

TENDER SPECIFICATION- MAINTENANCE CONTRACT FOR IP/ DIGITAL/ ANALOG PABX SYSTEM AND TELEPHONE NETWORK OF NHQ (INCLUDING SHAHEENBAG), BNS ISSA KHAN (INCLUDING LOVE LANE), DHAKA, BNA, SOLAM, TITUMIR, MONGLA AND NIRVIK

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.	NHQ (Including SHAHEENBAG)	NEC	1 Year (From 01 Jul 2026 to 30 Jun 2027)	02
2.	BNS ISSA KHAN (Including LOVE LANE)	KAREL		02
3.	BNS DHAKA			01
4.	BNA			01
5.	SOLAM			01
6.	BNS TITUMIR			01
7.	BNS MONGLA			01
8.	BNS NIRVIK			01

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

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

4. **Telephone Networks.**

a. All junction lines and subscribers connection with the PABX within NHQ (Including SHAHEENBAG), BNS ISSA KHAN (Including Love Lane), DHAKA, BNA, SOLAM, TITUMIR, MONGLA and NIRVIK.

b. Besides, NWD telephone connections through the MDF to various offices and residences under NHQ (Including SHAHEENBAG), BNS ISSA KHAN (Including Love Lane), DHAKA, BNA, SOLAM, TITUMIR, MONGLA and NIRVIK 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 NHQ (Including SHAHEENBAG), BNS ISSA KHAN (Including Love Lane), DHAKA, BNA, SOLAM, TITUMIR, MONGLA and NIRVIK 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 (NHQ including SHAHEENBAG).

Description of Existing System	List of Spares (To be used as ready Stock)
a. 02 x Complete PABX systems (NHQ and SHAHEENBAG).	a. Cat 6 Cable (100% copper) - 02 Box
b. 1200 x CLID subscriber's line.	b. RJ45 connector - 100 in no
c. 360 x Digital subscriber's line.	c. Rosette Box - 50 in no
d. 105 x IP subscriber's line (Including additional 300 lines, when connected).	d. Line cord - 25 in no
e. 56 x CO lines.	e. Hand set cord - 25 in no
f. 05 x PC based Attendant Console.	
g. 08 x UPS/Inverter.	
h. 01 x AVR (Auto voltageregulator).	
j. 10 x Backup batteries.	
k. 02 x PC for PABX system with printer.	
l. 08 X E-1 Trunk.	
m. 01 x Rectifier.	
n. 02 x AC.	
p. 01 x MDF	



Lot-2 (ISSA KHAN including Love Lane).

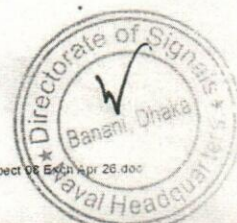
Description of Existing System	List of Spares (To be used as ready Stock)
a. 02 x Complete PABX systems:	a. Roset Box - 250 in no
b. 1390 x Analog/Digital subscriber's line. (Additional lines should be extended as required)	b. Line Cord (15 ft) - 125 in no
c. 455 x IP subscriber's line. (Additional lines should be extended as required)	c. Line Cord (05 ft) - 125 in no
d. 70 x Analog/Digital/IP subscribers line. (Love Lane)	d. Hand Set Cord - 100 in no.
e. 37 x CO (Command) lines.	e. 02 pair Telephone cable - 1,000 meters (Brand: BCSL).
f. 07 x PC based Attendant Console.	f. Cat 6 Cable (100% copper) - 05 box. (Brand -Rosenberger, Vivenco, BRB)
g. 2200 x Analog/Digital/IP telephone sets.	g. RJ45 connector - 250 in no. Brand: Micronet.
h. 08 x UPS/Inverter.	h. Drop wire - 500 Meters.
j. 02 x AVR (Auto voltage regulator).	j. Insulating tape - 05 dozen.
k. 14 x Backup Batteries.	k. Cable joint gum tape - 02 pounds.
l. 03 x PC for PABX system with Printer.	l. Cable securing tie clip - 250 in no
m. 08 x E-1 Trunk.	m. Cat-6 cable jointer - 50 in no
n. 05 x Rectifier.	n. Cable joint sleep - 500 in no
p. 04 x AC.	p. Pencil Battery Type-AA - 250 in no.
q. 02 x MDF.	

Lot-3 (BNS DHAKA).

