

NOTICE INVITING TENDER (NIT):

NOTICE INVITING TENDER for Supply , Installation, Configuration, Commissioning and Maintenance Testing of approx. 44(Forty Four) nos of Network Switches with L2 manageable (802.1x Compliant)switches in all the Branches (mentioned Annexure III) of the Bank at different Locations of the Bank in West Bengal .

Name of work:-Supply, installation ,Configurations and onsite support Service for three (03) years from the date of Installation of manageable Switches for the use of Branches .Therefore to have homogeneous network of L2 Manageable switches across the Branches of the Bank. Bank intends to procure the required switches to be place at 43 Branches of the Bank .

Equipment Sheet

SI. No.	Particular	Approx. Quantity
1	Technical specifications as per Annexure A [Part A] [Only those bidders who are comply in Annexure A are requested to participate]	Approx. 44 Nos as per Annexure III

Critical Date Sheet

SI. No.	Particulars	Date	Time
1	Date of Online Publication of Tender	03/08/2024	10.00 A.M.
2	Tender Document Download Start Date	03/08/2024	11.00 A.M..
3	Bid Submission Start Date	03/08/2024	11.30 A.M.
4	Bid Submission Close Date through Online	24/08/2024	11.00 A.M.
5	Opening of Technical Bids	26/08/2024	11.30 A.M.
6	Opening of Financial Bid(To be notified later)		

1.1 IMPORTANT NOTES TO THE BIDDER:

- Prospective bid applicants are advised to read carefully the minimum qualification criteria as mentioned in 'Instructions to Bidders' .
- Tenders shall be submitted in 2 parts-Technical Bid [Part A] and Financial Bid [Part B].
- Loss or damage in transit will be solely borne by the supplier. The suppliers may, if he/she so desires, get the goods insured and include such charges in the tendered rate.
- No Advance Payment will be made in favour of any supplier under this tender. The bidders are requested to not to mention any such clause for advance payments in their bid documents and if there is anything in this regard, the same will be ignored for consideration and no communication will be done in this regard.
- The bidders must submit necessary valid documentary proof/s of their Firm's Registration/Authorization along with their GST and other Service Tax Registration No. and PAN details along with the quotation.
- The Bank reserves the right to verify and confirm all necessary documents as submitted by the venders in support of their tender bids along with their credentials/documents required for the eligibility criteria. In any case, any information as furnished by the bidder/s if found fabricated or mala-fide or false or incorrect, the tender bids will be rejected and necessary legal proceedings may be taken against the bidders.

Once the Bank authority confirms its Purchase Order (PO) to the respective winning bidder either through email or by issue of a formal Work Order, as the case may appear, the item/s is to be delivered and installed accordingly within a period of Twenty One(21) days from the date of issuance or placement of such purchase order. If delivery does not happen within 21 (Twenty)days, the Bank reserves the right to cancel the PO.

- The Selected Bidder will be liable to configure & commissioning the said Proposed managed Switch to the installed Router and Firewall (if any) at Branches /HO along with free of costs for operations of the existing Banking Applications Software . For online payment, the bidders are requested to provide a copy of cancelled cheque along with their Invoice.

8. If the last date of tender submission falls on holiday/strike/Bandh etc., the last date for submission of tender will be extended up to the next working day.
9. This tender is floated for procurement of the Managed L2 Switches and the stated quantity for the same is indicative ones and their actual quantity for purchase may vary as per the requirement of the Bank.
10. The switches should carry 3 (three) years on-site compensatory warranty & support from the date of installation
11. The warranty details & product brochures for switches should be submitted with the bid documents . .
12. The bidder firms /Agencies should have a **Minimum Average Annual Turnover** of 3 (three) Crores for the last three(03) previous years viz., F.Y. 2020-21, F.Y. 2021-22 and F.Y. 2022-23.

