



भारतीय प्रबंध संस्थान विशाखपट्टणम
INDIAN INSTITUTE OF MANAGEMENT
VISAKHAPATNAM

Ref: Tender No: IIMV/PMO/T/04/ -2017-18

Date: September 6, 2017

Tender document for Supply, Installation, Commissioning and Maintenance (on call support for three years) of Wi-Fi facilities at IIM Visakhapatnam Students Hostel.

Last date for submission of technical & Commercial bids	14-9-2017, 3:00 PM
Opening of technical bids	14-9-2017, 4:00 PM
Opening of Commercial Bids	Of only those bidders, who qualify in the technical evaluation.

Address:

Andhra Bank School of Business Building
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**INDIAN INSTITUTE OF MANAGEMENT VISAKHAPATNAM
OFFICE OF THE PROJECT MANAGER - INFRASTRUCTURE
ANDHRA BANK SCHOOL OF BUSINESS BUILDING
ANDHRA UNIVESITY CAMPUS
VISAKHAPATNAM 530 003**

NOTICE INVITING TENDER (NIT)

IIMV/PMO/T/04/-2017-18 dated September 6, 2017

SUB: Supply, Installation, Commissioning and Maintenance (on call support for three years Period) of Wi-Fi facilities at IIM Visakhapatnam Students Hostel.

Indian Institute of Management Visakhapatnam invites tenders for Supply, Installation, Testing, Commissioning and Maintenance (on call support for three years period) of Wi-Fi facilities at IIM Visakhapatnam Students Hostel.

Wireless network manufacturer and authorize partners to submit bids to supply, install, test, commission and Maintenance (On call support for three years Period) of Wi-Fi facilities with a robust wireless network in the IIM Vishakhapatnam Students Hostel.

Tender details:

1	Ref. No. IIMV/PMO/T/04/-2017-18 dated September 6, 2017				
2	Name of the work	Supply, Installation, Commissioning and Maintenance (on call support for three years period) of Wi-Fi facilities at IIM Visakhapatnam Students Hostel.			
3	Type of Tender	Cost of Tender In Rs	EMD in Rupees	Estimated Cost in Rupees Excluding service tax	Time period
	Item Rate	500/-	40,000/-	-	14 days
4.	Tender Cost / Tender document charges of Rs. 500/- & EMD of Rs.40, 000/- (Rupees Forty thousand only) to be paid through e-Procurement portal while uploading documents.				
5	Last Date for Submission of Tender and for payment of Tender Cost& EMD	September 14, 2017 (Thursday); 3:00 pm			
6	Date and time of opening of tender (Technical Bid)	September 14, 2017 at 4:00 pm.			
7.	Date and time of opening of tender (Commercial Bid)	Of only those bidders, who qualify in the technical evaluation.			

7	Sale of Tender Document	The tender documents can be downloaded from the websites www.tenderwizard.com/IIMV or http://www.iimv.ac.in/tender-notices.html	
8	Place of the submission	Submission through e-portal: www.tenderwizard.com/iimv	
9	Eligibility Criteria	The bidder must meet the eligibility criteria indicated in the Technical Bid Evaluation Process	
10	Regulatory/ Statutory Compliances	The Bidder must have PAN Number, GST Registration Number,	

3.0 Terms & Conditions:

- i. Indian Institute of Management Visakhapatnam reserves the right to accept or reject any or all the tenders or cancel this process at any time, without assigning any reason whatsoever.
- ii. The bidders, who do not meet the eligibility criteria; or do not submit all the necessary documents in support of meeting the eligibility criteria; or do not submit documents that are complete and valid; or do not submit bids with supporting documentation in time - shall be disqualified.
- iii. Bidders are requested to download the documents from www.tenderwizard.com/IIMV or <http://www.iimv.ac.in/tender-notices.html>

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INDIAN INSTITUTE OF MANAGEMENT VISAKHAPATNAM

Subject: Supply, Installation, Testing, Commissioning and Maintenance (on call support for three years period) of Wi-Fi facilities at IIM Visakhapatnam Students Hostel.

Tender details:

1. OVERVIEW:

- a. Indian Institute of Management Visakhapatnam (IIMV, the Institute) was set up in 2015 in Visakhapatnam by the Government of India, Ministry of Human Resource Development. Presently, IIM Visakhapatnam operates from Andhra University Campus.
- b. IIMV is desirous of hire a contractor for Supply, Installation, Testing, Commissioning and Maintenance (on call support for three years period) of Wi-Fi facilities at IIM Visakhapatnam Students Hostels.
- c. Bids are invited from eligible bidders directly based on the eligibility criteria and general terms and conditions mentioned below. Interested bidders may download the copy of the document from websites, i.e. www.tenderwizard.com/IIMV or <http://www.iimv.ac.in/tender-notices.html>.
- d. Interested bidders are required to pay a Tender Cost of Rs.500/- (Rupees Five hundred only) and Earnest Money Deposit (EMD) of Rs. 40,000/- (Rupees Forty thousand only) as prescribed in the Notice Inviting Tender through e-procurement portal.
- e. The last date for submission of Technical Bid along with Tender Cost & EMD is September 14, 2017 (Thursday), 3 PM. All such received Technical Bids will be opened on the same day i.e. September 14, 2017 at 4 PM.
- f. A Committee duly constituted by the Competent Authority would evaluate the Technical Bids submitted by the bidders and the Financial (i.e. Commercial or Price Bids) of the short-listed bidders.
- g. The tender document can be downloaded from www.tenderwizard.com/IIMV or <http://www.iimv.ac.in/tender-notices.html>. Any corrigenda or amendments will be posted on the Institute's website only and the Bidders are advised to keep visiting the Institute's website regularly for updates/changes.

2. RFP TERMINOLOGY:

Definitions - Throughout this RFP, unless inconsistent with the subject matter or context:

- i. **Bidder/ Service Provider/ System Integrator / Original Equipment Manufacturer (OEM)**- An eligible entity/firm submitting a Proposal/Bid in response to this RFP

- ii. **Supplier/ Contractor/ Vendor** - Selected Bidder/System Integrator under this RFP.
- iii. **Company/ Purchaser/ IIM Visakhapatnam**- Reference to the “IIM Visakhapatnam”, “Company” and “Purchaser” shall be determined in same context and referred as “IIM Visakhapatnam”.
- iv. **Proposal/ Bid** - the Bidder’s written reply or submission in response to this RFP
- v. **RFP/Tender** - the request for proposal (this document) in its entirety, inclusive of any Addenda that may be issued by IIM VISAKHAPATNAM.
- vi. **Solution/ Services/ Work/ System** - “Solution” or “Services” or “Work” or “System” or “IT System” means all services, scope of work and deliverable to be provided by a Bidder as described in the RFP and include services ancillary to delivery of IT, such as installation, commissioning, transfer of user data, installation of antivirus and other basic applications, configuring email, windows account and other obligation of the Supplier covered under the RFP.
- vii. **IT** as specified within the technical requirement section of this RFP document.
- viii. **Annual Maintenance Contract (AMC)** - It would be the annual cost of maintenance of hardware / solution / Service

3. ELIGIBILITY CRITERIA: (Refer to Annexure II)

General Terms and Conditions:

1. Indian Institute of Management Visakhapatnam reserves the right to accept or reject any or all the tenders or cancel this process at any time without assigning any reason whatsoever.
2. The bidders, who do not meet the eligibility criteria; or do not submit all the necessary documents in support of the eligibility criteria; or do not submit documents that are complete and valid - shall be disqualified.
3. Bidders are requested to download the documents from www.tenderwizard.com/IIMV or <http://www.iimv.ac.in/tender-notices.html> for submission. Cost of tender documents shall be deposited as given in the Notice Inviting Tender.
4. **Contract Period:** The contract shall complete all the works awarded within “two weeks from the date of award of contract”.

5. The Bidder has to submit the OEM Authorization letter (MAF) for all active components.
6. In case of successful bidders, the existing contract with IIMV, if any, shall stand automatically terminated for the new contract to commence.
7. In case of any increase in the taxes and levies implemented by the Govt. during the contract period, the same shall be paid by IIMV at actual, on production of Govt. Notification and proof of payment. Similarly, in case of any reduction in the taxes and levies, the same must be passed on to IIMV.
8. Validity of financial bids: The validity of prices quoted in the financial bid by the bidders is for a period of 30 days from the date of opening of the financial bid.
9. The financial bids of only those short-listed bidders that have qualified in the technical evaluation shall be opened. The decision of IIMV on technical bid evaluation is final and binding on all the bidders. Only the technically qualified bidders shall be intimated the date of opening of the financial bids.
10. If the last date of opening of the offer coincides with a holiday, then the next working day shall be receiving/opening date.
11. IIMV reserves the right to reject all or any of the bids at any stage without assigning any reasons whatsoever and the decision of IIMV in the matter shall be final and binding on the bidders.
12. Conditional Offer shall be rejected.
13. Arbitration: All disputes in connection with the execution of contract shall be settled under the provisions of Arbitration and Conciliation Act 1996 and the rules framed there under and in force shall be applicable to such proceedings. The Competent Authority of IIM Visakhapatnam or a person nominated by him/her shall be the sole Arbitrator. The cost of arbitration shall be borne equally by both the parties.
14. Jurisdiction: All disputes shall be subject to the Civil Court jurisdiction of Visakhapatnam, Andhra Pradesh, India only.
15. The Institute shall correspond only with the shortlisted bidders.
16. Any form of canvassing/influencing will attract rejection of bid submitted by the bidder and the Institute reserves the right to take such penal action (e.g. blacklisting the Bidder for the present and future etc.) as it deems fit.
17. Irrespective of the offers received or their competitiveness, the final decision on choosing a bidder, will vest in entirety with the Institution.

18. The bidder is expected to examine all instructions, terms and specifications in the tender document. Failure to furnish all information required or to submit a bid not substantially responsive to the tender document in every respect will be at the bidder's risk and may result in the rejection of the bid. Prior to detailed evaluation, the Institute will determine the substantial responsiveness of each bid to the tender document. A substantially responsive bid is one which conforms to all the terms and conditions of the bidding/tender document and is without any material defects and deviations. Deviations from, or objections or reservations to critical provisions such as those concerning qualification criteria, availability of facilities and amenities as needed, availability of government/statutory approvals and clearances, ready and explicit willingness to accept and honour the terms and conditions of contract etc. will be deemed to be material deviations. If a bid is not substantially responsive, it will be rejected by the Institute and may not subsequently be made responsive by the bidder by correction of the non-conformity. Only those bidders whose Technical bids have been found substantially responsive would be informed by the Institute about their responsiveness. The Institute will evaluate and compare the financial bids of only those Technical bids which have been determined to be substantially responsive. The Institute will award the contract to the successful bidder who has been determined to qualify to perform the Contract satisfactorily, and whose bid has been determined to be substantially responsive, and is the lowest evaluated bid.
19. If any stage it is found that any of the details/documents furnished by the bidder is false/misleading/fabricated, his/her/its bid would be liable for cancellation without intimation to the bidder.
20. The offer should remain valid for 30 days. During the validity period of the offer, the bidder should not withdraw/modify the offer in terms of terms and conditions quoted in the Technical Qualification.
21. Notwithstanding anything contained above, the Institute reserves the right to reject all or any bid as recommended by the Tender Committee and is not bound to divulge any reason to the unsuccessful bidders
22. Payments: 90% of the Payments shall be made on completion of contracted works and balance 10 % would be released against submission bank guarantee for a period of three years towards post commissioning. TDS and other taxes/duties will be deductible as applicable as per Government of India rules.
23. Mode of Issue of Notice: Any notice sent by Speed Post only by either party to the addresses recorded in the Contract shall be deemed to have been properly served for any of the purposes mentioned herein.
24. Advances: IIM Visakhapatnam will not pay any advances, against supply material or against Proforma invoice to vendor.

25. The contractor shall not employ any person who has not completed eighteen years of age.
26. The contractor shall comply all the statutory and legal provisions as laid down under various Labour Laws from time at his own cost. In case of violation of any statutory provisions or any other applicable laws, IIM Visakhapatnam will not be held responsible.

1. Procedure for Opening & Evaluating of Tender Bids (Technical):

- a) The Committee or a Sub-Committee constituted by the Institute will open the Technical bids in the presence of the bidders or their duly authorized representatives (max one person/representative per bidder), on the date and at the time herein specified.

Detailed evaluation of the Technical Bids then follows, about their conformity with the requirement specifications as well as other relevant factors. For the bids that qualify in the first stage of evaluation, the second stage, where the Price bids of the finally short-listed bidders (only) would be opened and evaluated.

In case the bidder desires to clarify any issue of the RFP before submitting the proposal, you may contact

Mr. Sayikrishna Raju
Project Manager-Infrastructure,
Indian Institute of Management VISAKHAPATNAM;
Phone -0891-2824468;
email :- Sayikrishna.raju@iimv.ac.in

ANNEXURE-I**Bidder's Particulars**

Bidders Particulars- Annexure I		
Sl.No	Particulars	Details
1	Bidder's name/ Organization Name	
2	Address for communication	
3	Contact Details	
	Designation	
	Telephone Number office	
	Mobile Number	
	Email Id	
4	PAN Number	
5	GST registration number	
6	Bank Particulars	
	Account name	
	Type of A/c: (SB/CA/CC)	
	A/c No.	
	IFS Code	
	Name of the Bank	
	Branch	

Please attach copies of certificates issued by the principal company in this regard Note:

a) The bidder should attach the relevant documents related to financial details such as -Copy of the audited financials for last three years

- Copy of the audited Profit & Loss Statements for each of the last 3 financial years
- Self declaration, declaring bidder has not been blacklisted by a Central/ State / Local Government Organization/ Institution / PSU
- The bidder shall have at least one support office in Andhra Pradesh preferably at Visakhapatnam. Copy of the relevant trade license issued by State Govt. or competent local body mentioning the address. Copy of GST Registration

Eligibility Criteria

Eligibility Criteria-Annexure-II			
S. No	Specification	Yes / No	Remarks
1	The bidder should have integrated at least 3 campus wide wireless networks in India and minimum 1 Campus of them in the state of Andhra Pradesh or 2 campuses could be in state of Andhra Pradesh, Telangana, Karnataka & Orissa. A proof to the extent should be submitted along with bid.		
2	The Vendor should have been in the business of executing the networking projects for past 5 years. A proof to the extent should be submitted along with bid.		
3	The bidder should have its service center in Vishakhapatnam with minimum 5 certified engineers certified by the principal company. A proof to the extent should be submitted along with bid.		
4	All the Active Components (Wireless and switching components Etc.) proposed should be from a single Manufacturer Only. A proof to the extent should be submitted along with bid.		
5	The bidder should be an authorized Partner of the Active OEM for last 3 years & the Past experience of the Bidder should be for the same Make of products, which the bidder is quoting for this tender. A proof to the extent should be submitted along with bid.		
6	The Active Components Proposed should be supported by the Principal Manufacturer for Technical Assistance on 24 x 7 bases thru a TAC Centre. A proof to the extent should be submitted along with bid.		
7	The Original Equipment Manufacturer of Active Components should be an ISO 9001 & ISO 14001 Certified. A proof to the extent should be submitted along with bid.		
8	Quoted OEM (Actives) Products should have at least one depot in Vishakhapatnam or should maintain adequate spares at the site as follows. A Complete Controller of the same make and model.		

	Maintain 20% of Access Points of the same make and model. A proof to the extent should be submitted along with bid.		
9	The bidder should have a minimum annual turnover of ` Rs. 300 Lakhs exclusively in the Network Business in the last financial year. A proof to the extent should be submitted along with bid.		
10	The bidder if proposing a POE switches along with wireless devices the same should be from the same manufacturer.		

Technical specifications

1.0 Wireless access point

Wireless Access Point(Internal) - General Specifications		
Specifications	Compliance (Yes/No)	Remarks
Hardware:		
Access Points proposed must include radios for both 2.4 GHz and 5 GHz.		
Must have a robust design for durability, without visible vents		
Must have an industrial design for durability, with steel cases, industrial grade antenna connectors, without visible vents, and with metal locking points for Wireless AP		
Must include dual band antennas to support both the 2.4GHz and 5GHz operations simultaneously from single antenna.		
Must support a variety of antenna options for Wireless AP		
802.11 n		
Must support 3x3 multiple-input multiple-output (MIMO) with two spatial streams		
Must support simultaneous 802.11n and 802.11ac v1/ac v2 on both the 2.4 GHz and 5 GHz radios.		
Must support data rates up to 870Mbps on 5Ghz radio and 216mbps on 2.4Ghz radio.		
Must support 40 MHz wide channels in 5 GHz.		

802.11ac wave 1/wave 2		
Must support 3x3 multiple-input multiple-output (MIMO) with two spatial streams		
Must support data rates up to 870 (with 802.11ac client).		
Must support 80/160 MHz wide channels in 5 GHz.		
RF		
The Wireless AP should have the technology to improve downlink performance to all mobile devices including one-, two-, and three spatial stream devices on 802.11n/ac v1 and v2. The technology should use advanced signal processing techniques and multiple transmit paths to optimize the signal received by 802.11 clients in the downlink direction without requiring feedback and should work with all existing 802.11 clients.		
Should have custom chipset to detect and classify non-Wi-Fi wireless transmissions while simultaneously serving network traffic		
Should support configuring the access point as network connected sensor to access any network location covered by the access point to get real-time Spectrum analysis data.		
Must incorporate radio resource management for power, channel, coverage hole detection and performance optimization		
Roaming		

Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.		
Access point should work as controller in case of main controller down (Mobility Express)		
Security		
Must support Management Frame Protection.		
Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI).		
Must operate as a sensor for wireless IPS which might be deployed in Future		
Encryption		
Access Points must support a distributed encryption/decryption model.		
Access Points must support Hardware-based DTLS encryption on CAPWAP Standard		
Monitoring		
Must support the ability to serve clients and monitor the RF environment concurrently.		
Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.		
Operational:		
Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.		
Power:		

Must support Power over Ethernet, local power, and power injectors.		
Quality of Service:		
802.11e and WMM		
Wi-Fi Alliance Certification for WMM and WMM power save		
Type 1 Access Point - Quantity- As required		
Gain 4 dBi, internal Omni directional, horizontal beam width 360°		

2.0 Wireless LAN Controller

WLAN Controller Requirement		
Specifications	Compliance (Yes/No)	Remarks
Hardware:		
Standards:		
Must be compliant with IEEE CAPWAP for controller-based WLANs.		
Should support 5,000 clients		
Should support 4096 VLANs		
WLAN Controller should support up to 75 Access points in a single 1 RU chassis. Should have at least 4*1 GE CU ports for LAN Connection on each controller with populated modules.		
Optimized to enable 802.11ac Wave 2 next-generation networks, supporting		
High Availability:		
Must support both N+1 redundancy models.		

RF Management:		
Must support an ability to dynamically adjust channel and power settings based on the RF environment.		
Radio coverage algorithm must allow adjacent APs to operate on different channels, in order to maximize available bandwidth and avoid interference		
Must support interference detection and avoidance.		
Must support coverage hole detection and correction that can be adjusted on a per WLAN basis.		
Must support RF Management with 40 MHz channels with 802.11n.		
IPv6 features		
WLC should support L2 and L3 roaming of IPv6 clients		
WLC should support First hop security features in IPv6 network like "Router Advertisement guard", "DHCPv6 guard" and "IPv6 source guard"		
WLC should support IPv6 access control lists		
Performance:		
Controller performance must remain the same if encryption is on or off for wireless SSIDs.		
Should support ability to adjust Delivery Traffic Indicator Message (DTIM) on a per		
WLAN basis to improve performance for latency sensitive applications.		
Security:		

Should adhere to the strictest level of security standards, including 802.11i Wi-Fi Protected Access 2 (WPA2), WPA, Wired Equivalent Privacy (WEP), and 802.1 X with multiple Extensible Authentication Protocol (EAP) types, including Protected EAP (PEAP), EAP with Transport Layer Security (EAP-TLS), and EAP with Tunnelled TLS (EAP-TTLS).		
Guest Wireless		
Must support built-in web authentication.		
Functionality		
Must be able to set a maximum per-user bandwidth limit on a per-SSID basis.		
Must support user load balancing across Access Points.		
Monitoring		
Must be able to dedicate some APs to monitor-only for Intrusion Prevention Services.		
Roaming:		
Must support client roaming across controllers separated by a layer 3 routed boundary.		
Solution proposed must support clients roaming across at least 75 APs.		
Operational:		
Should support the ability to schedule AP power on/off for energy savings.		
Should be able to classify over 20 different types of interference within 5 to 30 seconds.		

Should provide a snapshot of air quality in terms of the performance and impact of interference on the wireless network identifying the problem areas.		
QOS:		
Must support 802.11e WMM		
Should have Voice Call Admission		
Should support multicast Video call admission control mechanism and Stream prioritization.		
To deliver optimal bandwidth usage, reliable multicast must use single session between AP and Wireless Controller.		
Should support Internet Group Management Protocol (IGMP) snooping and access point should transmits multicast packets only if a client associated to the access point is subscribed to the multicast group.		

3.0 Next Generation Firewall- Technical Specifications

Next Generation Firewall- Technical Specifications		
Specifications	Compliance (Yes/No)	Remarks
Industry Certifications and Evaluations		
The Firewall solution offered must be rated as 'leaders' or 'Challengers' in the latest Magic Quadrant for Firewall published by Gartner.		
The Firewall appliance should have certifications like NDPP or ICSA or EAL4		

The proposed vendor must have a track record of continuous improvement in threat detection and must have successfully completed NSS Labs' NGFW Methodology v5.4 testing with a minimum exploit blocking rate of 95% or more		
Hardware Architecture		
The appliance based security platform should be capable of providing firewall, IPS, Application control and VPN (both IPsec and SSL) functionality in a single appliance		
The appliance should support at least 6 * 10/100/1000 Gigabit ports from Day one		
The appliance hardware should be a multicore CPU architecture with a hardened 64 bit operating system to support higher memory		
Proposed Firewall should not be proprietary ASIC based in nature & should be open architecture based on multi-core cpu's to protect & scale against dynamic latest security threats.		
Performance & Scalability		
Should support at least 850 Mbps of production performance / multiprotocol firewall throughput		
Should support at least 450 Mbps of NGFW (FW, IPS and Application combined) throughput under production performance		
Support support 3Des/AES IPsec VPN throughput of at least 300Mbps		
Firewall should support at least 300 concurrent VPN peers IPsec / SSL users		
Firewall should support at least 250,000 concurrent sessions		
Firewall should support at least 20,000 connections per second		
Firewall should support at least 100 VLANs or more		
Firewall Features		
Firewall should provide application inspection for DNS, FTP, HTTP, SMTP,ESMTP, LDAP, MGCP, RTSP, SIP, SCCP, SQLNET, TFTP, H.323, SNMP		

Firewall should support creating access-rules with IPv4 & IPv6 objects simultaneously		
Firewall should support operating in routed & transparent mode. Should be able to set mode independently for each context in multi-context mode		
Should support transparent mode and arp-inspection to prevent spoofing at Layer-2 in transparent mode		
Should support Static, RIP, OSPF v2 & v3,BGP, BGPv6, routing Protocol, PBR		
Firewall should support SLA monitoring for static routes		
Should support Non Stop Forwarding in HA during failover and Graceful Restart		
Firewall should support static nat, pat, dynamic nat, pat & destination based nat		
Firewall should support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) & Nat46 (IPv4-to-IPv6) functionality		
High-Availability Features		
Firewall should support stateful failover of sessions in Active/Standby or Active/Active mode		
Firewall should support ether channel functionality for the failover control & date interfaces for provide additional level of redundancy		
Firewall should support redundant interfaces to provide interface level redundancy before device failover		
Firewall should support 802.3ad Ether channel functionality to increase the bandwidth for a segment.		
Firewall should support failover of IPv4 & IPv6 sessions		
Firewall should replicate Nat translations, TCP,UDP connection states, ARP table, ISAKMP & IPsec SA's, SIP signalling sessions		
VPN Features		
Firewall should support client based and clientless SSL vpn from day one.		

Firewall should support RFC 6379 based Suite-B Cryptography Suites/algorithms like AES-GCM/GMAC support (128-, 192-, and 256-bit keys), ECDH support (groups 19, 20, and 21), ECDSA support (256-, 384-, and 521-bit elliptic curves) for enhanced VPN security.		
Firewall should support latest IKEv2 standards for supporting SHA-2 256, 384 & 512 bit message integrity algorithms in hardware to ensure there is no performance bottleneck & higher security.		
For Mobile devices the SSL VPN/IPSEC client software should also be available for download from the Mobile Application Store/Market/OEM website other than the Firewall/Device.		
Should support pre-shared keys & Digital Certificates for VPN peer authentication		
Should support perfect forward secrecy & dead peer detection functionality		
Should support Nat-T for IPSec VPN		
Support Next Generation IPS		
Should support the capability of passively gathering information about virtual machine traffic, network hosts and their activities, such as operating system, services, open ports, client applications, and vulnerabilities, to assist with multiple activities, such as intrusion event data correlation, elimination of false positives, and policy compliance.		
Should support the capability of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.		
Should support the capability of automatically providing the appropriate inspections and protections for traffic sent over non-standard communications ports.		
Should support the capability to link Active Directory and/or LDAP usernames to IP addresses related to suspected security events.		
Should support the capability of detecting and blocking IPv6 attacks.		

The solution must support the capability of IP reputation feed that comprised of several regularly updated collections of poor reputation of IP addresses determined by the proposed security vendor		
Solution support the capability of IP reputation intelligence feeds from third party and custom lists of IP addresses including a global blacklist.		
Should support the capability of Reputation- and category-based URL filtering offering comprehensive alerting and control over suspect web traffic and enforces policies on more than 280 million of URLs in more than 80 categories.		
Solution support the capability of passively gathering details unique to mobile devices traffic to identify a wide variety of mobile operating systems, mobile applications and associated mobile device hardware.		
Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.		
The device OEM must support its own threat intelligence analysis center and should use the global footprint of security deployments for more comprehensive network protection.		
The detection engine should support capability of detecting and preventing a wide variety of threats (e.g., malware, network probes/reconnaissance, VoIP attacks, buffer overflows, P2P attacks, etc.).		
Should be able to identify attacks based on Geo-location and define policy to block on the basis of Geo-location		
The detection engine should support the capability of detecting variants of known threats, as well as new threats		
The detection engine must support the capability of incorporate multiple approaches for detecting threats, including at a minimum exploit-based signatures, vulnerability-based rules, protocol anomaly detection, and behavioural anomaly detection techniques. Identify and explain each type of detection mechanism supported.		

Should support Open based Application ID for access to community resources and ability to easily customize security to address new and specific threats and applications quickly		
Management		
Firewall should support management of firewall policies via Cli, SSH & GUI management capabilities		
Firewall should support syslog with the functionality of sending syslog messages		
Firewall should support SNMP v1,2c & 3 simultaneously		

4.0 Access Switch (PoE) Switch Specifications

Access Switch (PoE) Switch Specifications		
Specifications	Compliance Yes/No	Remarks
Access Switch - PoE Specification		
Specifications		
The switch should support a minimum of 24 nos. 10/100/1000 Ethernet Ports with 4 SFP Uplinks		
The switch should support a total of 28 Ports		
The switch should support Forwarding bandwidth of 100 Gbps and full-duplex of 200gbps		
The switch should support 64-Byte Packet Forwarding Rate of 70 Mpps		
The switch should support PoE (IEEE 802.3af) on all ports		
The switch should support PoE+ (IEEE 802.3at)		
The switch should support Multi domain Authentication which allows an IP phone and a PC to authenticate on the same switch port while placing them on appropriate voice and data VLAN.		
The switch should support Stacking up to 6 or more switches and should use dedicated stacking ports of 60 gbps Per Switch. Uplink ports should not be used for stacking		

The switch should support Stacking which enable all switches to function as a single unit. If more than one Switch is stacked, Quality of Service support should be available from Day one in the Stack Link as well		
The switch should support multi Core CPU		
The switch should support Min of 100 Vlans and Jumbo frame support as well		
The switch should support voice vlan and automatic configuration of QoS that allows switch to manage QoS policies based on traffic types		
The switch should support Spanning-Tree such as IEEE 802.1D STP, 802.1s MSTP and Link Aggregation Control Protocol 802.3ad		
The switch should multicasting features such as IGMPv1,2,3 from day one		
The switch should support Per port enabling/disabling of unknown unicast/ multicast flooding		
The switch should support hibernation mode / non-operation mode in situations such as nights or weekends which helps to reduce the power utilization		
The Switch should support IEEE 802.3az EEE Energy Efficient Ethernet		
The should should support IPv6 Ready Logo phase II - Host		
The switch should support IPv4 and IPv6 unicast routing		
The switch should support IPv6 Host support (IPv6 support: Addressing; IPv6: Option processing, Fragmentation, ICMPv6, TCP/UDP over IPv6; Applications: Ping/Traceroute/VTY/SSH/TFTP, SNMP for IPv6 objects)		
The switch should Support for NTP, SSHv2, SNMPv3 to provide network security by encrypting administrator traffic during Telnet and SNMP sessions		
The switch should support Layer 2 traceroute to ease troubleshooting by identifying the physical path that a packet takes from source to destination		

The Switch should support security Features such as IEEE 802.1x, port security, Dynamic Host Configuration Protocol (DHCP) Snooping and Guard, Dynamic ARP Inspection		
The switch should support TACACS+ and Radius based centralized authentication support to restrict unauthorized access		
The switch should support rate-limiting technique based on the source, destination MAC, IP address , TCP/UDP based Port types or combination of these as well		
The switch should support to identify unidirectional links caused by incorrect fiber-optic wiring or port faults to be detected and disabled on fiber-optic interfaces.		
The switch should support USB and Ethernet management interfaces and Multilevel security on console access to prevents unauthorized users from altering the switch configuration		
The switch should support to restrict the port level quality of service as low as 8kbps bandwidth per port		
The switch should support for Power redundancy with an optional external power redundancy		
The switch should support to automatically attempts to reactivate a link that is disabled because of a network error.		
The switch should be software-defined networking (SDN) ready		

ANNEXURE-IV

LIST OF CORPORATE CUSTOMERS OF THE BIDDER

The bidder must provide the details as per the below format for similar pan-India branch rollout projects of at least three customers having used/ordered/working with 90% of the given BOM.

Sl.No	Name of the Client, Contact person, Designation & Telephone No.	Date of the Assignment	Details of the assignment done for the Client with Product name, Model etc.
1			
2			
3			
4			

Note: The list should include at least three corporate clients.

- Work Completion Certificates and copies of client citation / purchase order / work orders showing all the details sought.

ANNEXURE-V

Price Bid

Price Bid - ANNEXURE-V									
Sl. No.	Make	Product Description	UoM	Qty	Unit Price	Total Price	GST (in percents)	Total with GST	
(1)	(2)	(3)	(4)	(5)	(6)	(7=5*6)	(8)	(9=7+ 7*8)	
Quote for Cisco Wi-Fi Components									
1	ASA5516-FPWR-K9	ASA 5516-X with FirePOWER services, 8GE, AC, 3DES/AES	Nos	1		0		0	
1.1	L-ASA5516-TAMC-3Y	Cisco ASA5516 FirePOWER IPS, AMP and URL 3YR Subs	Nos	1		0		0	
1.2	CON-SNT-ASA556F9	SOLN SUPP 8x5xNBD ASA 5516-X with FirePOWER services, 8GE, AC(Three years Warranty)	Nos	1		0		0	
2	AIR-CT2504-25-K9	2504 Wireless Controller with 25 AP Licenses	Nos	1		0		0	
2.1	AIR-CT2504-RMNT	2504 Wireless Controller Rack Mount Bracket	Nos	1		0		0	
2.2	CON-SNT-CT2525	SNTC-8X5XNBD 2504 Wireless LAN Controller with 25 AP(Three Years warranty)	Nos	1		0		0	
2.3	L-LIC-CT2504-25A	25 AP Adder Licenses for 2504 WLAN Controller (e-Delivery)	Nos	1		0		0	
3	AIR-AP1815I-D-K9	Cisco Aironet 1815i Series	Nos	44		0		0	
4	WS-C2960X-24PS-IN	Catalyst 2960-X 24 GigE PoE 370W, 4 x 1G SFP, LAN Base	Nos	2		0		0	
Quote for supply of passive components							0		0
1	AMP	Cat 6 UTP Cable boxes(White Colour)	Nos	10		0		0	
2	AMP	24 Port Fully Loded Jackpanel	Nos	2		0		0	
3	AMP	Cat6 Patch chord 3Ft	Nos	50		0		0	
4	AMP	RJ 45 Connectors box	Nos	1		0		0	
5	Netrack	6 U Rack with all Accessories With Power Manager	Nos	1		0		0	
6	Netrack	12 U Rack with all Accessories With Power Manager	Nos	1		0		0	
7	Sudhakar	32mm PVC pipe with all Accessories	Mtrs	180		0		0	
8	Sudhakar	25mm PVC pipe with all Accessories	Mtrs	200		0		0	
Services							0		0
1		Site survey,design,supply,installation and configuration charges along with Project Management and Three years on call support	LS	1		0		0	
Grand Total							0		0