulation type	To be mentioned.
x.	Spurious emissions	To be mentioned.
y.	Audio harmonic distortion	≤10%.
z.	Adjacent channel power	< 80 dB in Digital/Analog.
aa.	Channel spacing	To be mentioned.
<b><u>Receiver</u></b>		
ab.	Sensitivity	At 5% BER - To be mentioned At 12 dB SINAD - To be mentioned
ac.	Adjacent channel selectivity	Digital- to be mentioned Analog- to be mentioned
ad.	Intermodulation rejection	Digital- to be mentioned Analog- to be mentioned
ae.	Spurious response rejection	70-80 dB typical
af.	Audio output power	350 mW (at 10% distortion with 8Ω load).



<b>Headphone</b>		
ag.	Earpiece	2 Wire Surveillance Kit
ah.	SKU	PMLN8342 or To be mentioned
aj.	Brand	Genuine Motorola Part
ak.	Operation	Receive and Transmit
al.	PTT	PTT on MIC
am.	Programmable Button	To be mentioned
an.	Intrinsic Safety	Yes UL/TIA 4950
ap.	Supported Feature	MOTOTRBO ION Telephony Feature
aq.	Tube	Audio Translucent Tube

13. **Programming Kits/ License Software.** 04 (Four) sets of programming kit and 04 (Four) in no License Programming Software are to be provided for programming/cloning the VHF Transceiver (Walkie Talkie) and peripheral units.

14. **Scope of Supply.** The equipment is to be supplied fulfilling the technical specifications and complete in all respect with all required standard accessories and attachment (i.e Flexible antenna, Belt-Clip, Li-ion battery, Rapid charger with adapter and Genuine same brand spare battery etc.) which are required to obtain 100% performance of the sets whether it mentioned or not in the Specification. A list of offered standard accessories is to be attached separately with the quotation. In this regards the Bangladesh Navy (BN) reserve the right to reduce/ increase the quantity of item mentioned in the tender.

15. **Programming.** Upon receipt of the consignment at Naval Stores Depot Chattogram, the supplier's engineer is to programme all VHF transceiver (Walkie Talkie) at BN Dockyard with given frequencies in presence of BN reps. The supplier's engineer is to show BN reps the procedure of programming the sets so that BN can reconfigure/re programme the sets any time later if requires. Thereafter "Bench Test" to be conducted at BN Dockyard in presence of supplier's engineer.

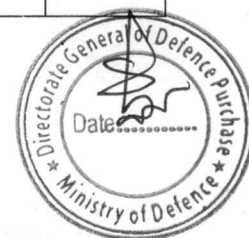
16. **Acceptance.**

a. The supplier's engineer will show BN personnel routine operation and maintenance procedure. The supplier will provide additional materials required for full functioning of the set if otherwise not mentioned in this contract at free of cost (including freight and all other cost). If any equipment is found defective during initial test/trials, that/ those are to be replaced immediately by new ones. BN is to return the original defective equipment after receiving the replacements.

b. On satisfactory completion of the test and trial, CINS/ BN will issue final acceptance certificate.

17. **Standard Accessories.** Standard accessories and assemblies have to be included (all items and accessories) which are essential to operate the equipment whether those are mentioned in the specification or not. Without quoted the concerned bidder will be considered disqualified supplier. A list of such items/ accessories/ assemblies with itemized price is to be included in the quotation as follows:

Ser	Part Number/ Model	Description	Qty (EA)	Brand	Country of Origin	Country of Manufacturer	Remarks
a.	-	VHF Transceiver Walkie Talkie (5Watt) complete with following standard accessories:					
b.	-	Antenna					



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c.	-	Rechargeable Li-ion battery					
d.	-	Belt clip					
e.	-	Rapid rate Charger with adaptor					
f.	-	2 Wire Surveillance Kit, with audio Translucent Tube					
g.	-	Operation Manual					
h.	-	Programming Kit					
j.	-	License Software					
k.	-	Others (If any)					

18. **Manual.** Following manual in English are to be provided free of cost at the time of delivery:

(1) **Operators Manual.** One set of original operators manual (covering major system units) is to be provided with each Walkie Talkie set.

(2) **Technical Manual.** Three sets of original technical/operating manuals (covering principle design and operations, detail circuit diagram, trouble shooting flowchart etc) for all supplied Walkie Talkie/accessories is to be provided.

(3) **Workshop Level Repair Manual.** Two sets of workshop level repair manual.