1.2 Scope for procurement of additional Switches

Bank reserves the right to order for supply of additional switches of the same configurations quoted above up to 30% of the total numbers of switches at the same cost , if order is placed within the first years from the date of purchase order

1.3 Installation and commissioning of the Managed Switches

1. Physical installation in the network Racks at all the Branches of the Bank ;
2. Installation , commissioning & configurations of the active and passive networking components ;
3. Unmounting of existing Switches and tracing /realignment of cables ;
4. The Switches shall be configured & the necessary cables /patch cord etc shall be responsibility of the bidder
5. Migration from old unmanaged switches to new Managed switches , if required ;
6. All the necessary tests to be performed by the vendor prior as well post mounting & configuration of the switches ;
7. Any cabling related works during the replacement of existing switches ., if necessary , at one or many locations shall be provided by the bidder .
8. All the supplied switches will provide 99.9% uptime during the warranty period and if the installed switches was out of order at the Branches , the same will be changed by a new one within the same say without hampering the normal Banking business at Branches

1.4 INSTRUCTIONS/GUIDELINES TO THE BIDDERS

1. **Collection of Tender Documents:** The bidder can search and download the Tender Documents from the website i.e Wbtenders.gov.in and also upload the required documents electronically within the stipulated dates mentioned earlier. The bidders may visit the Bank's website www.wbstcb.com
2. Tenders shall be submitted in 2 Parts:-Part "A"/Annexure "A"(Technical Bid)& Annexure "B"/Part "B" (Financial bid)
3. **Warranty:** As per the Original Equipment Manufacturer(OEM)/manufacturer terms and conditions. for three (03) years from the date of Installation of all the equipments & necessary proof will be submitted along bid.
4. The intending bidder/s must quote their price for their different items of the work within the BOQ.
5. **Time Extension:** Generally no extension of time will be allowed. At unavoidable circumstances, any extension of time is subject to the consideration of the Tender Inviting Authority.
6. **Penalty Charges:** Penalty charges will be imposed @ 5 % (Five)per week on the tendered amount subject to Maximum @ 10% of the tendered amount, if the work will not be completed within stipulated time period of the tender or no satisfactorily support services within the warranty period .
7. **Document Verification:** The bidders may be called on to be present at the Bank for evaluation, verification, and clarifications, if any and may be asked to bring their original documents for satisfaction of the authority. If the bidders fail to produce the same within the stipulated time frame, their bid/s will be liable to rejection.
8. **Rejection Bids:**
 - a) Incomplete bids are liable to be rejected.
 - b) Unsigned tenders/bids, unattested corrections and overwriting by bidders are also liable for rejection.
 - c) The schedule for accepting the tenders shall be strictly followed-late tenders shall not be accepted.

- d) Bids submitted without supporting documents as mentioned or required to submit with bids are liable to be rejected.
- e) The bidder/s must confirm in their bid acceptance in full of the terms and conditions in this enquiry. Any non-acceptance or deviations from the terms and conditions must be clearly brought out. However, bidders must note carefully that any conditional offer or any deviation from the terms and conditions of this enquiry may render the quotation liable for rejection.
- f) Each page of the tender document including annexure duly stamped and signed by the bidder must be submitted along with the tender bid and the tender should be page-numbered.

9. **OEM AUTHORIZATION:** BID Specific authorization (MAF) is mandatory with letter head including contact person name, mail ID and Phone number and gives the certification that particular bid model which was submitted by the bidder was not obsolete in next 5 (Five) years & Without MAF , the submitted Tender Documents will be disqualified /rejected .

10. **The selected bidder must deposited 10% of the quoted price in the form of DD/BG in favour of the Bank before awarding of work order and that will be returned after satisfactorily completion of the whole job ;**

11. The bidder service office must be located within Kolkata, West Bengal and if required provide the support Services during the warranty period without making any charges .

12. Bids are invited from Manufacturers or their Authorized Resellers .

13. Bidder should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service centre in city of Kolkata, West Bengal for attending the after sales service. Details of Service Centres are to be uploaded along with the bid with Service Center contact detail.

14. Bidder should have service centre in West Bengal.

15. **TECHNICAL COMPLIANCE :-** Bidder should provide bid specific technical compliance declaration on OEM letter head with signature and seal by the authorized signatory of the OEM along with phone Number .

16. Please submit all the requisite documents & no further clarification allowed

17. That the selected bidder will provide details of contract person , telephone number , email id , facsimile number for providing service support in the respective sites during the time of warranty period and the technical expertise to solve the issue related to the supplied items .

18. All the supplied hardware accessories are same make

19 . **Technical & Financial Documents**

Sl. No	Category	Sub-category	Sub category descriptions
A	Certificates	Certificates	PAN Card of the Company
			Last 3 years audited Balance Sheet along with IT return
			GST registration Certificates
			Valid Trade License
			Security certificates will be required from the OEM
			Certificate of Sole authorized Agent (OEM Certificates)
B	Financial	Last 3 years audited Balance sheet	

Note :Failure of submission of above mentioned documents by any bidder,bidder will summarily be rejected

20(A)Submission of Copy and Opening of Tender: All tender documents should be uploaded (all relevant documents) in the website www.wbtenders.gov.in . Any bid through the Email or Telegraphic/fax offer will not be considered as valid bid and will be ignored straight way. Any submission of the tender documents after the specified date and time shall not be considered.

- a) The selected bidders will deposit 10% of the work order value (Excluding GST) as a performances guarantee and should be released after the warranty period i.e after 3 (Three) years from the date of Installation .
- b) The Bank can cancel the said Tender Notice at any time without giving the reasons
- c) Vendors should clearly submit both the Technical ,Financial and other certifications For Supply & Installation of managed Switches at Bank “ and “Financial / Technical Bid” on the respective bids .
- d) Bidder should quote only one OEM product and in case more than one bid is submitted by the bidder ,all the bids will be rejected ;
- e) The bidder is responsible to carry out the entire end-to-end implementation of the solution as per the scope of work specified in the NIT.

- 21. Delivery & installation :** During the installation , the selected bidder will provide the technical support for implementation of Firewall ,Active directory ,VLAN ,Proxy Server etc along with free of cost at the Branches/HO of the Bank. If any material is not delivered within the time period specified in the Work Order, the Bank Authority reserves the right, without incurring any liability, to cancel the work order, and there by, to purchase the same from another vendor. Any provision thereof for delivery by installment shall not be construed as obligatory unless agreed upon by both the parties. If the vendor is unable to complete the work performance at the time specified for delivery, by reason of strikes, labor disputes, riot, war fire or other causes beyond the Vendor's reasonable control, the vendor will be allowed to extend the period of the Work Order.
- 22.** The selected bidder will provide first level support within Four(04) Hours on any Working day's during warranty period for 3 years from the date of installation of items. The supplied Accessories should conform to detailed technical specification mentioned in Annexure "A"/ Part "A" ;
- 23.** That the all Hardware delivered by selected bidder must be covered by a comprehensive warranty for a minimum period of three (03)years from the date of installation and supplied Accessories will provide 99.9% uptime during the warranty period ;
- 24.** That the selected bidder will bear all expenses for repair/replacement of the supplied accessories/system during the warranty period and this Bank will not make any separate payment for any such expenses to be incurred within the comprehensive warranty period & all the replacement materials are original & same make
- 25.** That the selected bidder will transfer ownership of the equipments in favour of the Bank and the same shall be effected as soon as the equipments is brought to the sites of the Bank's premises, installed thereafter and accepted by the bank;
- 26.** The Selected bidder will give a training to the Bank's s employee regarding the supplied items along with free of Costs
- 27.** The selected bidder will comply & complete the Call within same day during warranty period for 3 years from the date of delivery of items . The supplied managed switches should conform to the detailed technical specification mentioned in Annexure "A"[Technical Documents] ;
- 28.** That selected bidder will be responsible to give the call logging facility with the OEM , if any kind of problem arises in the supplied accessories within the warranty period & to provide the physical support services of the installed managed Services including the Software/Hardware/Firmware at the premises of Bank along with free of cost;

29 . Clause of Bank Guarantee/EMD value

That the vendor shall agree to furnish a Bank Guarantee (BG) for 3(three) years validity for a maximum amount of 10% of all Hardware cost excluding the GST Charges . The said BG will be forfeited by Bank and realized by Bank , in the following cases :-

- i) That if at any time the vendor's performances are considered unsatisfactory by the Purchaser in regard to maintenance of service or supply of spares or any related matter affecting operational efficiency of the supplied Switches operation, the Purchaser Bank shall be at liberty to terminate the contract after issuing 15 day's notice on the vendor and the Purchaser Bank shall be at liberty to invoke the Bank guarantee furnished by the vendor for liquidated damage @ 05 % (five) per week subject to maximum of 10% of the contract value.
- ii) In case of break down or glitches or snags of the Switches, vendor will be under obligation to restore the services of the system within the same day after receiving intimation from the Purchaser Bank either in writing or by Fax or telephonically or email during the period of warranty period failing which the vendor firm shall pay liquidated damages @ 05 %(five)per Week of the contract value in respect of the projects subject to a maximum of 10% of the cost of work order value executed by the vendor;
- iii). If any Emergency Situations , the vendor will give the support Services in any Holiday/beyond the Office Hours without the extra charges to the Bank;

iv). That vendor will bear all expenses for repair/replacement of the Switches installed by you instantly within the same day and this Bank will not make any separate payment for any such expenses to be incurred by you within the comprehensive warranty period for supplied Switches (provided the breakdown is not due to negligence, faulty electrical points/ mains, act of nature & others including unprepared/ unclean site) but the purchaser bank will not bear the cost of labour Charges for supplied Switches during warranty period ;

v). That this Bank may like to arrange for independent/outside and/or in-house team for testing and certification of hardware supplied by the selected bidder ;

(vi) The call related to the problem of the supplied Switches will be given by Bank personnel to the selected bidder either through email/Phone no/Whatsapp given by the said vendor and Vendor's responsibility will be restored the said problem within the same day from the time of call logging by Bank with free of costs during the warranty period ;

30. Payment Terms :-

The Bank will release payment in the following manner:-

- i) 50% of the billed amount will be released by the Purchaser Bank on receiving delivery at the respective site
- ii) 30% of the Billed amount will be released by the Purchaser Bank after installation, Configuration, Testing, Commissioning of Links and Maintenance of the supplied items and the hardware supplied by the vendor should be strictly in conformity with the specification of the order under Annexure "A" duly certified by Concern Officer & being free from operational defect and commissioning of the Links ;
- iii) Further 10% of the billed amount for Hardware is to be released 15 day's after the date of installation
- iiii) Remaining 10% will be released after furnishing of bank guarantee of 10% of the work order value [excluding the Taxes] for three (03) years validity from the date of issuance ;
- iv) The applicable TDS taxes would be deducted by the Bank at source , if any , as per prevailing rates .

31.All the jurisdiction are within the limit of Honorable Kolkata High Court Only

32. The Bank was not bound to accept the lowest bidder(L1)& any time Bank may Cancel the said Notice inviting Tender [NIT]

33. Regarding Financial Bid:

- i) The Financial Bid submitted by the bidders should contain the price of the material required to be uploaded as given in the BOQ format by bank
- ii) All costs should be given in the exact figures and words. All the Govt. levies like sales tax, Custom Duties, and educational CESS, service tax ,GST etc., if any, should be included within quoted amount for each item or component in the BOQ.
- iii) Prices shall not be subject to any escalation in the future prices
- iv) Prices should be exclusively for the Bank, including installation charges/ Configuration/Testing/ Commissioning and Maintenance [If any] should be specified separately.
- v) Bank may increase/decrease the quantity of the items mentioned in Annexure B /Part "B"
- vi) All the amount which will be mention in the Financial bid are including of all the Taxes

34. Service Level Agreement & Non-Disclosure Agreement Form

1. The bidder shall provide on-site warranty and support for the Switches supplied at all the locations for a period of three (03) years from the date of signing of the Switches installation on 24 X 7X365 basis ;
- 2 The Switches shall be configured with all required cables for cross connecting the switches by the bidder ;
- 3 For any single device failure, faulty device has to replaced within same day from the time of intimation of the failure ;
4. The selected bidder must execute a service level agreement & Non –Disclosure Agreement form as per the format provided by Bank on a stamp paper.

35. Delivery Scheduled

Expected Delivery & installation scheduled

Sl. No	Task	Expected period of delivery& Commissioning
1	Delivery of Switches in all the Branches of the Bank	Within 3 weeks from the date of issue of work order
2	Commissioning of the Switches in all the Branches of the Bank	Within 2 weeks after delivery of Switches/Hardware

36. Warranty support

Warranty support shall be covered for three (03) years from the date the system is successfully commissioned at all the 43 locations of the Bank. During the warranty period, the successful bidder will provide the onsite implementation support for both the Hardware & software related to the Managed Switches ;

1. The warranty support shall be provided on 24 X 7X 365 basis and the support shall include parts replacement & associated efforts to perform the parts replacements & upgraded the patches/Firmware etc ;
2. The successful bidder will sign agreement with the OEM for any services required from them and shall be responsible for any SLA in this regard, which shall be agreed between bank and the successful bidder ;
3. During the warranty period, successful bidder shall provide the upgrades & updates to be patched on system .
4. Warranty should not become void if Bank buys any other add-on Hardware /Software from a third party and installs it within production. However, the warranty by the selected bidder will not apply to such third party Hardware /Software items installed by Bank ;
5. The successful bidder will provide the proof of ATS/CON support/Extension of Warranty support and proof of online verification of the Switch product number on respective OEM website should be furnished .
6. The selected bidder will undertake to supply upgraded model of the product in case of technological obsolescence/non – availability of the contracted product/model . The supply of upgraded product, subject to the Bank's approval, will be at the same contracted price as the quoted model .

37. Support Services

Service Descriptions	Support provided by
Support during Business Hours of the Bank from 8 A.M. to 8 P.M. for all Banking working days	Support through physical at the Branches of the Bank along with free of cost
Support after business operations hours of Bank	Support through Telephonic & Email
Time when scheduled maintenance will be performed	Scope & schedule to be agreed mutually

The software support will also cover patches including Software and proactive system health checkup & reporting will cover Hardware and Firmware updates .

38. Bidders obligations

1. The bidder is responsible for managing activities of its personnel & hold itself responsible for any mishandling ;
2. The bidder will treat all data & information about the Bank, obtained in the execution of his responsibilities as confidential and will not reveal such information to any other party without the prior written approval from the Bank .
3. Escalation matrix is to be provided by the selected bidder
4. Bidders are required to mention specifically the Name, Address and telephone number of their Service centre, Mobile No, Email ids etc for after sales Service at the delivery location .
5. The selected bidder will be executed the Service Level Agreement (SLA) with the Bank
6. Rate quoted should be valid for at least 1(one) Year from the date of submission of the Bid
7. Detailed technical specifications of the proposed switches should be submitted along with the bid documents

39. Bill of material

Detailed Bill of material indicating the make, model of the proposed switch with all accessories including Support Services, Power supply, power Cords etc to be tabulated as a part of the technical bid. The total no of quantity may be change after physical visit of the Engineers from your end at the Branches of the Bank .

(S. Sarkar)
Managing Director

ANNEXURE-A(Part-A)

Technical specifications to be filled by bidder

**I :Manageable Network Switches(L2- 16 Port)for the use of Branches of the Bank
Approx. Total Quantity require:- 43 (Forty Three) to be installed at Annexure III Branches**

S.No.	General Specifications	Comply (Y/N)
	General Features :	
1	Switch must be enterprise grade in 1 RU form-factor with internal power supply and fanless model.	
2	Switch Should have minimum 1 GB RAM	
3	Switch Should have minimum 512MB Flash	
4	Performance :	
5	Switch shall have minimum 36.0Gbps of switching fabric and 26.78Mpps of forwarding rate.	
6	Shall have minimum 15 K MAC Addresses and support of 4K VLANs.	
7	Shall have minimum IPv4 and IPv6 multicast routes and support of 2K IGMP multicast groups	
8	802.1d Spanning Tree support	
9	Support for up to 1024 rules IPV4 IPV6	
10	Switch Need to support 600 IPv4/MAC security ACEs and IPv6 security ACEs	
11	Switch shall support 9K byte Jumbo Ethernet frame from day 1	
12	Switch need to support. 9K bytes MTU-L3 packet	
13	Functionality :	
14	Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3az.	
15	Switch must have features like static routing 990 static routes for IPv4 and support IPv6 routing	
16	Shall have 802.1p class of service, marking and classification & eight egress queues.	
17	Switch should support QoS through Differentiated Services Code Point (DSCP) mapping and filtering.	
18	Switch should support Strict priority and Weighted Round-Robin (WRR)	
19	Switch should support management features like SNMPv3, NTP, RADIUS and TACACS+ .	
20	Switch should support advance mechanism to handling link failures and improving convergence time in ring topologies with industry standard like Resilient Protocol or equivalent.	
21	Switch should support DHCP, Auto Negotiation, DTP, LACP, UDLD, MDIX, VTP, TFTP, NTP, Per-port broadcast, multicast, Static routing, Layer 2 trace route and unicast storm control.	
22	Must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.	
23	Should support management CLI and web UI over SNMP, RJ-45, Bluetooth or USB console access	

24	Should have trunk failover capabilities to ensure server NIC adapters teamup to provide redundancy in the network so that in case of the link is lost on the primary interface, network connectivity is transparently changed to the secondary interface.	
25	Security with 802.1X support for connected devices, Switched Port Analyzer (SPAN), and Bridge Protocol Data Unit (BPDU) Guard	
26	Switch should support MTBF of 6,64,987 (hours) 25 deg C	
27	Switch should support enhanced QoS like , egress queues, Ingress policing to, QoS through Differentiated Services Code Point (DSCP) mapping and filtering, QoS through traffic classification, Trust boundary, AutoQoS, Shaped Round Robin (SRR) scheduling and Weighted Tail Drop (WTD) congestion avoidance, 802.1p Class of Service (CoS) ,	
28	Operating Temperature range : -5 to +50 degC	
29	Interface	
30	Minimum 16 x 10/100/1000 Base-T ports and additional 2nos. SFP uplinks ports	
31	Certification:	
32	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 5 years.	
33	Security Features	
34	Switch should support 802.1X features to control access to the network, including flexible authentication, 802.1X monitor mode, and RADIUS change of authorization	
35	Switch support 802.1X with Network Edge Access Topology (NEAT), which extends identity and user distribution, which enables you to load-balance users with the same group name across multiple different VLANs.	
36	Switch should have capability to disable per-VLAN MAC learning to allow you to manage the available MAC address table space by controlling which interface or VLANs learn MAC addresses	
37	Switch should support Multidomain authentication to allow an IP phone and a PC to authenticate on the same switch port while being placed on the appropriate voice and data VLANs.	
38	Switch need to support Access Control Lists (ACLs) for IPv6 and IPv4 security and Quality-of-Service (QoS) ACL elements (ACEs).	
39	Switch should have features like Port-based ACLs, SSH, Kerberos, and SNMP v3, TACACS+ and RADIUS authentication, Web authentication redirection, Multilevel security on console access, Spanning Tree Root Guard (STRG), Internet Group Management Protocol (IGMP) filtering,	
40	Switch should support SPAN, with bidirectional data support, to allow the OEM Intrusion Detection System (IDS) to take action when an intruder is detected.	
41	Managed Features	
42	Managed through the Business Dashboard and Business mobile app, Customer can configure, manage through the dashboard	

ANNEXURE-A(Part-A)
Technical specifications to be filled by bidder

II :Manageable Network Switch(L2-24 Port) for the use of Branch of the Bank

Approx. Total Quantity require:- 01(one) no

S. No.	General Specifications	Comply (Y/N)
1.1	General Features :	
1.1.1	Switch should be 1U and rack mountable in standard 19" rack.	
1.1.2	Switch should support internal hot-swappable Redundant Power supply from day 1.	
1.1.3	Switch should have redudant hotswappable fans.	
1.1.4	Switch should have minimum 8 GB RAM and 16 GB Flash.	
1.1.5	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 320 Gbps of stacking throughput with 8 switch in single stack.	
1.2	Performance :	
1.2.1	Switch shall have minimum 56 Gbps of switching fabric and 41.66 Mpps Mpps of forwarding rate.*	
1.2.2	Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.	
1.2.3	Should support minimum 32K IPv4 routes or more and 16K IPv6 routes or more	
1.2.4	Switch shall have 8K or more multicast routes.	
1.2.5	Switch should support atleast 64K flow entries	
1.2.6	Switch should support 128 or more STP Instances.	
1.2.7	Switch should have 16MB or more packet buffer.	
1.3	Functionality :	
1.3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.	
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1	
1.3.3	Should support* advance Layer 3 protocol like BGPv4, BGPv6 , MPLS, VRF, VXLAN, IS-ISv4, OSPFv3, MP-BGP	
1.3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.	
1.3.5	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .	
1.3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	
1.3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-256 on hardware*	
1.3.8	Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.	

1.3.9	During system boots, the system's software signatures should be checked for integrity. System should be capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.	
1.3.10	Switch shall have modular OS to support application 3rd party application hosting	
1.4	Interface	
1.4.1	Switch shall have 24 nos. 10/100/1000 Base-T ports and additional 4 nos. SFP 1Gig uplinks ports.	
1.5	Certification:	
1.5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.	
1.5.2	Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.	
1.5.3	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 3 years before releasing this RFP.	
1.5.4	Managed Features	
1.5.5	Managed through the Business Dashboard and Business mobile app, Customer can configure, manage through the dashboard	

Annexure "III" [List of Branches]

1. Central region

Sl No	BranchName	Address	Near Landmark
1	Kolkata Main Branch	24A, Waterloo Street, Kolkata-700069	Great Eastern Hotel
2	Bhawanipur	28/A, S.P.Mukherjee Road, Kolkata-700025	Purna Cinema Hall
3	Shyambazar	15/2B, Balaram Ghosh ,St, Kolkata-700004	Faria Pukur
4	Behala	5, S.N.Roy, Kolkata-700038	Ajanta Cinema Hall
5	Beliaghata	P-52, C.I.T Scheme, VIP Market, Kolkata-700054	Pentaloons/VIP Market
6	Hatibagan	89, Arabinda Sarani, Kolkata-700005	Anjali Jewellery House
7	Entally	27/1C, CIT Scheme, LV, Kolkata-700014	Moulali Crossing
8	Gariahat	2/2A, Nandy Street, Kolkata-700029	Ballyganj New Market
9	Golpark	28/3A, Gariahat Road, Kolkata-700029	City College
10	New Alipur	23/A, New Alipur, Block-21-C, Kolkata-700053	Taratala

11	Chetla	Auditorium Block, CIT Market, Kolkata-700037	Ahindra Mancha
12	Salt Lake City Branch	EC-156, Sector-1, Salt Lake City, Kolkata-64	Salt Lake EC Market
13	Pourabhaban	FD-415-A, Pourabhaban, Salt Lake City, EC-III, Kolkata-700106	Bidhannagar Municipality

2. North Region

1	Barasat Branch	36, Rishi Bankim Sarani, Barasat, Kolkata-700124	Zilla Parishad
2	Barrackpore	Ashadeep Complex, 1, Pipe Road, Barrackpore, Kolkata-700120	Chiria More, BSNL Office
3	Baduria	Near Baduria Bus stop, North 24-Parganas, PIN-743401	Baduria Bus stop
4	Kanchrapara	Lichubagan, Kanchrapara, PIN-743145	Lichubagan Baishakhi Market
5	Habra	Kali Market, Habra, North 24-Pgs	Kali Market
6	Amdanga	Arkhali Amdanga, Panchayet & BDO Office, PIN-743221	BDO Complex
7	Chandpara	Chandpara Busstand, North 24-Pgs, PIN-743245	Chandapara Bazar
8	Panshila	Panshila Municipal Market, R.N. Avenue, P.O.-Khardah, PIN-700112	Panihati Municipal Health Centre
9	Helencha	P.O.- Helencha, P.S.- Bagdah, North 24-Pgs	Helencha Bus Stand
10	Dum Dum	60, Purba Sinthi Rd, Dum Dum, Kadamtala, Kol-700030	Kadamtala Bazar
11	Bongaon	School Road, Bongaon, North 24-Pgs, PIN-743235	Bongaon Court
12	Basirhat	Near Basirhat Court, North 24 Pgs, PIN-743414	Basirhat Court

3. South Region

1	Diamond Harbour Branch	Diamond Harbour, South 24-Pgs, PIN-743331	Diamond Harbour Municipality
2	Kakdwip	Kakdwip, South 24-Pgs, PIN-743347	Kakdwip Court
3	Kashinagar	Kashinagar, South 24-Pgs, PIN-743349	Maibibi Mandir
4	Amtala	Amtala, P.O.-Kanyanagar, South 24-Pgs	Amtala Bus stop
5	Sagar	Rudranagar, P.S.-Sagar, South 24-Pgs, PIN-743373	BDO Office
6	Pathar Pratima	Patharpratima, South 24-Pgs, PIN-743371	Patharpratima Central Bazar

7	Bhangore	B. Gobindapur, Bhangore, South 24-Pgs, PIN-743502	Pakiza Cinema Hall
8	Baruipur	Baruipur, Suth 24-Pgs, PIN-700144	Dristikon Eye Clinic
9	Bijoyganj	Suvadra Villa, WSEDCL Buildings, 1st Floor, Vill-Laxmikantapur, P.O- Bijoyganj Bazar, P.S- Mandir Bazar, South 24-Pgs, PIN-743345	Laxmikantapur Rail Station
10	Canning	Cinema Road, anning, Suth 24-Pgs., PIN-743329	Gobinda Talkies

4. Coochbehar Region

1	Coochbehar Branch	Biswasingha Rd, Coochbehar, PIN-736101	B.D.Hotel
2	Silliguri Day	Sarkar Mansion, Hill CartRd, Silliguri-734001	Bata Show Room
3	Silliguri Evening	Sarkar Mansion, Hill CartRd, Silliguri-734001	Bata Show Room
4	Mathabhanga	Mathabhanga, Coochbehar, PIN-736146	Police Station
5	Alipurduar	Alipurduar, Dist- Jalpaiguri, PIN-736121	St Marry's Nurshing Home
6	Dinhata	Dinhata, Dist- Coochbehar, PIN-736135	Main Road
7	Falakata	Falakata, Dist- Jalpaiguri, PIN-735211	Sitala Bari Mandir
8	Tufanganj	Tufanganj, Dist- Coochbehar, PIN-736159	Fire Station

- End of Document -