Description of Existing System	List of Spares (To be used as ready Stock)
a. 1 x complete CLID Digital PABX system, 16+200 lines.	a. Handset cord (Black) - 25 in no
b. 1 x E1 Card.	b. Cat 6 Cable (100% copper) - 01 Box
c. 2 x Attendant Console.	c. RJ45 connector - 100 in no
d. 250 x CLID Telephone Set.	d. Key stone jack - 25 in no
e. 10 x VIP Digital Telephone Set.	e. Patch cord (FC-FC) - 05 in no
f. 1x Main Distribution Frame (MDF).	
g. 4 x Backup Battery (12V each).	
h. 1 x Programming Computer (Brand: Clone) with Software and Printer.	
j. 1 x UPS (Model: Apollo 1000VA).	

Lot-4 (BNA)

Description of Existing System	List of Spares (To be used as ready Stock)
a. 1 x Complete Digital PABX System with 400 line IP Extension..	a. Cat 6 Cable (100% copper) - 02 Box
b. 10 x CLID Trunk Lines.	b. RJ45 connector - 100 in no
c. 50 x CLID extension lines.	c. Rosette Box - 20 in no
d. 20 Digital extension lines.	d. Line cord - 20 in no
e. 150 IP extension lines.	e. Hand set cord - 05 in no
f. 03 x Attendant Console.	
g. 02 x AVR (Brand: Micro)	
h. 04 x Backup Battery (12V each).	
j. 01 x MDF.	



Lot-5 (SOLAM)

Description of Existing System	List of Spares (To be used as ready Stock)
a. 1 x Complete Digital PABX System. b. 14 x Trunk Lines. c. 130 x Extension lines d. 01 x E1 Card. e. 03 x Attendant Console. f. 01 x Main Distribution Frame (MDF). g. 02 x AC. h. 01 x programming computer with printer. j. 01 x Protection. k. 12xUPS	a. CAT6 Cable (100% Copper) - 02 Box b. OFC (6 core) - 150 mtr c. Media Converter (MC) - 15 Pair d. RJ-45 Connector - 150 in no e. IP Telephone Handset Cord - 05 in no f. Telephone Drop Wire - 100 mtr

Lot-6 (BNS TITUMIR)

Description of Existing System	List of Spares (To be used as ready Stock)
a. 1 x Complete Digital PABX System. b. 50 x CO Line with CLID. c. 700 x Subscriber. d. 04 x PC based auto attendant consoles board. e. 01 x Protection (Brand: KRONE). f. 04 x E1 Trunk. g. 01 x Maintenance PC with One Laser jet printer. h. 700 x Telephone Set (500 Caller ID & 200 IP). j. 03 x AC (Brand: General). k. 01 x Main Distribution Frame (MDF) PABX. l. 01 x UPS. m. 04 x Backup Battery (12 V each). n. 01 x AVR (Capacity: 2000VA, Brand: Micro).	a. Cable Ties - 07 Box b. Wall Pin - 07 Box c. Royal Plug - 07 Box d. Screw - 750 pcs

Lot-7 (BNS MONGLA)

Description of Existing System	List of Spares (To be used as ready Stock)
a. 01 x Complete Digital PABX System b. 02x Attendant Consoles. c. 01 x Maintenance computer (Brand: DEL) with software and printer. d. 120 x Digital subscriber's line. e. 230x IP subscriber's line (Including additional 300 lines, when connected). f. 06 x CO lines. g. 01 x Rectifier and charger. h. 04 x Backup Battery (12V each). j. 01 x E1 Trunk k. 01 x UPS (Brand: Micro 1000VA) l. 01x Main Distribution Frame (MDF) m. 300 x IP connection in future.	a. Telephone Drop Wire - 500 mtr b. Cat 6 Cable (100% copper) - 02 box c. RJ45 connector - 25 in no d. Rosette Box - 25 in no e. Line cord - 25 in no f. Hand set cord - 25 in no



Lot-8 (BNS NIRVIK)