19. **Test and Trial.** Technically suitable bidders will have to submit 04 (four) sets of VHF Walkie Talkie with hand free headsets for test and trial to BN. The supplier is to submit the Walkie Talkie sets within 02 (two) weeks from the date of issuing letter. In this regards, one set of programming kit and software for programming/cloning, one set of original technical and operating manual (covering major system units) must be provided with the sample Walkie Talkie sets. Without test and trial concerned bidder will not be considered as qualified supplier. During test and trial following will be checked:

Ser	Name	Description
a.	Range coverage	To be checked as per offered range
b.	Frequency range	136-174 MHz.
d.	Channel capacity	16 programmable Channel or more.
e.	Power supply requirement	To be checked as per offered range
f.	Dimensions (WXHDXD) mm	As per offer.
g.	Weight	As per offer.
h.	Battery power and charge life	Minimum 2600 mAh or higher and backup 24 hrs or more
j.	Display	Offered item must have display to indicate channel, charging amount & any other features (If any).
k.	Operating mode	Offered Walkie Talkie should be able to operate in both analogue and digital mode.
l.	Compatibility	The offered model shall be capable to communication through BN,s existing IP linking VHF Repeater (Motorola, Mototrbo SLR 8000) and directly with existing Walkie Talkie sets in both digital and analogue mode.
m.	Inbuilt voice scrambler facility	Offered item must have inbuilt voice scrambler facility by which user can exchange secure voice communication as and when required, with set having similar facility. Moreover, user must be able to communicate with other set which doesn't have scramble facility. Same scramble facility must be available in group communication via repeater.
n.	Output power	5/3/1 W (High/ mid/ low).
p.	Hands free Headsets	To be checked with offered Walkie Talkie



20. **Documents.** The following documents must be submitted with the offer:
- (1) Certificate of assurance for minimum 10 years supply of spares.
  - (2) Itemized prices list of all spare parts that would be required within 05 years for repair/ maintenance.
  - (3) Original brochure/ catalogue of the offered model of Walkie Talkie set.
  - (4) Manufacturer's/distributor's/agent's/dealer's certificate mentioning that the supplier (enlisted bidder) is being authorised for this quotation/offer and will be liable to fulfil all contractual obligation if the firm is awarded contract.
  - (5) Certificate of ingress protection standard IP (dust and water).
  - (6) Certificate of MIL-STD standard.
21. **Warranty.**
- a. Warranty for 02 (two) years trouble free operation of VHF Transceiver (Walkie Talkie) and its accessories wef the date of final acceptance by BN is to be provided by the principal/manufacturer.
  - b. Warranty for 01 (one) year trouble free operation of Li-ion batteries wef the date of final acceptance by BN is to be provided by the principal/manufacturer.
22. **Extension of Warranty.** During the warranty period, if the item/equipment remains non-operational for any action pending by the supplier, the warranty period will be extended for the same period. The warranty covers all parts and labour (including service engineer's cost) throughout the warranty period.
23. **After Sales Service.** After sales service must be provided by the local agent within warranty period and thereafter as and when required (Assurance certificate to be submitted with the offer for at least 10 years).
24. **Price Quotation.** Marine Type VHF Transceiver (Walkie Talkie) and its accessories price is to be quoted in FC without VAT/ Tax etc as follows:
- a. FOB price.
  - b. Freight.
25. **Port of Shipment.** Any port of country of origin/ manufacturer/ principal. It is to be mentioned in the offer.
26. **Delivery Destination.** The supplier will arrange delivery of all items to the NSD Chattogram. All sea/ air port formalities, customs clearance, transportation etc to be completed/ arranged by supplier. BN may be asked for necessary certificates/ documents.
27. **Delivery Schedule.** All items are to be supplied within 180 (one hundred eighty) days after issuance of purchase order by BN.
28. **Validity of Offer.** Offer should remain valid up to 30 Jun 2026.
29. **Consignee.** The Commanding Officer, Naval Stores Depot, Chattogram, New Mooring, Chattogram, Bangladesh/ Officer In-charge, Naval Stores Sub Depot Dhaka, Namapara Khilkhet, Dhaka 1229.
30. **Terms of Payment.** 80% of total CPT/ CFR value will be paid on completion of shipment of the contracted goods. Remaining 20% payment will be made on production of "Acceptance Certificate" rendered by BN (CINS) following successful test and trial upon delivery of items as per contract.





31. **Qualification of Bidders.** Only the genuine manufacturers or their authorized dealer can submit quotation through their authorized Dealer/Supplier enlisted at DGDP. In case of authorized dealer of OEM, manufacturer's certificate of authorization has to be submitted with the offer.

32. **Certificate and Document of Authentication.** The concerned supplier must provide following original certificate(s)/ document(s) as applicable with the quotation and during delivery of items as regard to the genuinity of source and item(s) in order to establish chain of links from the original source to supply of items:

a. One certificate by the Original Equipment Manufacturer (OEM) in favour of the supplier/ local agent (in case of OEM as principal).

b. Two certificates, one by the OEM to authorized agent and other by the authorized agent to supplier/ local agent (in case of authorized agent as principal).

c. Three certificates, first one by OEM to authorized Dealer/Supplier, second one by authorized Dealer to sub- dealer and third one by sub- dealer to local supplier/ local dealer (in case of sub-dealer/supplier as authorized Dealer/Supplier). If the local supplier/ local dealer is unable to obtain the first certificate (by OEM to authorized Dealer/Supplier), then it has to produce relevant document to prove agency-ship of its claimed agent of the recognized manufacturer.

d. Quality Assurance Certificate (QAC) by the Original Equipment Manufacturer (OEM).

33. **Compliance Statement.** A compliance statement fulfilling all the requirement of the tender is to be submitted for evaluation of the quotations. An incomplete compliance statement may attribute to cancellation of the offer. If any clause of this specification does not commensurate with offered item, the deviation has to be spelt out clearly.

