

TENDER SPECIFICATION- MAINTENANCE CONTRACT FOR IP/ DIGITAL/ ANALOG PABX SYSTEM AND TELEPHONE NETWORK OF BNS BHATIARY, ULKA, SHAHEED MOAZZAM, SHER-E-BANGLA AND NAVAL AVIATION

General.

1. **Name of PABX System.** The existing IP/ Digital/ Analog PABXs are as follows:

Ser	Name of the PABX	Brand	Duration of Maintenance	Qty
1.	BHATIARY	KAREL	1 Year (From 01 Jul 2026 to 30 Jun 2027)	01
2.	ULKA	Grandstream		01
3.	SHAHEED MOAZZAM			01
4.	SHER-E-BANGLA			01
5.	NAVAL AVIATION			01

2. **Purpose.** Keeping the PABX fully functional at all times for uninterrupted telecommunications.

3. **Location.** Chattogram and Khulna Naval area.

4. **Telephone Networks.**

a. All junction lines and subscribers connection with the PABX within BNS BHATIARY, ULKA, SHAHEED MOAZZAM, SHER-E-BANGLA AND NAVAL AVIATION.

b. Besides, NWD telephone connections through the MDF to various offices and residences under BNS BHATIARY, ULKA, SHAHEED MOAZZAM, SHER-E-BANGLA AND NAVAL AVIATION PABX and adjoining Naval Area.

5. **Maintenance of Existing System:** The contractor shall be solely responsible for the maintenance of the existing PABX systems and supply spares/ service supports at BNS BHATIARY, ULKA, SHAHEED MOAZZAM, SHER-E-BANGLA AND NAVAL AVIATION PABX as mentioned lot wise at free of cost (within yearly maintenance charge) during the contract period. Apart from this, any subsequent up-gradation of the PABX should be taken into consideration. The maintenance contract shall include but not be limited to:

Lot-1 (BNS BHATIARY).

Description of Existing System	List of Spares (To be used as ready Stock)
01 x Complete PABX System.	NIL
b. 10 x CLID Trunk interface.	
c. 160Xclid Extension interface (Presently 30 CLID line being used).	
d. 40 x Digital Extension interface.	
e. 400 IP interface (Presently 70 IP line being used).	
f. 2 x Attendant Console interface.	
g. 1 x 8 Ch Auto Attendant and Voice Mail system (EVM).	
h. 1 x Maintenance Software-exclude PC.	
j. Call Detail Recording without PC (1 User)	
k. 32 party Conference facility.	
l. 2 x Racks -224 port each.	
m. CPU-Single.	
n. 01 x E1 Card with R2 Signal -30 channel.	
p. 50 x Telephone Set-Caller ID/ Display and 40 x Telephone set IP.	
q. Main Distribution Frame (MDF) PABX.	
r. IDF (PABX side) for 200 lines.	
s. 04 x Backup Battery.	



Lot-2 (BNS ULKA).

Description of Existing System	List of Spares (To be used as ready Stock)
a. 01 X Complete IP PBX System.	a. Cat 6 Cable (100% copper) – 05 box
b. 90 X SIP Phone.	b. RJ45 connector – 400 in no
c. 09 X FXO/FXS Gateway.	c. RJ45 Place plate with Ethernet module – 30 in no
d. 14 X Switch Power over Ethernet (PoE).	d. RJ45 Joints – 30 in no
e. 01 X UPS.	
f. 01 X 22U Rack.	
g. 04 X 9U Rack.	

Lot-3 (BNS SHAHEED MOAZZAM).

Description of Existing System	List of Spares (To be used as ready Stock)
a. 01 x Complete IP PABX System.	NIL
b. 40x CLID Trunk interface.	
c. 200 x CLID Extension interface.	
d. 50 x Digital Extension interface.	
e. FXS Gateway	
f. UPS	
g. Rack 15U	
h. PoE Switch	

Lot-4 (BNS SHER-E-BANGLA)

Description of Existing System	List of Spares (To be used as ready Stock)
a. 01 X Complete IP PBX System.	a. Cat 6 Cable (100% copper) -05 Box
b. 01 E1 Trunk Line.	b. RJ45 connector – 100 in no
c. 20 CO Trunk Line.	c. Rosette Box – 30 in no
d. 01 DC Power backup system.	d. Line cord – 50 in no
e. 250 X Telephone set.	e. Hand set cord – 50 in no
f. 94 X PoE switch.	
g. 01XSystem Cooling Unit (1.5 Ton)	
h. 03 X UPS.	
j. 01 X 42U Rack.	
k. 04 X 6U Rack.	
l. 15 X 12U Rack.	
m. 10 X 9U Rack.	