Description of Existing System	List of Spares (To be used as ready Stock)
a. 1 x complete CLID Digital PABX system, 10+100 lines.	a. Telephone Drop Wire -500 mtrs.
b. 1 x E1 Card with R2 Signal-30 Channel each.	b. Rosette Box - 25 in no
c. 1 x Radio link Equipment.	c. Line cord - 25 in no
d. 4 and 8 Channel DSP Expansion Board with License and Software.	d. Hand set cord - 25 in no
e. Tower antenna at BNS NIRVIK end and BNS ISSA KHAN end.	
f. Media Getway for ISSA KHAN end.	
g. 1 x Attendant Console.	
h. 70 x Standard Telephone Set.	
j. 6 x VIP Digital Telephone Set.	
k. 1x Main Distribution Frame (MDF) 150 Lines.	
l. 4 x Backup Battery (12V each).	
m. 1x Air Condition (Window type, Capacity 1.5 Tons)	
n. 1 x Programming Computer (Brand: Clone) with Software and Printer.	
p. 1 x UPS (Model: Apollo 1000VA).	

6. **Qualification of the bidder.** The bidders are to meet following qualifications:

- a. Have experience in selling and repair work of PABX related maintenance.
- b. Bidder should have an office in respective area.
- c. 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:

- a. **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.
- b. **Maintenance/ Repair/ Restoration/ Replacement.** 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:

- (1) **Minor Defect.** Within **6 hours** (for replacement of Line/ Trunk Cards, Power Supply Cards, Cable Strip etc including minor software adjustments).



(2) **Major Failure.** Within 24 hours (In case of total system shutdown for whatever reason like failure of hard-disk, CPU, Power-Supply units etc).

c. **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.

d. **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:

(1) Maintenance of existing Optic Fiber Cable (OFC), Copper and others cable network (underground, overhead and in-house wiring) as and when required.

(2) Maintenance of existing IP/ Digital/ Analog telephone sets connected through all PABX systems.

(3) Maintenance of existing items (Cabinets, DP boxes, MDF, IDF etc) connected through all PABX systems.

(4) 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.

(5) 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.

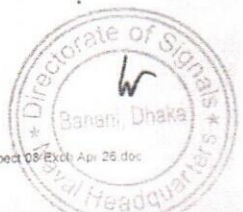
(10) Bidder is responsible for configuring IP/Digital/Analogue telephone sets for connection.

(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 server/ 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.	NHQ (Including SHAHEENBAG)	01	02	05
2.	DHAKA	01	01	02
3.	ISSA KHAN (Including Love Lane)	01	01	09
4.	BNA	01	-	02
5.	NIRVIK	-	-	02
6.	TITUMIR	01	01	04
7.	MONGLA	01	02	02
8.	SOLAM	01	-	02

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.

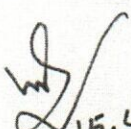
15. **Natural Calamities.** If any damage occurs to the PABX system or Network components due to natural calamities e.g. earthquake, fire, cyclone, flood including heavy lightning and thunder storm, the user will bear the cost of spares and the Bidder will provide the required services for the said repair/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

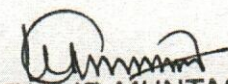
17. **Terms of Payment.** On completion of satisfactory services, respective telephone exchange authority will render a performance certificate (stating that the performance of the Bidder has been satisfactory/ not satisfactory during the maintenance period) to Directorate of Signals and the Bidder quarterly 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.

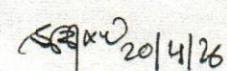

15.4.26
MD MOMINUL ISLAM
Lt BN
Member Secy
Officer-in-Charge
NHQ Telephone Exchange
Directorate of Signals
Date:

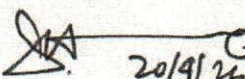

15.4.26
MD TABU SUFIAN
Lt Commander BN
Rep of DNE (Repair)
Directorate of Naval Engineering
Naval Headquarters
Banani, Dhaka-1213
Date:


KHALID MUNTASIR
Lt Commander BN
Sta Officer (BN/Electrical)
Rep of DNE
Directorate of Naval Weapons
and Armaments Engineering
NHQ, Banani, Dhaka-1213
Date:


15.4.26
M SAMI
Lt Commander BN
Staff Officer (NS-1)
Member Headquarters
Banani, Dhaka-1213
Date:


19/4
ZAYNAL ABEDIN MAHBUB
Capt BN
Director of Signals
Naval Headquarters
Date:


20/4/26
M SOHEL AZAM
Capt BN
Director of Naval Plans
Naval Headquarters
Banani, Dhaka-1213
Date:


20/4/26
MD SHAMSUL HAQUE
Commodore BN
Director of Naval Operations
Naval Headquarters
Banani, Dhaka-1213
Date:

