

TENDER SPECIFICATION FOR ESTABLISHING SECURED AND RELIABLE DATA CONNECTIVITY WITH DEDICATED 85 MBPS BANDWIDTH

1. **General.** Bangladesh Navy (BN) intends to establish a secured and reliable data connectivity including voice between different areas/ establishments such as: Naval Headquarters (NHQ) and BNS ISSA KHAN, NHQ and BNS TITUMIR, NHQ and BNS HAJI MOHSIN, NHQ and BNS SHEIKH MUJIB, BNS ISSA KHAN and BNS ULKA, BNS ISSA KHAN and BNS BHATIARY, BNS TITUMIR and BNS MONGLA, BNS ISSA KHAN and BNS SHAHEED MOAZZAM. In this regard, BN calls offer from experienced and capable ISPs to establish the said connectivity.
2. **Purpose.** To establish a secured and reliable data connectivity including voice for messaging/ mailing, central CCTV monitoring, access control monitoring system and data exchanging among the said place.
3. **Bidder.** Name and full address with e-mail of the bidder is to be mentioned.
4. **Scope of Supply/ Services**

Ser	Description	Duration of Contract/ Service
1.	15 Mbps dedicated full duplex Bandwidth between NHQ and BNS ISSA KHAN	01 (one) year
2.	10 Mbps dedicated full duplex Bandwidth between NHQ and BNS TITUMIR	
3.	10 Mbps dedicated full duplex Bandwidth between NHQ and BNS HAJI MOHSIN	
4.	10 Mbps dedicated full duplex Bandwidth between NHQ and BNS SHEIKH MUJIB	
5.	10 Mbps dedicated full duplex Bandwidth between BNS ISSA KHAN and BNS ULKA	
6.	10 Mbps dedicated full duplex Bandwidth between BNS ISSA KHAN and BNS BHATIARY	
7.	10 Mbps dedicated full duplex Bandwidth between BNS TITUMIR and BNS MONGLA	
8.	10 Mbps dedicated full duplex Bandwidth between BNS ISSA KHAN and BNS SHAHEED MOAZZAM	

5. **Qualification of the Bidder.** Any genuine and renowned ISP/ Company/ firm may participate in this tender. In addition, following qualifications with necessary documentary proofs for business experience and up to date trade license with VAT, Tax certificates and client-lists are to be submitted with the offer:
 - a. Shall have point to point connectivity with Bangladesh Internet Exchange Trust (BDIX). Supporting documents are to be submitted in this regard.
 - b. Shall have own Nationwide ISP license and connectivity with 02 International Internet Gateway (IIG).
 - c. Shall have internet connectivity at least in 02 (two) Defence/ Government organizations. Details are to be submitted with the offer for verification by BN.
 - d. Shall have Nationwide Telecommunication Transmission Network (NTTN) service agreements for underground fiber optic connectivity with path level redundancy.
 - e. Membership of ISPAB, NIX and BTRC license shall be preferred. Necessary documents are to be submitted with the offer.
 - f. Shall have own office at Dhaka, Chattogram/ Kaptai, Khulna/ Mongla city for instant support.

- g. Shall have DR site for full redundancy of both IIG and ISP Network. Necessary network diagrams are to be submitted.
- h. Shall have ISO Certification 9001.
- j. Shall have at least 05 (five) years experience of working in internet and network sector of Bangladesh.
- k. Shall have sufficient number of qualified engineers (CISCO and Microsoft certified) and technicians in the company's pay-roll to undertake the intended service contract. List of key engineers and technicians are to be submitted with the offer.
- l. Shall have security measures against Distributed Denial of Service (DDoS) Attack, Protection, Monitoring, Mitigation etc.
- m. Shall have Bogon Filtering and Route Origin Authorization (ROA) Validation capability.
- n. To provide documentation of network design and implemented firewall/ router policy with firewall/ router configuration files.
- p. To ensure the confidentiality through Non-Disclosure Agreement (NDA), provided by BN authority. Failing which, BN reserves the rights to cancel the contract.
- q. No joint venture agreement shall be accepted.