Lot-5 (NAVAL AVIATION).

Description of Existing System	List of Spares (To be used as ready Stock)
a. 01 x Complete IP PABX System.	NIL
b. 40 x CLI Trunk interface	
c. 100 x CLID IP Extension interface	
d. Enterprise SIP Phone	
e. SIP phone with display.	
f. FXS Gateway	
g. Switch Power over Ethernet (PoE).	
h. UPS	
j. Rack 15U.	



6. **Qualification of the bidder.** The bidders are to meet following qualifications:
- Have experience in selling and repair work of PABX related maintenance.
 - Bidder should have an office in respective area.
 - Bidder should be capable to render service/repair defect at once.

7. **Duration of the Contract.** The duration of all maintenance contract will be for 01 (one) year effective from 01 July 2026 to 30 Jun 2027. The period of contract may extend with mutual understanding by both parties.

Obligation of the bidder.

8. **Maintenance and Repair Schedules.** The bidder is responsible to carry out Maintenance/Repair/Restoration/Replacement works of all PABX system. Bidder has to maintain essential accessories of all PABX System and Telephone sets/Cable Networks etc as and when required as per following time schedules:

- Maintenance (Preventive).** The bidder must give highest priority for Maintenance/Repair/ Restoration/ Replacement works of all PABX system. He shall be responsible to carry out periodical routine checks and system tuning as recommended by the manufacturer to ensure smooth, efficient and continuous operation of the system. Bidder shall also ensure that employees are available at telephone exchange by rotation for 24 hours as per contract.
- Maintenance/ Repair/ Restoration/ Replacemant.** If any defect arises to the said PABX systems, it is to be repaired/restored/replaced at the earliest. However maximum time frame allowed to complete the work is as follows:
 - Minor Defect.** Within **6 hours** (for replacement of Line/ Trunk Cards, Power Supply Cards, Cable Strip etc including minor software adjustments).
 - Major Failure.** Within **24 hours** (In case of total system shutdown for whatever reason like failure of hard-disk, CPU, Power-Supply units etc).
- Installation.** The bidder is responsible to install or add any accessories of all PABX system for up-gradation or re-installation at free of cost. In that case, Bangladesh Navy (BN) will pay for new items required for up-gradation.
- Telephone and Cable Network.** The bidder will carry out maintenance/repair works in respect of the telephones and cable networks of all said PABXs as follows:
 - Maintenance of existing Optic Fiber Cable (OFC), Copper and others cable network (underground, overhead and in -house wiring) as and when required.
 - Maintenance of existing IP/ Digital/ Analog telephone sets connected through all PABX systems.
 - Maintenance of existing items (Cabinets, DP boxes, MDF, IDF etc) connected through all PABX systems.
 - Installation, removal and shifting of telephones and existing items (PABX extensions , BTCL lines, Cabinets, DP boxes, IDF etc) from offices, residences and any places in PABX connection area as directed by BN.
 - The bidder will carry out minor repair of defective telephone sets as required. However, if a telephone set becomes BER (Beyond Economic Repair) without any fault attributable to the bidder, BN will provide its replacement.



(6) Cleaning and painting of PABX switch room, MDF room, IDF room, operators room, all Cabinets, all telephone poles, external & internal cabinets and DP boxes once in a whole maintenance period (during Annual Inspection).

(7) Bidder is responsible for joining of Optic Fiber, Copper and others cable inside naval premises. Cable joint materials will be provided by Navy.

(8) All PABX are connected with Joint Services Integrated Communication Network. In case of any problem in the said network, bidder will check his portion of network and extend all necessary help for rectification of defect.

(9) Bidder should have splicing machine, fault finding tools for various component including OFC & copper cable, necessary tools for repair work and experienced technician to effect the repair work including joining of OFC and other cables.

(10) Bidder is responsible for configuring IP/Digital/Analogue telephone sets for connection.

(11) The bidder will carry out minor repair of defective telephone sets (CLID/Digital/IP) as and when required.

e. **Protection.** Bidder shall suggest precautionary measures to protect all PABX from lightning, over voltage and other faults. BN will provide necessary equipment as suggested by the supplier and the supplier will arrange for its installation. In case of any damage to the PABXs due to lack of proper protection (which was not previously notified), the cost of repair shall bear by the supplier.

f. **Essential Accessories of PABX System.**

(1) These include following items:

(a) Power Supply arrangements like rectifier, switchboards, cables, plug-sockets etc.

(b) Back-up batteries for PABX system.

(c) Back-up batteries for UPS.

