



## Dutch-Bangla Bank Limited

IT Operation Division, Head Office

3rd Floor, House No # 47

Road No # 9A

Dhanmondi, Dhaka-1209

Ref: DBBL/100/17/2016/

January 10, 2016

### Tender Schedule

#### Technical Offer

#### 1. Bidder's Particulars:

- a) Name of the Company :
- b) Address :
- c) Contact Person :
- d) Telephone No. :

#### **2.1 Participating vendor should have permission from Bangladesh Bank for marketing foreign products in Bangladesh as per the guideline of Foreign Exchange Regulation Act 1947, Section 18A**

(section 18A : 1[ 18A. (1) Notwithstanding anything contained in any other law for the time being in force, no person shall, except with the general or special permission of the Bangladesh Bank, act or accept an appointment to act as an agent in the trading or commercial transactions, or as a technical or management adviser or any other employee, in Bangladesh (whether or not a citizen of Bangladesh) of a person resident in Bangladesh (but not a citizen of Bangladesh) or of a company (other than a banking company) not incorporated under any law in force in Bangladesh.

(2) A person acting or holding an appointment to act as an agent or as an adviser or any other employee in Bangladesh of a person or company referred to in sub-section (1) immediately before the commencement of the Foreign Exchange Regulation (Amendment) Ordinance, 1976 (Ord. No. LXXVI of 1976), may continue to so act for a period not exceeding six months from such commencement unless the Bangladesh Bank has, upon an application made in this behalf in such form and containing such particulars as the Bangladesh Bank may direct, granted him permission to continue to so act thereafter.

**Explanation.-** For the purpose of this section, the term "person" shall include a firm, or a business organisation or concern whether incorporated or not.

#### **2.2 Experience of the Bidder in supplying the quoted items in any organization in Bangladesh. Need to mention at least two similar projects for which the project value is not less the amount of quoted value in different groups. (Proper evidence need to be submitted):**

- a) Group-01 (Servers) :
- b) Group-02 (Computers) :

- c) Group-03 (Laser printers & Scanner) :
- d) Group-04 (Dotmatrix Printer)
- e) Group-05 (Network Equipment) :
- f) Group-06 (Network Accessories) :
- g) Group-07 (On-line UPS & Automatic Voltage Stabilizer )
- h) Group-08 (CCTV) :

SAMPLE

### 3. Technical Specification:

#### 3.1 Group-01 (Servers):

##### 3.1(a) 2 Processor Servers:

Descriptions	Required Specification	Quoted Specification
Brand	IBM/Lenovo/ HP/ Dell/ SUN/ Oracle/Cisco	
Model No.	Specify the model	
Form Factor	Rack Mountable	
Chassis	At least 2U Rack Unit with rack mountable Rail Kit and cable organization arm	
Chipset		
Type of Chipset	Intel® C 608 Series or higher	
Processor:		
Type of Processor	2 X 10 Intel XEON Processor or higher	
Processor clock speed	2.60 GHz or Higher	
Quick Path Interconnect	Minimum 8.0 GT/s or Higher	
Processor Number	E5-2600V3 or Higher	
Cache Memory	Minimum 25 MB level 3 Cache per processor or higher	
No of Processors	02	
Main memory:		
RAM	128 GB (16 GB X 8 or 8 GB x 16) Expandable up to 768 GB minimum	
RAM type	DDR4 ECC 1866 MHz Fully Buffered/RDIMM RAM with Heat Sinks or higher	
Total no of RAM Slots	Twelve (12) slots or higher for each processor slots	
Video Memory	Integrated 8/16 MB or higher	
Disk Storage:		
Internal HDD bus interface type	Hot plug 2.5/3.5 inch SAS (Serial Attached SCSI)	
Internal HDD Capacity	08 X 600 GB or higher (10k/15k RPM) SAS Hot-Plug able Hard Disk Drives or Higher	
No of Hot-pluggable Media bays	Eight (08) or higher	
RAID Controller	Raid Controller with 1 GB battery backed cache support Raid Level 0,1,5,6,10,50	
PCI-X slots	04 no PCIe x16/ x8/ x4 or Higher	
Others		
Optical Drive	USB DVD SATA Writer	
Ethernet Card	10/100/1000 (03 Nos.) {1 integrated dual or quad port and 2 add-on dual port in PCIe slot } TOE hardware enabled including key for all NICs The add-on 2 nos Ethernet cards should be a proper iSCSI HBA.	
Remote management	Integrated remote management capability	

Descriptions	Required Specification	Quoted Specification
port	from day 1 with dedicated network connection supporting GUI (iLoAdv/iDRAC Enterprise /RSAII/IMM/compatible)	
System management	OEM supplied system management software to manage all system from single console from day 1	
Power Supply	2x Redundant Hot-Swappable Power Supply from day 1	
Keyboard	IBM/Lenovo/ HP/ Dell/Cisco/ SUN USB or PS2 Keyboard	
Mouse	IBM/Lenovo/ HP/ Dell/ Cisco/SUN 3 button USB or PS2 Optical Mouse with mouse Pad	
Dongle cable	USB to PS/2 Dongle cable, which will be used to connect the KVM switch with the Servers monitor, keyboard and mouse.	
Operating System	Not Required	
Operating System support	The server must support: i) Microsoft Windows 2012 R2 server Data Center Edition ii) Microsoft Windows 2012 R2 server Standard Edition iii) Red Hat Linux Enterprise Edition 7 (or latest edition)	
Warranty	03 years full warranty	
Delivery	Within 60 days after receiving the formal Work Order	

### 3.2 Group-02 (Computers):

#### 3.2(a) Computer (Category-1):

Descriptions	Required Specification	Quoted Specification
Brand	IBM/ Lenovo/ HP/ Dell	
Model	Please specify	
Chip Set	Intel Q77/Q85 Express Chipset or any Q series Higher Chipset	
Type of Processor	Core i5-2320 Processor or Higher	
Processor Number	i5-2320 or Higher	
Processor clock speed	3.0 GHz or Higher	
Processor FSB	Minimum 1333 MHz	
Cash Memory	Minimum 6 MB Level 2 Cache	
No of Processors	01	
RAM	Minimum 04 GB (2 GB x 2) DDR3 RAM 1333 MHz Expandable up to 8GB	
Total no of RAM Slots	Four (04) slots	
Hard Disk	Minimum 300 GB or Higher SATA 7200 rpm	
Optical Drive	IBM/ Lenovo/ HP/ Dell DVD writer	
Video RAM	Minimum integrated 64MB or Higher	
Parallel Port	Must be built in with the system	
Network Card	10/100/1000 LAN Card	
Monitor	IBM/Lenovo/ HP/ Dell 17" TFT LCD Flat	

Descriptions	Required Specification	Quoted Specification
	Square monitor or Higher (1280x1024 res minimum).	
Keyboard	IBM/ Lenovo/ HP/ Dell PS2 or USB Keyboard	
Mouse	IBM/ Lenovo/ HP/ Dell 3 button PS/2 or USB Optical Mouse with mouse Pad	
Software	Windows Professional 8.0 R2 (64 bit) with original license, CD & Manual. Downgraded to Windows 7 (32 bit) Professional with SP2 or Higher	
Warranty	03 years full warranty	
Delivery	Within 60 days after receiving the formal Work Order	

SAMPLE

### 3.2(b) Computer (Category-2):

Descriptions	Required Specification	Quoted Specification
Brand	IBM/ Lenovo/ HP/ Dell /Cisco	
Model	Please specify	
Chip Set	Intel Q77/Q85 Express Chipset or any Q series Higher Chipset	
Type of Processor	Core i5-2320 Processor or Higher	
Processor Number	i5-2320 or Higher	
Processor clock speed	3.0 GHz or Higher	
Processor FSB	Minimum 1333 MHz	
Cash Memory	Minimum 6 MB Level 2 Cache	
No of Processors	01	
RAM	Minimum 04 GB (2 GB x 2) DDR3 RAM 1333 MHz Expandable up to 8GB	
Total no of RAM Slots	Four (04) slots	
Hard Disk	Minimum 300GB or Higher SATA 7200 rpm	
Optical Drive	IBM/ Lenovo/ HP/ Dell DVD writer	
Video RAM	Minimum integrated 64MB or Higher	
Parallel Port	Must be built in with the system	
Network Card	10/100/1000 LAN Card	
Monitor	IBM/Lenovo/ HP/ Dell 17" TFT LCD Flat Square monitor or Higher (1280x1024 res minimum).	
Keyboard	IBM/ Lenovo/ HP/ Dell PS2 or USB Keyboard	
Mouse	IBM/ Lenovo/ HP/ Dell 3 button PS/2 or USB Optical Mouse with mouse Pad	
Software	Windows Professional 8.0 R2 (64 bit) with original license, CD & Manual. Downgraded to Windows 7 (32 bit) Professional with SP2 or Higher	
Microsoft Office	Microsoft Office 2013 Standard Edition. 1 License for each machine – (Paper License (MOLP) have to be provided with media kit for each machine) or Latest release.	
Warranty	03 years full warranty	
Delivery	Within 60 days after receiving the formal Work Order	

### 3.3 Group-03 (Laser Printer & Scanner):

#### 3.3(a) Laser Printer:

Descriptions	Required Specification	Quoted Specification
Brand	HP/ Samsung	
Model	Please specify	
PPM	Minimum 35	
RAM	Minimum 128MB	
Processor speed	Minimum 600MHz	
Monthly duty cycle	50,000 pages	
Interface	USB & Network	
Warranty	01 year	
Delivery	Within 60 days after receiving the formal Work Order	

#### 3.3(b) Scanner:

Descriptions	Required Specification	Quoted Specification
Brand	HP	
Model	Minimum G3110 or higher	
Type	Flat bed with negative scanning facility	
DPI	Minimum 4800x9600 or higher	
Interface	USB	
Warranty	01 year	
Delivery	Within 60 days after receiving the formal Work Order	

### 3.4 Group-04 (Dotmatrix Printer)

#### 3.4(a) 80 Columns Dotmatrix Printer:

Descriptions	Required Specification	Quoted Specification
Brand	EPSON	
Model	Please specify	
Print Head	24 Pinimpact dot matrix	
Speed	300 CPS	
Print Columns	80	
Interface	Parallel and USB	
USB Printer Cable	At least 1 (one) 5 Feet cable	
Parallel Printer Cable	At least 1 (one) 5 Feet cable	
Delivery	Within 45 days after receiving the formal Work Order	
Warranty	01 year	

### 3.5 Group-05 (Network Equipment):

**ALL ACTIVE COMPONENTS SHOULD BE FROM A SINGLE OEM MAKE ONLY**

#### 3.5 (a) Branch Switch:

Required Specification		Quoted Specification	
Items Description	Quantity / Time	Items Description	Quantity / Time
Brand	CISCO/JUNIPER		
Model	Please specify		
Architecture	Layer-3 switching		
10/100/1000 BaseTauto sensing ports with PoE supports for all ports	24 or Higher		
SFP ports (Not to be shared with inbuilt 10/100/1000 ports)	4 or Higher		
Total no of usable ports after adding the SFP post should be	28 or Higher		
1000 BaseTEthernet Copper Module for SFP Port	1		
Power Cord UK	1 or Higher		
Switching Fabric Bandwidth/ Backplane	160Gbps or higherat Layer 2 and Layer 3.		
Forwarding Rate	Based on 64 Byte packet it should be min 65Mpps or Higher		
DRAM	Minimum 256 MB		
Flash memory	Minimum 64 MB		
Form factor	19" rack mountable		
Delivery	Within 45 days after receiving the formal Work Order		
Warranty	01 year full warranty		

**The features that must be included in the offer are given below:**

1. Functionality at Half Duplex and Full Duplex speed
2. Required VLAN / Spanning Tree Support
  - a. The switch should support 802.1Q VLAN support and VLAN trunking
  - b. The switch should support 802.1Q tag per port
  - c. The switch should support MAC-based VLANs
  - d. The switch should have support for 802.1p
  - e. The switch should support Integrated Routing and Bridging
3. IEEE 802.1Q VLAN support for at least 255 VLANs
4. Standard Supports
  - a. IEEE 802.1p prioritization with min. four priority queues
  - b. IEEE 802.3x Flow control
  - c. IEEE 802.3ad Link aggregation
5. Redundancy and Fault Backup Support
  - a. Support for IEEE 802.1w Rapid Spanning Tree Protocol (RSTP).
  - b. VLAN Rapid Spanning Tree (PVRST+).
  - c. Equal-cost routing for load balancing and redundancy.
  - d. Bandwidth aggregation up to 04Gbps through Gigabit EtherChannel/ equivalent technology and up to 800 Mbps through Fast EtherChannel/ equivalent technology.



6. Quality of Service
  - a. Four Egress queues per port
  - b. Traffic prioritization
  - c. 802.1p support
  - d. DSCP recognition
7. Required Protocol and Standards Support
  - a. IEEE 802.1Q, 802.1p, 802.1D, 802.3x, 802.3ad, 802.1w, 802.1s.
  - b. IEEE 802.3u 100BASE-TX specification.
  - c. IEEE 802.3ab 1000BASE-T specification.
  - d. IEEE 802.3z 1000BASE-X specification.
  - e. 1000BASE-X (SFP), 1000BASE-SX, 1000BASE-LX/LH, 1000BASE-ZX.
  - f. RMON I and II standards.
  - g. SNMPv1, SNMPv2c, SNMPv3.
  - h. IGMP v1/v2/v3
  - i. IGMP Snooping
  - j. RIP v1/v2
  - k. Should be upgradeable to BGPv4, OSPF.
  - l. IPv6 in Hardware.
  - m. QoS: Should support SRR (Shaped Round Robin)
  - n. QoS: Should support control plane policing.
  - o. Should support auto configuration of POE/ IEEE 802.3af enabled endpoint devices.
  - p. 802.1x= Should support 802.1x for guest VLAN as well Dynamic VLAN assignment.
  - q. Should support dynamic routing protocols like RIP, OSPF, BGP and multicast technologies like PIM-SM, PIM-DM. Should support IGMP-v1, v2 and v3.
8. Required Security Features like
  - a. IPv6-routing in hardware with MAC address notification & MAC address Locking.
  - b. DHCP interface tracker, Access control lists, Private VLAN edge.
  - c. Port security, SNMPv3, SSH, VLAN ACLs (VACLs) and Port-based ACLs (PACLs).
  - d. IEEE 802.1x with VLAN assignment allows a dynamic VLAN assignment for a specific user regardless of where the user is connected.
  - e. Bridge Protocol Data Unit (BPDU) and Spanning Tree Root Guard (STRG).
  - f. Atleast 1000 access control entries (ACEs).
  - g. Support for Terminal Access Controller Access Control System Plus (TACACS+) and Remote Authentication Dial-In User Service (RADIUS).
  - h. Rate limiting Committed Information Rate (CIR) function. Bandwidth should be allocated based on several criteria, including MAC source address, MAC destination address, IP source address, IP destination address, and TCP or UDP port number.
9. Managed with free embedded management software including Port description feature
10. Management through Web View (Web Based Management), Telnet, SNMPv1, SNMPv2, SNMPv3, Console, RMON, CLI, Remote Switch Port Analyzer (RSPAN), Remote Monitoring (RMON), IEEE 802.1D Spanning-Tree Protocol, IEEE 802.1p CoS Prioritization.
11. Embedded RMON: 4 groups of RMON (Statistics, Alarm, Events, History)
12. Support for 1000BaseT, 1000BaseSX, and 1000BaseLX/LH, 1000BASE-ZX SFP.
13. RJ-45 and/or USB console port.

### 3.5 (b) Branch Firewall:

Required Specification		Quoted Specification	
Items Description	Quantity / Time	Items Description	Quantity / Time
Brand	CISCO/JUNIPER		
Model	Please specify		
10/100BaseT WAN ports	01 or Higher		
10/100BaseT LAN switch ports	06 or Higher		
PoE Switch Ports	02 or Higher		
The no of Firewall Zone	Minimum 02 or Higher		
VPN-3DES/AES encryption capability	Must be built in the offered device		
Concurrent user license.	50 or Higher		
Support for Fire walling and Routing	From Day 1		
Power Cord UK	1		
Form factor	Please specify		
Delivery	Within 60 days after receiving the formal Work Order		
Warranty	01 year full warranty		

#### The features that must be included in the offer are given below:

1. The Firewall should be an appliance based firewall
2. Firewall should be on purpose built hardware platform and should not use any of the commercially available Operating system
3. Firewall should be with minimum 150 Mbps throughput
4. 3DES VPN performance should be minimum 100 Mbps
5. Firewall should support up to 10,000 Concurrent sessions
6. Firewall should support at least 85,000 Packets Per Second
7. Integrated Hardware based encryption.
8. Should have 8 numbers of 10/100 ports for at least 02 different Zones
9. The Firewall should support Layer 2 (Transparent) mode.
10. Firewall should support static NAT, Policy based NAT and PAT
11. Firewall should be capable minimum 10 Concurrent VPN tunnels
12. Firewall should be capable of Dynamic routing on VPN
13. Firewall should support DES (56-bit), 3DES (168-bit) and AES encryption
14. Firewall should support client based IPSec VPN Tunnels
15. Firewall should be able to prevent against replay attacks
16. Firewall should support IPSec NAT Traversal
17. Support for Standard Access Lists and Extended Access Lists to provide supervision and control.
18. Support for Fire walling with IDS by a hardware and/or software upgrade without changing the proposed appliance
19. Should have Control SNMP access through the use of SNMP with MD5 authentication.
20. Implement Access Lists on the firewall to ensure SNMP access only to the SNMP manager or the NMS workstation.
21. VPN Acceleration Module should be present in the proposed appliance.
22. IPSec, DES, 3DES and AES Support from Day 1.
23. Should be able to maintain Multiple Privilege Levels.
24. Support for Remote Authentication Dial-In User Service (RADIUS) and AAA and Terminal Access Controller Access Control System Plus (TACACS+)
25. MD5 Route Authentication should be supported.

### 3.5 (c) Branch Routers:

Required Specification		Quoted Specification	
Items Description	Quantity / Time	Items Description	Quantity / Time
Brand	CISCO/JUNIPER		
Model	Please specify		
10/100/1000BaseT Routing ports	04		
RAM	Minimum 512 MB		
Flash	Minimum 512 MB		
Modular Slot	04or Higher		
Should have on board VPN acceleration mechanism as well as shouldsupport additional VPN acceleration hardware for better VPN performancewith IPv6encryption	Must be present		
Firewall Features	Built in		
Security and Advance security license	Should be present from Day 1		
FXO ports	02 or Higher		
FXS and/or DID port or Equivalent	02 or Higher		
Required PVDM/Equivalent for all the above FXO and FXS ports	Please specify and quote for the same		
SRST or Equivalent Feature	Minimum 10 Seat license should be quoted		
Power Cord UK	1 or Higher		
Delivery	Within 60 days after receiving the formal Work Order		
Warranty	01 year full warranty		

#### The features that must be included in the offer are given below:

1. The architecture should be based on high speed CPU.
2. Should be a multi-service capable router
3. The Router should be a Single Box configuration (for voice separate appliance canbe use) and modular, so that the purchaser has the flexibility to use the appropriate choice of interfaces as and when required
4. The router should have provision for hardware based compression engine by providing an internal slot on the motherboard (Preferable) or equivalent.
5. Route Processors should have minimum 256/512 MB of flash/internal memory to support multiple software images for backup purposes and future scalability.
6. Route Processor should have 512 MB of RAM/DRAM to support large routing tables & other memory intensive processes with capability to scale up to 01 GB.
7. Integrated Hardware based encryption.
8. Routers should be capable of supporting VPN with standard user identification and authentication mechanisms (by adding appropriate hardware/software) from Day 1
9. The software on the router must have online software reconfiguration to ensure that changes made to a router configuration take place with immediate effect.
10. Support for VRRP
11. Should have modular slots for voice and data interface cards or quote with an external Appliance.
12. Route Processor should perform the following functions:
  - Build L2 & L3 forwarding information tables.

- Allow for centralized configuration of router including services like stateful firewall, deep-packet inspection etc.
  - Negotiating and maintaining IPSec authentication, encryption methods, and encryption keys.
  - Load the software image onto installed modules
  - MAC classification & Layer 2 and Layer 3 forwarding,
  - QoS classification, policing and shaping
  - Multicast replication with low-jitter traffic paths
  - Security access control lists (ACLs),
  - VPNs and load balancing,
  - Support flow-export mechanism without impacting performance
13. Router should have an integrated auxiliary and/or console interface; in addition it should support a standard USB interface to allow for software image & configuration portability.
  14. Should have status and health LEDs to diagnose system status on the front panel.
  15. Support for Serial Connection.
  16. Should support the following LAN interfaces: Fast Ethernet and Gigabit Ethernet.
  17. All the LAN ports should be in compliance with 802.3 standards
  18. Should be capable of supporting 802.1q VLANs and VLAN trunking.
  19. Front-to-back airflow and be NEBS compliant is Preferable.
  20. Should support port aggregation for higher bandwidth and redundancy
  21. The router should support wide variety of interfaces including E1 and Ethernet 10Mbps to 100 Mbps WAN interfaces
  22. Should have Fast software Upgrades while the router is in service
  23. Should have integrated online diagnostics features
  24. Should support IPv6 from day 1.
  25. The operating system should support a simple CLI interface for configuration
  26. Should support the following WAN protocols: X.25, HDLC, PPP, and Frame Relay
  27. Should support Multilink PPP as per RFC 1990.
  28. Should support LFI (link fragmentation and Interleaving) for multiservice networks
  29. Should support RIPv2, OSPF, MPLS, IS-IS and BGP4 routing protocols, with support for all the features like OSPF on demand etc& IP multicast routing protocols: DVMRP, PIM Version 2 (Sparse Mode & Dense Mode), IGMP v1, v2, v3
  30. Should support Enterprise Services feature set with support for protocols like Multiprotocol Label Switching (MPLS), Ethernet over MPLS (EoMPLS), Frame Relay over MPLS (FRoMPLS), ATM over MPLS (ATMoMPLS) & Virtual Route Forwarding (VRF)
  31. The router should support multiple levels of privileges and authentication for user access; along with SSH support for secured device access.
  32. Should Support for Remote Authentication Dial-In User Service (RADIUS) and AAA and Terminal Access Controller Access Control System Plus (TACACS+)
  33. Should be capable of Multiple Privilege Levels.
  34. The software should support Network Address Translation (NAT) and Port Address Translation (PAT)
  35. Support for Standard Access Lists and Extended Access Lists to provide supervision and control.
  36. Should support source and destinations based ACLs, time based ACLs, VLAN / Port-based ACLs & Dynamic reflexive ACLs
  37. Should support MD5 authentication for routing protocols
  38. Control SNMP access through the use of SNMP with MD5 authentication.
  39. Implement Access Lists on the router to ensure SNMP access only to the SNMP manager or the NMS workstation.
  40. Support for DHCP Server functionality should be present
  41. Support for Fire walling and IDS/IPS (by a software upgrade)
  42. Software should provide packet filtering and firewall functionality
  43. The router should support IPSec encryption for data confidentiality, with support for dedicated hardware modules to offload encryption processes from the CPU.
  44. The router should support IPSec, DES, 3DES and AES encryption standards

45. Should support protection against anti-replay attacks & perform Unicast Reverse Path Forwarding in hardware
46. IPSec implementation should be IETF compliant
47. Should support RSVP
48. Support for Auto-QoS, (Quality of Service) or Equivalent including Policy Management Capability
49. Should support the standard routing protocols with Auto QoS or Equivalent for Voice & Video Applications
50. Should have support for 802.11a/b/g wireless in the box or adding a separate appliance.
51. Should support endpoint security mechanism like Admission control, 802.1x.
52. Should support full Voice over IP and IP telephony features. Should have support for FXS/FXO/E&M as well as High density Voice fax network modules.
53. Should support Class of Service, Prioritization, Policy based Routing and Low Latency Queuing
54. Should support cRTP to compress voice (RTP) streams
55. Support for different voice codec's as G.711, G.729, G.729a, and G.723. and/or equivalents codec's
56. The router should be able to support IP precedence and also able to configure six classes of service
57. Should be able to do accounting based on IP precedence
58. The router should support ingress and egress Committed Access Rate (CAR) features.
59. Should be possible to configure CAR based on IP precedence, TCP port number or by application flow
60. Should support SNMP v1 and v2
61. Should support Telnet client functionality
62. Should support TFTP/FTP for downloading of Router software
63. The router should be able to support multiple OS images for smoother up gradation.
64. The software on the router must have online software reconfiguration to ensure that changes made to a router configuration take place with immediate effect.
65. Should support online and extensive debugging features
66. Should support fine-grained data collection including detail traffic statistics by protocol and IP address.
67. The router should support the following Accounting mechanism
  - Network Time Protocol.
  - Packet & Byte Counts.
  - Start Time Stamp & End Time Stamps.
  - Input & Output interface ports.
  - Type of service, TCP Flags & Protocol.
  - Source & Destination IP addresses.
  - Source & Destination TCP/UDP Addresses

### 3.5 (d) IP Phone Basic (IPP1):

Required Specification		Quoted Specification	
Items Description	Quantity / Time	Items Description	Quantity / Time
Brand	CISCO/Avaya		
Model	Please specify		
10/100 Switch port	Minimum 2 ports		
Display	03 inch monochrome display or higher		
Programmable Key	02 or Higher		
Phone license should be included	01		
Power supply	PoE		
Warranty	01 year		

#### The features that must be included in the offer are given below:

1. It should be a full-featured IP phone with speakerphone and handset.
2. The phone should have at least two programmable line buttons.
3. Following Speakerphone properties should be present:
  - a. Full-duplex speakerphone with acoustic echo cancellation.
  - b. Speakerphone includes Speaker On/Off, Microphone Mute, and Headset buttons that are lit when active.
4. Following Display properties should be present:
  - a. The phone should have a grayscale graphical LCD (3-inch or higher) which may provide features such as date and time, calling party name, calling party number, digits dialed, presence information etc.
  - b. Phone should have flexibility of features and applications, and significantly expands the information viewed when using features such as Services, Information, Messages, and Directory.
  - c. Display should have ready access to missed, received, and placed calls (intercom history and directories). Incoming messages should be identified and categorized on the display to allow users to quickly and effectively return calls using direct dial-back capability.
5. Settings should allow user to adjust display contrast, select background images (if available), and select ringer sounds through the menu.
6. Configuration can be set up either automatically or manually for Dynamic Host Control Protocol (DHCP)
7. Internal 2-port Ethernet switch should allow for a direct connection to a 10/100BASE-T Ethernet network through an RJ-45 interface with single LAN connectivity for both the phone and a collocated PC. System administrator should be allowed to designate separate VLANs (802.1Q) for the PC and phone (voice and data traffic).
8. A volume-control toggle provides easy decibel-level adjustments of the handset, monitor speaker, and ringer.
9. Quality of Service (QoS) options of the phone should support CDP and 802.1Q/p standards, and can be configured with an 801.1Q VLAN header containing the VLAN ID overrides configured by the Admin VLAN ID
10. The phone should be an interoperable IEEE 802.3af PoE (Class 1 or higher device).
11. The phone should support Cisco Unified Communications Manager Versions 7.0, 8.0, 9.0, 10.0 or greater.
12. Signaling Protocols should be Session Initiation Protocol (SIP) with Cisco call control.



### 3.5 (e) IP Phone Standard (IPP2):

Required Specification		Quoted Specification	
Items Description	Quantity / Time	Items Description	Quantity / Time
Brand	CISCO/Avaya		
Model	Please specify		
10/100 Switch port	Minimum 2 ports		
Display	05 inch monochrome display or higher		
Programmable Key	02 or Higher		
Phone license should be included	01		
Power supply	PoE		
Warranty	01 year		

#### The features that must be included in the offer are given below:

1. It should be a full-featured IP phone with speakerphone and handset.
2. The phone should have at least two programmable line buttons.
3. Following Speakerphone properties should be present:
  - a. Full-duplex speakerphone with acoustic echo cancellation.
  - b. Speakerphone includes Speaker On/Off, Microphone Mute, and Headset buttons that are lit when active.
4. Following Display properties should be present:
  - a. The phone should have a large grayscale graphical LCD (5-inch or higher) which may provide features such as date and time, calling party name, calling party number, digits dialed, presence information etc.
  - b. Phone should have flexibility of features and applications, and significantly expands the information viewed when using features such as Services, Information, Messages, and Directory.
  - c. Display should support localization requiring double-byte Unicode encoding for fonts.
  - d. Display should have ready access to missed, received, and placed calls (intercom history and directories). Incoming messages should be identified and categorized on the display to allow users to quickly and effectively return calls using direct dial-back capability.
5. Settings should allow user to adjust display contrast, select background images (if available), and select ringer sounds through the menu.
6. Configuration can be set up either automatically or manually for Dynamic Host Control Protocol (DHCP), Trivial File Transfer Protocol (TFTP), Cisco Unified Communications Manager, and backup Cisco Unified Communications Manager instances.
7. Internal 2-port Ethernet switch should allow for a direct connection to a 10/100BASE-T Ethernet network through an RJ-45 interface with single LAN connectivity for both the phone and a collocated PC. System administrator should be allowed to designate separate VLANs (802.1Q) for the PC and phone (voice and data traffic).
8. Phone should have volume control that provides easy decibel-level adjustments for the speakerphone, handset, headset, and ringer.
9. Quality of Service (QoS) options should support differentiated services code point (DSCP) and 802.1Q/p standards.
10. IP address assignment can be statically configured or configured through the DHCP client.
11. Phone should support IEEE 802.3af PoE (Class 2).
12. The phone should support Cisco Unified Communications Manager Versions 7.0, 8.0, 9.0, 10.0 or greater. Supported in Cisco Unified Communications Express and SRST Version 4.1
13. Signaling Protocols should be Skinny Client Control Protocol (SCCP) and Session Initiation Protocol (SIP) with Cisco call control.

### 3.5 (f) Closed Rack for Branches:

Items	Description	Quoted Specification
Closed Rack	APC/IBM/HP/DEL/Emerson 19" 42U (73.4 inches) 1200 mm depth with: <ul style="list-style-type: none"> <li>▪ Frame with top cover</li> <li>▪ 2 pc side panel</li> <li>▪ 1pc front door perforated</li> <li>▪ 1pc rear door</li> <li>▪ 1pc power panel { 12 Way UK/C13 sockets (in case of C13, converter for C13 to 3 pin UK female should be included) capable and input should be 32/16 Amp industrial socket)</li> <li>▪ 2 pc fixed equipment shelf which will be able to carry 50 Kg load depth should be 900mm and should have 2/4 posts from front to rear bar to evenly distributed the load</li> <li>▪ 1 pc sliding equipment shelf with front to rear bar post which will be able to carry 20 Kg load</li> <li>▪ 4 pc castor wheel with adjustable feet.</li> </ul>	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	

### 3.6 Group-06 (Network Accessories):

#### 3.6 (a) Modular:

Product	Description	Quoted Specification
Modular	SYSTIMAX / PANDUIT/ ADC Krone/TE CAT 6 Modular	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	

#### 3.6 (b) Faceplate:

Product	Description	Quoted Specification
Face plate	SYSTIMAX / PANDUIT / ADC Krone/ TE 02 ports face plate (Capable of tool free assembly) with dust protected shutter	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	



### 3.6 (c) Patch Panel:

Items	Description	Quoted Specification
Patch Panel	SYSTIMAX / PANDUIT/ ADC Krone /TE 24 Port CAT-6 Patch Panel with cable organizer and Horizontal Cable Management kit <ul style="list-style-type: none"><li>• All 24 port should be modular</li><li>• All 24 CAT6 modular should be provided with the proposed panel</li><li>• Any port should be changed not effecting other</li><li>• Cable organizer for rear of the patch panel to be provided</li><li>• Cable organizer for front of the patch panel to be provided</li></ul>	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	

### 3.6 (d) Patch Cord 10 feet:

Product	Description	Quoted Specification
Patch Cord	SYSTIMAX / PANDUIT/ADC Krone/ TRE CAT-6 (10 feet)	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	

### 3.6 (e) Patch Cord 05 feet:

Product	Description	Quoted Specification
Patch Cord	SYSTIMAX / PANDUIT/ ADC Krone/TE CAT-6 (05 feet)	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	

### 3.6 (f) Patch Cord 03 feet:

Product	Description	Quoted Specification
Patch Cord	SYSTIMAX / PANDUIT / ADC Krone/TE CAT 6 (03 feet)	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	

### 3.6 (g) Patch Cord 10 feet CAT- 6 Cross over:

Product	Description	Quoted Specification
Patch Cord	SYSTIMAX / PANDUIT / ADC Krone/TE CAT 6 Cross over (10 feet)	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	

### 3.6 (h) Patch Cord 5 feet CAT-6 Cross over:

Product	Description	Quoted Specification
Patch Cord	SYSTIMAX / PANDUIT / ADC Krone /TE CAT-6 Cross over (5 feet)	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	

### 3.6 (i) CAT 6 UTP cables:

Product	Description	Quoted Specification
CAT 6 UTP Cable	SYSTIMAX / PANDUIT / ADC Krone/TE CAT-6 UTP cable box. (1000 ft per Box)	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	01 year	

### 3.7 Group-7 (On-line UPS and voltage stabilizer):

#### 3.7 (a) 10KVA or higher Truly On-Line UPS:

Descriptions	Required Specification	Quoted Specification
Brand	Emerson/APC/Riello/ ABB/ AROS/ SOCOMEC SICON/ EATON	
Model	Please specify	
Country of Origin	US/EUROPE	
Country of Manufacturing	Please specify	
Type	Double Conversion Truly On-Line	
Transfer Time	Zero	
Capacity	10KVA or higher	
Backup Time	1 Hour at Full Load 10KVA (Specify battery VAH)	
Type of Battery	Sealed & Maintenance free	
No of Battery with specifications (VAH)	Please specify	
Input Voltage	220 Volt, Single Phase	
Input Voltage Range	±10%	
Output Voltage	220 Volt, Single Phase	
Frequency	50Hz±5%	
Wave	Sinusoidal (Pure Sine Wave)	
Form Factor	Rack Mountable in standard 19" rack	
Batter Box Form Factor	19" standard rack width OEM factory made or custom made approved by the bank authority	
Software and Interface	UPS Monitoring and Management Software and Ethernet interface for TCP/IP connection from ups from Day 1 (SNMP Card)	

Descriptions	Required Specification	Quoted Specification
Miscellaneous	<ul style="list-style-type: none"> <li>The proposed UPS should be able to work in parallel with another same size, brand and model UPS,( parallel kit model no)</li> <li>The proposed unit should be able to work in serial with another same size, brand and model UPS.</li> <li>To achieve the functionality if any other equipment and/or component is required it should be added and quoted for the same.This additional device should have SNMP capability. Please specify parallel kit model no.</li> </ul>	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	02 years full including battery	

### 3.7(b) 12 KVA or higher Voltage Stabilizer:

Descriptions	Required Specification	Quoted Specification
Brand	Please specify	
Model	Please specify	
Capacity	12 KVA or higher	
Control Type	Servo Control	
Input Voltage	140V-250V	
Input Voltage Range	±30%	
Output Voltage	220 Volt	
Frequency	50Hz	
Other specification	<ul style="list-style-type: none"> <li>Input cable and socket should be provided to connect with the main power.</li> <li>Output cable and socket should be provided to connect with the UPS input</li> <li>Cable and socket should be capable of taking 63 amp current</li> </ul>	
Cable	The length of Input and Output cable must not be less than 10 meter each.	
Delivery	Within 60 days after receiving the formal Work Order	
Warranty	02 years full	

### 3.8 Group-08 (CCTV):

Descriptions	Required Specification	Quoted Specification
3.8(a) Camera	1/3" CMOS/CCD bullet type IR Day-night Camera with built-in Lens and at least 35 LED and wall mount bracket & power supply. Brand: Samsung/ Panasonic/ Sony Model: Please specify	
3.8 (b) DVR System	16 Channel DVR Brand: (Samsung/ Panasonic/ Sony Model: Please specify HDD: Minimum 12TB (3TBx4) CD/DVD-Writer: Minimum 52X Network Interface: RJ 45 Display: Capable to display on 5 computer monitor simultaneously Recording Capability: At least 12 months video snaps using 16 cameras and motion detection capability.	
3.8 (c) LED Monitor	18.5" or higher LED Monitor/TV Brand: Samsung/ Panasonic/ Sony Model: Please specify	
3.8 (d) Co-axial Cable	Please specify	
3.8 (e) Power Cable	Please specify	
3.8 (f) Delivery time	As and when required with 1 week's notice (not before 60 days from the work order)	
3.8 (g) Warranty	01 year full	

## **Terms and Conditions**

1. The participating company must submit the offer in two envelope system. The first envelope will contain the technical offer and the second envelope will contain the financial offer. The two envelopes must be covered in a large envelope. All the envelopes will contain the full name and address of the participating company. The name, address and telephone number of the contact person should be mentioned in the forwarding letter submitted with the technical offer.
2. **The participating vendors should quote for all the items for an individual group in the schedule. Partial offer for individual group will not be accepted.**
3. **Sealed quotations have to be submitted to the Head of IT Operation of the bank on or before January 26, 2016 by 4.00 p.m. The technical offers will be opened at 4:10 p.m. on the same day in presence of bidders, if any. The financial offer will be opened later on. The evaluation of the technical offers will also be made later on.**
4. All the pages of the tender schedule as well as all the offered documents should be duly signed by the authority of the bidder.
5. Proper documents and data sheet have to be provided supporting the compliance of all the specification in the offered model which is stated in the required specification, feature and description.
6. Proper bills of material have to be provided for the quoted product.
7. **2.5% (two and half percent) of the quoted price to be submitted with the offer through separate PO/BG (BG as per enclosed format Annexure-A) for individual group in favor of "Dutch-Bangla Bank Limited" as earnest money for the period of offer validity. If successful supplier fails to deliver, install and configure the hardware within the stipulated time, the earnest money will be forfeited. The PO/ BG must be enclosed inside the Financial Offer's envelope.**
8. The earnest money will be released after successful installation, configuration and operation of the hardware.
9. All quoted price should include delivery, installation, configuration and training cost and VAT, Tax, etc, if any.
10. Warranty period will start after delivery and successful power on self-test of all the devices. The AMC will start after the end of the warranty period. Both the warranty and AMC should be backed by a similar back-to-back warranty/AMC between the supplier and the principal for DBBL project, a draft copy of which should be submitted to the bank along with the offer.
11. Full warranty will cover replacement or repairing of the defected / corrupted hardware within 24 hours of the reporting the problem. The problem should be attended on the spot within 2 hours of reporting.

12. The successful company must submit original technical and user manuals of all the hardware and software at the time of delivery of the items to the Bank.
13. The terms of payment will be as under:
  - \* 50% of the total value after delivery of the hardware in each phase.
  - \* 30% of the total value after installation of the hardware in each phase.
  - \* 20% after 3 (three) months of payment of total 80% of the bill.
14. Photocopy of all the relevant documents should be submitted with the offer including:
  - a. Valid Trade License
  - b. GIR/TIN certificate
  - c. Proof of experience as desired in the general section of this schedule
15. The offers should have validity for at least December 31, 2016.
16. The ordered quantity may increase or decrease based on the actual requirement of the Bank at the time of issuing Work Order. The Bank may re-order on the work order price within December 31, 2016.
17. **Delivery for some group items should be made in different phases within one year from the date of the work order as and required. More details will be available at the IT Operation Division.**
18. Delivery of on-line UPS, AVR, CCTV and closed Rack should be made initially at Bank's warehouse. Later installation should be done at different locations of the bank as and when required. The items to be carried to installation sites at respective vendor's cost.
19. All the prices should be mentioned in Bangladeshi Taka.
20. The authority reserves the right to relax, change or drop any of the terms and conditions of the schedule without any further notice.
21. The Bank shall not be under any obligation to accept the lowest quotation.
22. The Bank authority reserves the right to accept or reject any or all, in part or full offers.
23. The technical offer should be submitted as softcopy also in CD/DVD/Flash drive in the technical envelop.

Seal & Signature  
With Name of the participating vendor



## Dutch-Bangla Bank Limited

IT Operation Division, Head Office

3<sup>rd</sup> Floor, House No # 47

Road No #9A, Dhanmondi R/A

Dhaka-1209

### Financial Offer

Valid until December 31, 2016

1. Name of the Company :

2. Quoted price :

Sl No	Items ****	Qty	Unit Price including VAT & Tax (BDT)	Total Price including VAT & Tax (BDT)	AMC with spare including VAT & Tax (% of Unit Price)
3.1 (a)	2 processor Server	5			
3.1 (b)	Operating Systems for 2 processor server				
	i) Microsoft Windows 2012 server Data Center Edition with 25 CAL (against DBBL's MOLP)	1			
	ii) Microsoft Windows 2012 server Standard Edition with 10 CAL (against DBBL's MOLP)	1			
	iii) Red Hat Linux Enterprise Edition 7 (or latest edition) with 3 years' subscription	1			
3.2 (a)	Computer (Category-1)	290			
3.2 (b)	Computer (Category-2)	10			
3.3 (a)	Laser Printer	75			
3.3 (b)	Scanner	25			
3.4 (a)	80 Columns Dotmatrix Printer	32			
3.5 (a)	Branch Switch	25			
3.5 (b)	Branch Firewall	10			
3.5 (c)	Branch Router	25			
3.5 (d)	IP Phone Basic (IPP1)	40			
3.5 (e)	IP Phone Standard (IPP2):	10			
3.5 (f)	Closed Rack for Branches	12			
3.6 (a)	Modular	3000			
3.6 (b)	Face plate	1500			
3.6 (c)	Patch Panel	70			



Sl No	Items ****	Qty	Unit Price including VAT & Tax (BDT)	Total Price including VAT & Tax (BDT)	AMC with spare including VAT & Tax (% of Unit Price)
3.6 (d)	Patch Cord 10 feet	540			
3.6 (e)	Patch Cord 05 feet	540			
3.6 (f)	Patch Cord 03 feet	20			
3.6 (g)	Patch Cord 10 feet CAT- 6 Cross over	20			
3.6 (h)	Patch Cord 5 feet CAT-6 Cross over	20			
3.6 (i)	CAT 6 UTP cable	100			
3.7 (a)	10KVA or higher Truly On-Line UPS	6			**
3.7 (b)	10 KVA or higher Voltage Stabilizer	6			
3.8 (a)	Camera	120			
3.8 (b)	DVR System	10			
3.8 (c)	LED Monitor/TV	10			
3.8 (d)	Co-axial Cable/ UTP Cable	Pls. specify in rft.			
3.8 (e)	Power Cable	Pls. specify in rft.			
3.8 (f)	installation charge	Pls. specify			
<b>TOTAL</b>					

\*\*\*\* The full specification of the item is as per Technical Offer.

\*\* Please mention the % AMC cost with Battery and without Battery for on-line UPS.

Seal & Signature

With Name of the participating vendor

DUTCH-BANGLA BANK LIMITED  
SENA KALYAN BHABAN, 3<sup>th</sup> FLOOR  
195, MOTIJHEEL COMMERCIAL AREA  
DHAKA-1000, BANGLADESH

**GUARANTEE NO:** \_\_\_\_\_ **DATED:** \_\_\_\_\_ **EXPIRY** \_\_\_\_\_

WHREAS ..... (HEREIN AFTER CALLED THE 'SUPPLIER') HAS UNDERTAKEN IN TERMS OF THE TENDER PUBLISHED IN DAILY .....NEWS PAPER DATED.....FOR SUPPLY INSTALLATION AND COMMISSION OF RELATED HARDWARE AND SOFTWARE, NETWORK ITEMS AND CCTV UNDER THE A TOTAL VALUE OF .. ..... (.....) WITH DUTCH-BANGLA BANK LIMITED, SENNA KALYAN BHABAN, 3<sup>rd</sup> FLOOR, 195, MOTIJHEEL COMMERCIAL AREA, DHAKA-1000 (HEREIN AFTER CALLED THE CUSTOMER).

AND WHEREAS IT HAS BEEN ADVISED BY THE CUSTOMER THAT THE SUPPLIERS' HAVING BUSINESS AT ..... FLOOR, ..... , DHAKA-1000 SHALL FURNISH THE CUSTOMER WITH AN UNCONDITIONAL BANK GUARANTEE BY A RECOGNIZED BANK, ACCEPTABLE TO THE CUSTOMER FOR THE SUM OF ... ..... (.....) FOR 06 (SIX) MONTHS AS SECURITY MONEY AS PER THE TERMS OF THE TENDER.

WE (BANK NAME, ADDRESS), HEREBY IRREVOCABLY UNDERTAKE TO PAY UP TO THE SUM OF TAKA ..... (.....) UPON RECEIPT OF YOUR FIRST WRITTEN DEMAND AND WITHOUT CAVIL OR ARGUMENT, ANY SUM OR SUMS SET OUT IN SUCH WRITTEN DEMAND, WE ACKNOWLEDGE THAT THE CUSTOMER WILL NOT BE REQUIRED TO PROVE OR SHOW GROUND(S) OF REASON(S) FOR THE DEMAND FOR THE SUM SPECIFIED HEREIN.

OUR MAXIMUM LIABILITY UNDER THIS GUARANTEE SHALL IN NO EVENT EXCEED THE AGGREGATE SUM OF Tk ..... (.....) ONLY.

THIS GUARANTEE IS VALID FROM ..... UNTIL CLOSE OF BANKING BUSINESS IN BANGLADESH AT 5.00 PM ON ..... (HEREIN AFTER CALLED "THE EXPIRY DATE") AND ANY CLAIM FOR PAYMENT IN THIS RESPECT MUST REACH THE BANK ON OR BEFORE THE EXPIRY DATE. THIS GUARANTEE MAY BE EXTENDED FOR THE FURTHER PERIOD OF SIX MONTHS OR ANY PERIOD SPECIFIED BY THE BUYER UPON RECEIPT OF THE WRITTEN REQUEST FROM THE CUSTOMER. AFTER THE

**GUARANTEE NO: \_\_\_\_\_ DATED: \_\_\_\_\_ EXPIRY**

EXPIRY, THIS GUARANTEE SHALL AUTOMATICALLY BECOME NULL AND VOID NOTWITHSTANDING THE FACT THAT THIS GUARANTEE IS NOT RETURNED TO US FOR OUR CANCELLATION.

DHAKA

DATE.....

SAMPLE