6. **Support Services.** The bidder shall provide support for maintenance of the said network at all times. Following support services are to be provided:

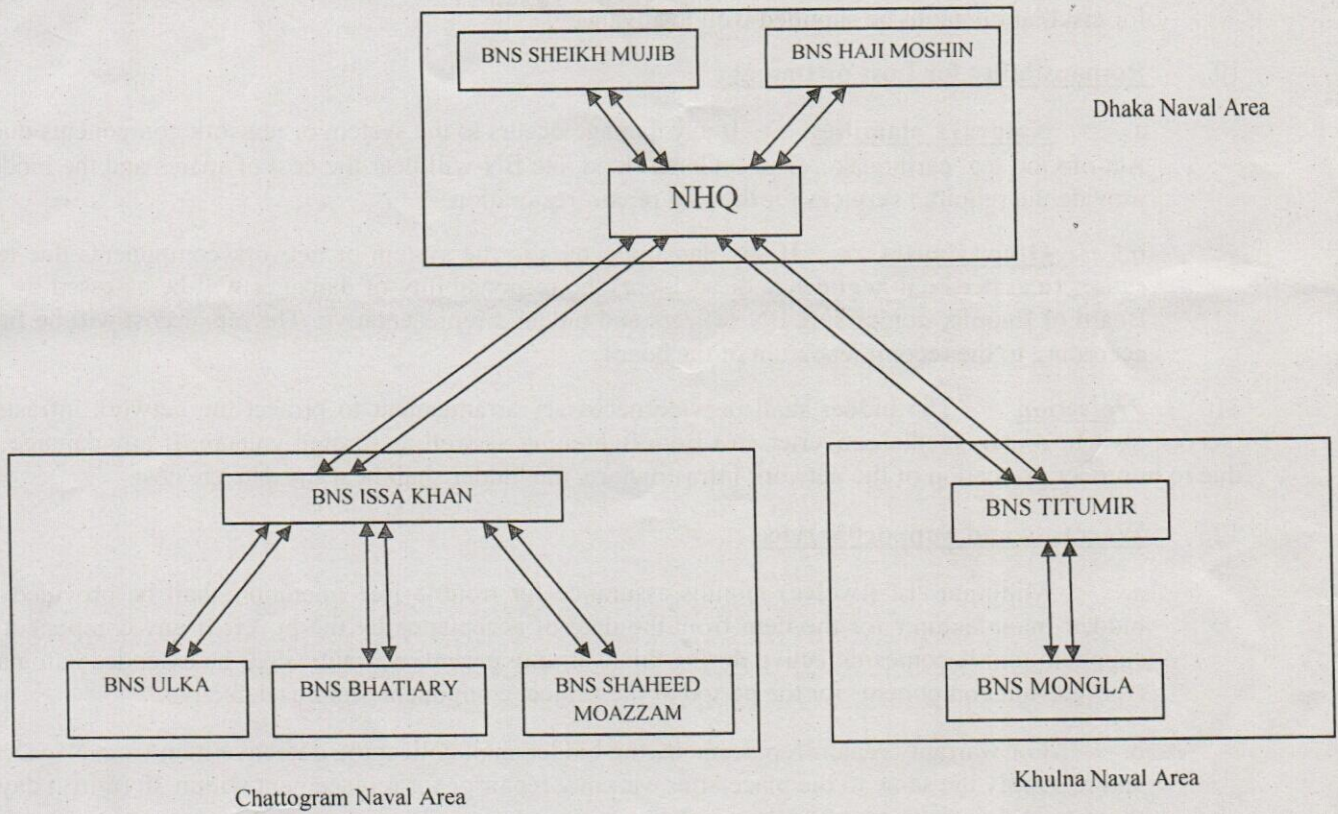
- a. In case of any fault of data connectivity bidder's maintenance team shall arrive at the site promptly. In every case maintenance teams shall arrive at the site after receiving the call over telephone/ FAX/ email from authorized persons of (Directorate of Naval Intelligence, BNS HAJI MOHSIN, BNS SHEIKH MUJIB for Dhaka, BNS ISSA KHAN, BNS ULKA, BNS BHATIARY, BNS SHAHEED MOAZZAM for Chattogram and BNS TITUMIR, BNS MONGLA for Khulna) within 01 (one) hour. The service should be provided round the clock (24 x 7) throughout the year including government holidays.
- b. The maintenance team shall report to authorized persons (Directorate of Naval Intelligence, BNS HAJI MOHSIN, BNS SHEIKH MUJIB for Dhaka, BNS ISSA KHAN, BNS ULKA, BNS BHATIARY, BNS SHAHEED MOAZZAM for Chattogram and BNS TITUMIR, BNS MONGLA for Khulna) over telephone/ mobile/ email. All necessary action to solve/ repair/ replace the equipment should start immediately.
- c. The maintenance team shall comprise of minimum following persons:
 - (1) Two engineers (expert on hardware/software related to network equipment).
 - (2) Two technicians (expert on the system equipment).
- d. In case of any non-compliance or partial compliance of any complaint, NHQ will decide on the basis of explanation from the service provider and in that case decision of Navy regarding payment against that complaint will be final.
- e. The service provider has to replace any damaged item/ equipment within 05 (five) days and make the system functional at their own cost.

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Proposed Secured Data Connectivity Diagram.

The proposed architecture for establishing secured and reliable data connectivity among different areas/ establishments are as follows:



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Expected Features of the Connectivity.

The above mentioned connectivity fulfils the following criteria:

- The network shall be basing on Layer-2 architecture. But if required the network can be modified into Layer-3 Network with the permission of BN authority.
- The medium of the connection shall be optical fiber for all terminal points upto the last mile connection. However provision for future extension should be considered.
- Full network shall be secured, uninterrupted, stable and reliable.
- The bandwidth capacity of each tunnel shall be dedicated (not shared) and shall have provision for future expansion.
- The bidder shall provide technical support to configure last end network device (Router, Firewall etc) as required.
- Location of terminal points is in Dhaka, Chattogram and Khulna Naval Area.

g. **Backup Link (Secondary Connectivity).** Besides primary physical connectivity backup link to be established as secondary. Installation and maintenance point to point full duplex backup link connectivity between ISP and selected Naval Area to be done by the ISP. This link is to be operated when the fiber optic physical connectivity is disrupted due to any natural or man-made incident. The backup link device shall be capable of passing as like fiber optic bandwidth at any situation. It is to be mentioned that, all hardware's and accessories required for the complete secondary connectivity between BN sites and ISP central office shall be provided, installed and maintained by the bidder in a total package solution.

9. **Network Diagram/ Documents.**

- a. The bidder shall submit the complete network diagram along with detailed description of the connectivity.
- b. Technical documents (installation drawings, Installation instruction, specifications etc) required for installation are to be supplied well in advance.

10. **Responsibility for Loss or Damage.**

- a. **Natural Calamities.** If any damage occurs to the system or network components due to an Act-of-God e.g. earthquake, fire, cyclone, flood, etc BN will bear the cost of spares and the bidder will provide the required services for the said repair/ restoration.
- b. **Other Causes.** If any damage occurs to the system or network components due to other causes (e.g. 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.

11. **Protection.** The bidder shall provide necessary arrangement to protect the network infrastructure (server, switch, router, media converter etc) from lightening as well as foreign voltage. If any damage occurs due to improper protection of the network infrastructure, the bidder shall bear the damage cost.

12. **Warranty and Support Service.**

- a. Minimum 12 (twelve) months assurance for trouble free operation shall be provided by the bidder/ manufacturer for the item from the date of acceptance by the buyer. If any component of the supplied item becomes defective during this warranty period, warranty shall be extended automatically (for relevant component) for the period of the subject component remains defective.
- b. For warranty repair/ replacement, the bidder shall collect the defective item from NSSD, Dhaka and re-supply the same to the place after warranty repair or for replacement within 30 (thirty) days from the date of defect at no cost to the purchaser.
- c. The bidder shall provide necessary support service if any component of the supplied items/ service becomes defective during this warranty period. In other cases, for advanced repairing/ replacement of any device, the bidder shall collect the defective item from NSSD, Dhaka.

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13. **Count of Downtime.** BN shall take internet service availability into consideration by discarding the time for which the service was not available due to disruption from bidders end. Accumulation of such down time in a month shall be calculated and an equivalent amount of money shall be deducted from the total bill due for the corresponding month, along with 10% or more of monthly fee for the inconvenience caused to BN.

14. **Tenure of the Service.** Initial tenure of the service shall be for 01 (one) year with effect from the date of commissioning of the network connectivity. This may be extended for further 02 (two) years upon mutual agreements of both parties. After signing of the contract, at any time in future, BN shall have the option to increase/ decrease the bandwidth and pay proportionately as per the quoted rates.

15. **Termination of the Contract.** First party shall reserve the rights to terminate the contract at any time by giving a one month's notice to the second party.

16. **Price Quotation.** The bidder shall quote separate prices (in BDT) per scope of supply/ services in following table:

a. **Onetime Cost**

Ser	Item Description	Price (Tk)
1.	Installation cost of Primary and Secondary Link (Patch cord, TJ box, MC/ SFP and all other required accessories to install link upto router)	
	Sub Total Price =	

b. Recurring Cost

Ser	Description of Each Type Service(s)	Per Mbps Bandwidth Cost (Tk)/ Unit price	Monthly Per Mbps Bandwidth Cost (Tk)	Yearly Per Mbps Bandwidth Cost (Tk)
1.	15 Mbps dedicated full duplex Bandwidth between NHQ and BNS ISSA KHAN			
2.	10 Mbps dedicated full duplex Bandwidth between NHQ and BNS TITUMIR			
3.	10 Mbps dedicated full duplex Bandwidth between NHQ and BNS SHEIKH MUJIB			
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8.	10 Mbps dedicated full duplex Bandwidth between BNS ISSA KHAN and BNS SHAHEED MOAZZAM			
Total Price(a+b)=				

17. Validity of Offer. The offer will remain valid for 06 (six) months from the date of submission of the tender.

18. Source of Supply. To be mentioned.

19. Payment Terms.

a. 100% payment of supply and installation cost (para 16.a) will be paid after acceptance by BN.

b. On completion of satisfactory services for each month, BN shall pay the total amount (for internet bandwidth charges as well as for the support service charges) through SFC (Navy). In case the bidder fails to meet his obligations wholly or partially, he may be penalized proportionately at the discretion of Naval Headquarters.

20. Other Conditions. Following conditions shall apply for execution of the contract:

a. All payments shall be made by BN to the bidder through SFC (Navy) in accordance with the relevant Payment Schedules of the Contract. While paying the appropriate amount of VAT and Income Tax etc shall be deducted by SFC (Navy) from the due amount in accordance with the relevant rules and regulations of the Government. (As such, the bidders are to quote their prices inclusive of all relevant Govt taxes in Financial Offers). Final acceptance shall be issued thereof by ACINS.

b. BN shall not consider increase of price for any items/ services during the total time-span of the project, either due to higher inflation-rate in the country or for increased taxation rate by the Government.

21. Breach of BN Data Integrity and Facilities. The bidder shall undertake utmost measures to preserve the integrity of BN data, records and IT facilities. For any breach of such integrity due to bidder activities, the bidder will be liable and subject to compensation and legal measures as applicable.

22. Site Visit. The bidder may visit the installation sites at Dhaka, Chattogram/ Kaptai, Khulna/ Mongla before submission of tender to avoid any difficulties and confusion. The request for site visit shall be made at least five working days before the date of visit.
23. Pre-bid Meeting. A pre-bid meeting will be arranged at NHQ after floating this tender. To know the meeting schedule, bidders are requested to contact telephone no: 2155 (SO TECH DNI)/ 2344 (SO IT DNIT) or mobile No: 01769702155 (SO TECH DNI)/ 01769702344 (SO IT DNIT)
24. Optional items. Bidder may offer additional item (if deemed necessary) as optional items including their cost.
25. Security Clearance. After signing of the Contract, the bidder will submit the bio-data of his engineers/ technicians for obtaining security clearance. If any employee is not security cleared' by BN, he/she will be substituted. In any case, the bidder (or his employees) will ensure complete 'Security of Information' while working with this project.
26. Compliance Statement. A clear and complete compliance statement of the bidder with necessary specification and drawing/ diagram shall be submitted for evaluation of the quotation. If any clause of this specification does not commensurate with offered items/ services practically, the deviation has to be spelt out clearly. Incomplete compliance statement shall attribute to cancellation of the offer.
27. Delivery. The complete system including all accessories shall be delivered within 60 days.

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