(d) Computer (PC) and its accessories like hard disk, motherboard, printer, AVR, UPS etc.

(e) Air Conditioning Unit fitted in the PABX Room.

(f) Operator Console Board and its accessories.

(2) The works to be performed by the bidder are:

(a) Preventive Maintenance such as routine checks, calibrations/adjustment of PABX system, short circuit/ open circuit checks, cable insulation checks, equipment's earthing checks, equipment internal/external cleaning and as per manufacturer's directives.

(b) Repair or replacement of any of the above items mentioned in Para 8.f(1) becoming defective. However, if an item becomes BER without any fault attributable to the maintainer, BN will bear the cost of its replacement.



9. **Spares/Service/Software Support.** The contractor is liable to provide following spares/services:

- a. The contractor is responsible to provide/supply all types of spares as per lot at his own cost during maintenance period. In the case of up-gradation/ expansion of PABX systems BN will bear the cost of required new items.
- b. The contractor is responsible to provide cards, modules, unit or sub-units etc that may be required for repair/restoration of the PABX system at full efficiency. The contractor will keep sufficient amount of spares in ready stock, which are critical in nature at the disposal of contractor within BN premises/the contractor's premises. It is to be mentioned that due to non manufacturing of server model DS-200 by the OEM all out, efforts may be taken by the bidder for repair in co-ordination with OEM.
- c. All types of software (in ROM Chips or Hard Disk), which might be required for repair/restoration of the system. Such Hard Disk or ROM Chips with back-up software has to be kept in ready stock at PABX premises.
- d. The contractor is responsible for renewal all types of Software of server and operator PC consoles at his own cost during maintenance period.

10. **Maintenance Staff.** Maintenance staffs must be capable to carry out all types of service to solve the user requirement. Penalty may be deducted from maintenance bill as desired by BN for negligence or absence of maintenance staff. The bidder will deploy following maintenance staffs:

a. **System Technician.** Qualified system technician will perform his duty on PABX site 0800 to 1600 daily. He should be capable to configure Analog/Digital/IP numbers, Programming IP set and carrying out preventive/corrective maintenance as required. Besides, he will give emergency support if required. In case of his absence due to leave or sickness, the bidder will provide suitable reliever. System technician should have at least 6 (six) months experience on Analog, Digital and IP PABX.

b. **Telephone Technician/Linemen.** Telephone technician/ linemen will perform their duties at the PABX site by rotation. They will carry out the maintenance of telephone and cable network as described above. Telephone technician/ linemen will also attend the complain raised by users at the earliest. Bidder will provide suitable reliever during absence of any of the appointed telephone technician/linemen for any reason. The distributions of duties of Telephone technician/ linemen are to be employed at respective telephone exchange as per user's requirement. Telephone technician/Linemen should have at least 6 (six) months experience on Analog, Digital and IP PABX. Allocation of system engineer, system technician, telephone technician and line man are as follows:

Ser	PABX Name	System engineer (On Call)	System technician	Telephone technician/ Line man
1.	BNS BHATIARY	01	-	02
2.	BNS ULKA	01	01	02
3.	BNS SHAHEED MOAZZAM	01	-	01
4.	BNS SHER-E-BANGLA	-	01	02
5.	NAVAL AVIATION	01	01	01

c. System technician and telephone technician/linemen must be trained and have sufficient knowledge on said PABX systems. Documents are to be submitted to OIC PABX in this regards. If any additional/new system technician and telephone technician/linemen join for the PABX, he must appear a practical exam to respective Officer-In-Charge of respective PABX. New system technician and telephone technician/linemen can be appointed after successfully passing the practical exam. Moreover, system technician and telephone technician/linemen must be appointed for at least 1 year to work with the maintainer of the PABX.

d. It is entirely the Supplier's responsibility to keep all PABX operational at all times. In this case, if any specialist is required in addition to the appointed manpower, the supplier will be obliged to arrange it.



11. **Price Quotation.** Bidder shall quote lot wise (exchange wise) price list mentioning the unit price for the items/services demanded. Bidder may offer optional items required for the maintenance of all PABX with unit price separately. Besides, Bidder has to mention all types of service charges including recruitment of manpower for maintenance of all PABXs. Maintenance charges of whole period to be mentioned separately. All prices should be quoted in taka including govt VAT, Tax and dues normally applicable.

12. **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 disqualification of the offer. If any clause of this specification does not commensurate with the work, the deviation has to be spelt out clearly.

13. **Security Aspects.** The Bidder has to submit the Bio-Data of his staffs to BN at least 30 days prior to his/their planned deployment in the PABX. The concern persons will only be employed after obtaining security clearance from appropriate Naval Authority. However, the bidder is solely responsible for a 'Breach of Security' by any of his employees.

14. **Non-performance by the Bidder.**

a. All complaints/defects will be recorded in a complaint register maintained by the Bidder. The maintenance staff of the Bidder will be intimated about the complaints immediately and he will have to address them instantly including holidays.

b. If the Bidder fails to comply any of his obligations described above, the user will immediately notify the Bidder about the specific failure through the quickest means (verbally by telephone or any other means).

c. If the Bidder still fails to respond within reasonable time, the user will then notify the Bidder in writings.

d. In case of repeated non-performance by the Bidder, Naval Headquarters will impose penalty by deducting an appropriate amount from his dues as maintenance charge and decision of Naval authority will be final in this respect.

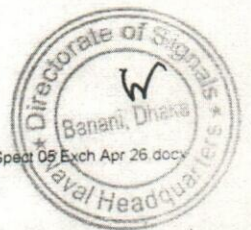
e. Based on the performance of the Bidder, the user will send quarterly performance certificate to the Naval Headquarters. If the user is not satisfied in any quarter, a Liquidity Damage (LD) up to 10% will be deducted from the Bidder.

Responsibility for Loss or Damage.

15. **Natural Calamities.** If any damage occurs to the PABX system or Network components due to natural calamities e.g. earthquake, fire, cyclone, flood including heavy lightning and thunder storm, the user will bear the cost of spares and the Bidder will provide the required services for the said repair/ restoration.

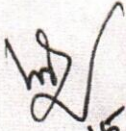
16. **Other Causes.** If any damage occurs to the PABX system or network components due to personal negligence or accident the responsibility of damages will be assessed by a Joint Board of Enquiry comprising BN Officers and Bidder's representative. The repair cost will be finalized according to the recommendation of the board.


17. **Terms of Payment.** On completion of satisfactory services, respective telephone exchange authority will render a performance certificate (stating that the performance of the Bidder has been satisfactory/ not satisfactory during the maintenance period) to Directorate of Signals and the Bidder quarterly in Sep, Dec, Mar and monthly in Apr, May and Jun. Bidder shall apply to BN for bill with the certificate. BN shall pay the bill lot wise (exchange wise) quarterly/ monthly through SFC (Navy) after getting satisfactory certificate from the users.




18. **Settlement of Dispute.** If any dispute arises between the User (BN) and the Bidder, the decision of the user will be considered paramount. All matters of dispute or differences arising out of this contract between BN (First Party) and the Bidder (Second Party), the decision of Naval Headquarters shall be final.

19. **Cancellation of the Contract** BN reserves the right to cancel this maintenance contract fully or lot wise (exchange wise) for BN requirement at no reason at any time, for which a "30 days notice" shall be served to the Bidder. In this regard, payment will be deducted/ adjusted accordingly (for whole/lot wise). The Bidder also empowered to cancel the contract for which a 90 days notice is required. In such case, the Bidder may be paid part of the maintenance charge proportionately for the duration he has carried out the maintenance for whole or lot wise. In that case (If cancelled by the bidder), BN reserves the right to impose penalty proportionately.

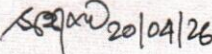

15.4.26
MD MOMINUL ISLAM
Lt BN
Member Secy
in-Charge
NHO Telephone Exchange
Dir. of Signals
Date: 15.4.26
Directorate of Signals

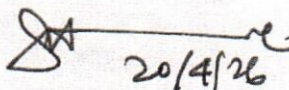

15.4.26
MD ABU SUFIAN
Lt Commander BN
Rep of DNE
(Repair)
Member
Dir. of Naval Engineering
Naval Headquarters
Dhaka-1213
Date: 15.4.26


KHALID MUNTASIR
Lt Commander BN
Staff Officer (Gen. Electrical)
Rep of DNVCE
Directorate of Naval Weapons
and Electrical Engineering
NHO, Banani, Dhaka-1213
Date:


S.4.26
M SAMI
Lt Rep of DNE
Staff Officer (NS-1)
Member
Naval Headquarters
Banani, Dhaka-1213
Date:


19/4
ZAYNAL ABEDIN MAHBUS
Captain BN
Dir. of Signals
Member
Naval Headquarters
Date:


20/04/26
M SOHEL AZAM
Captain BN
Dir. of Naval Plans
Member
Naval Headquarters
Dhaka-1213
Date:


20/4/26
MD SHAMSUL HAQUE
Comdant BN
Dir. of Naval Operations
Member
Naval Headquarters
Banani, Dhaka-1213
Date: