

Tender Notice No. G/28/11/14/2020/GOV COLLEGE DIU/424

Date: 18/01/2022

**TENDER DOCUMENT FOR SUPPLY AND INSTALLATION OF SERVER
AND FIREWALL AT DIU HIGHER EDUCATION SOCIETY, EDUCATION
HUB, KEVDI, DIU- 362520.**

Through Online Tendering Process Only

Price: Rs.1000/- (Rupees One Thousand Only)

DIU HIGHER EDUCATION SOCIETY

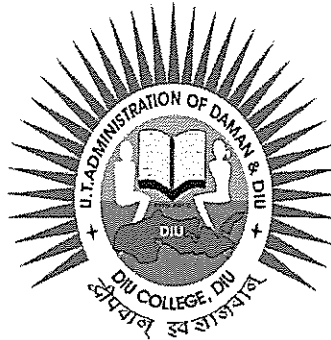
U.T. Administration of Dadra and Nagar Haveli and Daman and Diu,

Diu College, Education Hub,

Kevdi, Diu - 362520

Phone-02875-254115

Email:acct.dcd@gmail.com



Section-1

DIU HIGHER EDUCATION SOCIETY
U.T. ADMINISTRATION OF DADRA & NAGAR HAVELI AND DAMAN & DIU
OFFICE OF THE PRINCIPAL
DIU COLLEGE, EDUCATION HUB, KEVDI, DIU - 362520 (U.T.)

E-PROCUREMENT TENDER NOTICE

The Principal, Diu College, Diu on behalf of the Diu Higher Education Society, Diu invites tenders under 'Two Bids System (Technical and Financial)' from reputed & eligible agencies for the **Supply and Installation of Server and Firewall.**

Particular	Details/Date
Bid Document Download Start Date	19-01-2022, 11:00 AM
Online Bid Submission Start Date	19-01-2022, 11:00 AM
Online Bid Submission End Date	08-02-2022, 04:00 PM
Offline Bid Submission End Date	14-02-2022, 04:00 PM

Notes:

- (i) All details regarding the subject tender are available on our websites www.diucollege.ac.in and <https://ddtenders.gov.in>. Bidders are therefore, requested to visit our websites regularly to keep themselves updated.
- (ii) Manual/hardcopy of only technical bids shall be reached to this office on or before 14-02-2022, 04:00 PM.
- (iii) For submission of E-Bids, bidders are required to get themselves registered with <https://ddtenders.gov.in>. Tenders should be submitted before the end date and time of bid submission. Failing which offer will be liable for rejection. Papers related to company details (Copies of TIN No., PAN No, Sales Tax & Income Tax registration, GST, etc) and product details (Printed product specification sheet and other brochure/ leaflets etc.) should also be uploaded by bidders along with bids.
- (iv) Clarifications/ queries, if any, can be addressed to the Principal, Diu College, Diu.
- (v) Bidder can contact on email: acct.dcd@gmail.com for any query.



Vinod Kumar
Principal,
Diu College, Diu

Section-2**INFORMATION & INSTRUCTIONS FOR BIDDERS**

Tenders containing commercial bids are invited under e-procurement scheme for the following item as per the specifications given in Section 3. Your quotation should be submitted online latest by 04.00 PM on 08th February, 2022.

The details of the tender, items (s) and their technical specification are as under:

Tender Type	Open
Product Category	Goods (IT equipments)
Bid Document Fee	Non-refundable Rs.1000/- (Rs. One Thousand Only) in the form of Demand draft.
Bid Document Fee payable to	"The Collector & Chairman, Principal & Member Secretary DHES, Diu" Payable at Diu
Bid EMD (INR)	Rs. 1,12,500/- (Rs. One Lakh Twelve Thousand Five Hundred only) in the form of FDR
Bid EMD in favour of	"The Collector & Chairman, Principal & Member Secretary DHES, Diu" Payable at Diu
Security Deposit	10% of the total amount of work-order in the form of FDR.
Security Deposit in favour of	"The Collector & Chairman, Principal & Member Secretary DHES, Diu" Payable at Diu

1. Bid Submission

“**Technical Bid**” shall be submitted as per **Section 3**

“**Financial Bid**” shall be submitted as per **Section 4**

Bids shall be submitted online only on <https://ddtenders.gov.in>.

Tenderer/contractor are advised to follow the instructions provided in the ‘Instructions to the Contractor/Tenderer’ for the e-submission of the bids online through the Central Public Procurement Portal for e-procurement at <https://ddtenders.gov.in>.

Tenderer who has downloaded the tender from the college website www.diucollege.ac.in and Central Public Procurement Portal (CPPP) <https://ddtenders.gov.in>, shall not tamper/modify the tender form including downloaded price bid template in any manner. In case if the same is found to be tempered/ modified in any manner, tender will be completely rejected and tenderer is liable to be banned from doing business with Diu Higher Education Society.

Intending tenderers are advised to visit again college website www.diucollege.ac.in and CPP Portal <https://ddtenders.gov.in> at least 3 days prior to closing date of submission of tender for any corrigendum / addendum/ amendment.

2. OPENING OF FINANCIAL BID AND EVALUATION

Financial bids of eligible bidder will be opened. The item wise lowest financial bid will be considered award of work.

If in case there are more than one bidder quoting L1 price for same items, the L1 Bidder will be selected on the basis of average turnover of the bidder of previous 3 financial year.

3. FINAL DECISION MAKING AUTHORITY

The Principal, Diu College reserves the right to accept or reject any bid and to annul the process and reject all bids at any time, without assigning any reason or incurring any liability to the bidders. No claim whatsoever will be entertained/paid by the Diu College or Diu Higher Education Society to the bidder(s).

4. SUMMARY REJECTION OF TENDER:

The tenders after due date and time shall be summarily rejected. Similarly, if the bidder proposes any alternation in or additions to the prescribed form of tender or decline to carry out any work of the tender document; or any conditions mentioned, etc., his/her tender is liable to be rejected.

5. AMENDMENT OF TENDER DOCUMENT:

Before the deadline for submission of tender, the Diu College or Diu Higher Education Society may modify the tender document by issuing addendum/corrigendum.

6. Any addendum/corrigendum thus issued shall be a part of the tender document and shall be uploaded on the college website (www.diucollege.ac.in) and CPP portal <https://ddtenders.gov.in>. Prospective bidders must visit the website before filling and submission of Tender Document for such information.

7. ARBITRATION AND SETTLEMENT OF DISPUTES:

In the event of any question, dispute or difference arising under this agreement or in connection therewith (except as to matter the decision of which is specifically provided under this agreement), the decision of the Collector & Chairman, EC, DHES Diu will be final.

8. TERMS OF PAYMENT

- Payments will be made to the bidder as per the rates finalized in the Tender and after completion of the assignments. (When 100% goods are supplied and installed against the particular order).
- No advance will be paid.
- Following documents are to be presented by the successful bidder for payment after supply and installation:
 - Duplicates of invoices in name of The Principal, Diu College.
 - Proof of Delivery of Goods to Diu College
 - Request letter clearly mentioning the total amount of payment,
 - Bank details
 - PAN Card details and GST Registration details
 - Payment shall be made in Indian Rupees against completion of work.

9. INSTRUCTIONS FOR ONLINE BID SUBMISSION:

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on

the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://ddtenders.gov.in>.

10. REGISTRATION

Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: <https://ddtenders.gov.in>).

11. PREPARATION OF BIDS

1) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

2) Bidder should take into account any corrigendum published on the tender document before submitting their bids.

3) Language of Bid: The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser shall be written in English language. In case, the supporting documents and printed literature furnished by the Bidder are in some other language, then an accurate translation in the English language must be provided (if asked by Diu College).

4) Documents Constituting the Bid

The bid is required to be submitted in **two parts** separately

- One part is the **Un-priced Technical Bid**, and
- The other part is the **Financial/Price Bid (Volume 2)**.

A) Technical bid (un-priced)

The Technical bid (un-priced) prepared by the Bidder shall include the following documents without indicating the price in the technical Bid. The Technical offer should be complete in all respects, and submitted **Online & Offline**.

- i. **Annexure I** - Covering letter/Tender acceptance letter as per given format.
- ii. **Annexure II** - Attach information on The Company profile as per format.
- iii. **Section 3** - Technical bid with item details and eligibility fulfilment

Technical Bids with **incomplete documentation & details shall be rejected.**

B. Instructions for Financial/Price Bid (Volume 2)

- (i) The Financial offer should be complete in all respects, and submitted **Online Only.**
- (ii) The Price/Financial Bid shall include all the details as per the format.
- (iii) The Bidder shall indicate the unit prices and total bid prices of the goods it proposes to supply and installation under the order and enclose it with the priced bid.
- (iv) Prices indicated shall be entered separately for each item.
- (v) Please note Diu College is exempted from payment of Excise/Customs Duty. Please mention the applicable taxes (GST/VAT/CST/Service) clearly. We don't issue any 'Form C' or 'Form D'. If there is no explicit mention of taxes in your offer then the quoted price will be deemed inclusive of such taxes. No other charges except those mentioned clearly in the offer will be paid.
- (vi) Rates should be quoted for delivery up to Diu Higher Education Society, Office of The Principal, Diu College, Education Hub, Kevdi, Diu - 362520.
- (vii) The price should be quoted inclusive of all taxes, installation & commissioning charges and any other tax/charge applicable. Bidder must quote in Rupees only.
- (viii) Price will be valid for the period of 12 month from the date of receipt of tender.
- (ix) No extra charge for packaging, forwarding and insurance, transportation etc. will be paid in addition to the rates quoted.
- (x) A bid submitted with an adjustable price quotation will be treated as non - responsive and rejected.

12. SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee (Rs.1000 in form of DD) / EMD (Rs. 1,12,500 in form of FDR) as applicable and enter details of the instrument.

- 4) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable.
- 5) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 6) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid.

13. ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

Section 3**TECHNICAL BID**

Only such of the bidders who meet the eligibility criteria specified below will be eligible to respond to this notice inviting tender (NIT):

Sr. No.	Criteria	Document Required	Ref. Page no. of attached document
1	The Bidder should be Registered Firm/Company or OEM / Authorized Dealer/Distributor /Supplier of OEM. Bids from authorized distributors/ dealer/supplier of OEM shall also be accepted, subjected to the furnishing of a certificate from OEM authorizing them to bid on their behalf.	Attested copy of PAN Card and GST registration (both mandatory).	
2	The proof of the bidders (authorized representative firm/Company/OEM) as income Tax assessee	Income Tax Return of F.Y.2019-20, F.Y.2018-19, F.Y.2017-18	
3	The bidder should be in the business of supplying and installation of instrument to reputed Educational institutes (Institutions and recognized Universities etc	Copy of atleast 1 supply order/ work order from any government organization/educational institute/university.	
4	Bidder should not be blacklisted by Central Government, State Government or any other Institute(s) / Organization.	Signed Annexure-I on firm/company's letterhead	
5	Total turnover per year of Business during the last three years	Copy of Audited Balance sheet and P&L A/c of F.Y.2019-20, F.Y.2018-19, F.Y.2017-18	

Volume 2-Financial Bid

Commercial/Financial/Price bid should be prepared in the following format **(Through Online Submission Only)**

Financial Bid

Supply and Installation of Server and Firewall:

Sr. No.	Particular of Instrument	Description	Quantity	Price Inclusive of Taxes & Charges
A	B	C	D	E
1	Server	As per given in Annexure - III	1	
2	Firewall UTM with wireless Controller	As per given in Annexure - IV	1	

Annexure – I
Covering letter/tender acceptance letter
(Format of the letter to be submitted by the Vendor on company letter head)

To
The Principal
Diu College,
Education Hub,
Kevdi,
Diu – 362520.

Date:.....

Dear Sir,

Sub: Your tender for **Supply and Installation of Server and Firewall** as per specifications in your Tender.

With reference to your tender, and after having examined and understood the instructions, terms and conditions specified in the tender, we hereby enclose our offer for the supply and installation items as detailed in your tender.

We further declare that

1. I/We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:.....

As per your advertisement, given in the above mentioned website(s).

2. I/We hereby certify that I/we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I/we shall abide hereby by the terms / conditions/ clauses contained therein.

3. The corrigendum(s) issued from time to time by your department / organization too has also been taken into consideration, while submitting this acceptance letter.

4. I/we hereby unconditionally accept the tender conditions of above mentioned tender document(s)/corrigendum(s) in its totality/entirely.

5. I/we do hereby declare that our firm has not been blacklisted/debarred by any Govt. Department/Public Sector undertaking.

6. I/we certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or

remedy including the forfeiture of the full said earnest money deposit absolutely.

We further confirm that the offer is in conformity with the terms and conditions as mentioned in your above referred letter and enclosures. We also understand that the Diu College or Diu Higher Education Society is not bound to accept the offer either in part or in full and has right to reject the offer in full or in part without assigning any reasons whatsoever.

Yours faithfully,
Authorized Signatories
(Name & Designation, seal of the firm)
Date:

Annexure - II

Company Profile

Details filled in this form must be accompanied by sufficient documentary evidence, in order to verify the correctness of the information.

Sr. No.	Item	Details
1	Name of Company	
2	Mailing Address	
3	Telephone and Fax numbers	
4	Date of registration of the Company	
5	Year of commencement of Business	
6	Name and designation of the person authorized to make commitments to the College	
7	Contact details of the person authorized to make commitments to the College	
8	Sales Tax Number/ TIN Number	
9	PAN Number	
10	GST Number	
11	Whether direct manufacturer (OEM) or authorized dealer/representative	

Yours faithfully,
Authorized Signatories
(Name & Designation)
Date:

COMMERCIAL TERMS AND CONDITIONS

- Prices should be quoted up to Diu Higher Education Society, Diu.
- Discounts/Rebates: Maximum special discounts/rebates should be indicated in the offer.
- The price bids shall remain valid for a period of 1 year days from the date of opening of technical bid. Diu College, Diu reserves the right to reject a bid valid for a period shorter than 1 year as non-responsive without any correspondence.
- The delivery period should be within 20 days from the date of receipt of order. Bids offering delivery period beyond stipulated time period will be treated as non-responsive and will be summarily rejected.
- The prices quoted by the bidder in the price bid are final and no adjustment of the same shall be made on account of any variations in costs of materials or any other cost component affecting the total cost in fulfilling the obligation under the contract. The prices once offered shall remain firm and fixed and shall not be subject to escalation for any reason whatsoever during the currency of the contract.
- Bidder should required to check and follow all applicable guidelines and rules issued by GOI/UT administration of DNH & DD in regards to this procurement.

Authorized Signatory
With seal of company

Rack Server Specification

Chassis	
Form Factor	Standard Mountable Rack (29") Suitable Server class rack to be included (24U minimum)
Size of server (RU)	Not more than 2U
Processor	
Processor Architecture	CISC (X86)
Processor Make	Intel
Number of Processors	2
Number of Cores per Processor	Minimum 20
Processor Base Frequency (GHz)	Minimum 2.3
Processor Turbo Frequency (GHz)	Minimum 3.5
Processor Description. Number	Intel Xeon Gold 62XX Series or higher
Motherboard	
Chipset compatible with CPU	Intel C621
Expansion Slots Gen 3 (PCIe x8)	Minimum 2
Expansion Slots Gen 3 (PCIe x16)	Minimum 2
Number of Sockets available on server	Minimum 2
Number of Processor Sockets populated on server	Minimum 2
Memory	
Type of RAM	DDR4 SDRAM with ECC or Advanced (Speed at least 2933 MHz)
Total Number of DIMM Slots available	Minimum 16
Number of DIMM Slots populated with DDR SDRAM	Minimum 16
DDR SDRAM Size (GB)	Minimum 128 GB 16 x 8 GB DDR4
Storage	
Type of storage configuration	Combo of M.2 NVMe SSD and SAS Based HDD with RAID 1 or RAID 5 (with hot spare) support.
Configuration of M.2 NVMe SSD	2 TB M.2 NVMe SSD (with RAID — 1 support). Minimum 2 disks to be populated.

	NVMe support including "Boot from NVMe" from day-1.
Type of Interface for Hard Disk Drive	SAS
Total Storage Capacity with SAS Drive	Minimum 6 TB (available space) 7 x 1.2 TB SAS HDD RAID 5 support and one spare drive. Any other combination is acceptable. Minimum usable disk space 6 TB after RAID implementation. Spare to be included in case of RAID-5 implementation.
Total number of slots available for SAS drive	Meet the above requirement.
Number of Slots populated with SAS Drive	
SAS drive Speed (Hot plug or better) (RPM)	Minimum 7200
RAID	
RAID level	1, 5, 10
No of RAID Controller Ports	Minimum 32
Speed of RAID Controller Ports (Gbps)	Minimum 24
RAID Controller Cache (GB)	Minimum 8
Ports & Interfaces	
Network Card Supported	1G, 10G auto-negotiable
Type of Network Interface Card	Embedded
Number of Ports	Support for 4x1G, 1x10G with SFP+ or better
Networking Interface Card Features	Asset Feature Tracking Security Management
Number of Dual port FC HBA card	Minimum 1
FC HBA Speed (Gbps)	Minimum 16
Support for vHBA card Features	Required
USB Ports (version 2point0/3point0)	Minimum 6

Total Number of Spare Bays Available for Future Up gradation (Internal)	Minimum 3
Total Number of Spare Bays Available for Future Up gradation (Hot Plugable)	Minimum 3
Other Requirement	
GPU	No dedicated GPU
	VGA/Serial/SD-2/1/1 VGA card/KVM switch with suitable configuration Suitable OEM rack with power connection and socket. Monitor, Mouse, Keyboard.
Certifications	
Certifications/Compliance (OS)	Windows Red Hat Linux Suse Linux Ubuntu Cent OS
Certifications/Compliance (Virtualization/Cloud platform)	VM Ware HyperV Red Hat Virtualization
Features	
Management Features	Remote Power On/shutdown of Server Remote management of server over LAN & WAN with SSL encryption through gigabit management port Should have virtual media support with all required licenses Remote KVM, server health logging out of band management Automated infrastructure management for patch upgrades, version upgrades etc. Simplified management with analytics driven actionable intelligence. Hardware Profile based deployment to multiple servers simultaneously, Policy template for deployment of single policy to multiple servers simultaneously Platform inventory and health status Server utilization statistics collection

	<p>(including firmware updates and diagnostic tools)</p> <p>Solution should be open and programmable providing rest API SDK for programming languages like Python, power shell scripts etc.</p> <p>Real-time out-of-band hardware performance monitoring and alerting</p>
Security Features	<p>Secure Boot (Firmware and Bios Level Security)</p> <p>Provision to lock the system on breach</p> <p>Hardware root of trust /dual root of trust</p> <p>Server should provide policy based security</p> <p>Server should provide server intrusion detection</p> <p>“Malicious Code Free design”(to be certified by OEM)</p> <p>Provision for cryptographic firmware updates</p> <p>Capability to stop execution of Application/Hypervisor/Operating System on predefined security breach</p> <p>Secure/ Automatic BIOS recovery</p> <p>Network card secure firmware boot</p> <p>In case of any security breach system should provide the lock down feature</p>
Server scalability to be achieved within the box & without adding nodes	Required
Support for high availability clustering and virtualization	Required
Generic	
Redundant Power Supply	<p>Required (n+1)</p> <p>To be populated with 1- hot redundant supply</p>
Hot Swappable (Redundant power supply)	Required
Power supply efficiency	Platinum or Better
Redundant Fan	Required
Hot Swappable (Redundant Fan)	Required (n+1)

Server Main Supply	Indian standard of 230+/-10% Volts AC (50Hz)
Benchmark	
SPEC int_rate_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	
SPEC fp_rate_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	
SPEC int_speed_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	
SPEC fp_speed_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	
Miscellaneous	
Power consumption of the system (Watts)	Suitable OEM power supply
BIS registration under CRS of MeitY	Required
BIS registration number under CRS of MeitY and its validity	To be mentioned
Other certifications required	UL (Underwriters laboratories) CE (Conformite Europeenne) FCC(Federal Communications Commission)
RoHS (Restriction of Hazardous Substance Directive) Compliance	Required
Scope of Supply	
Installation and commissioning shall be included in the scope of supply	To be included in the scope of supply
Warranty	
On site OEM comprehensive warranty (year)	Minimum 5

Firewall UTM with Wireless Controller-WLC

- HW Appliance
- Full Guard Licenses for 3 year - includes Base Firewall
- Network Protection
- Web Protection
- Email Protection
- Web Server Protection with Enhance support.
- User based Authentication

Ser No	Item	Minimum Technical Specification
1	General Features	Proposed WLC should be installed On-Premises and should support 20 (Approx. As per requirements) access points from Day 1, scalable for up to 50 (As per requirements) AP's without Software/hardware change.
2		Controller shall support minimum 700 concurrent sessions from a single account. System should have capability to support 1000 or more concurrent users.
3		VLANs 802.1Q (1 per BSSID), dynamic VLAN
4		Solution should have integrated/external DHCP SERVER Supported
5		tunnel wireless user traffic to 3rd party wireless gateway using common tunnelling protocols like L2TPv2 or L2GRE or any other equivalent tunnelling protocols
6		WLAN system shall support Mobile data offload as a feature
7	RF Management	Wi-Fi system Must support an ability to dynamically adjust channel based on the RF environment.
8		Wi-Fi system Must have Automatic 802.11 interference detection/mitigation.
9		Wi-Fi system Must support RF Management with 20,40,80 MHz channels with 802.11a,b,g,n,ac
10		WLC should support L2/L3 roaming for IPv4/IPv6 clients.
11	Security :	Option to support management users authentication from multiple data base like Local Data base, Active Directory or TACACS Server
12		Should adhere to the strictest level of security standards, including 802.11i Wi-Fi Protected Access (WPA/WPA2), Wired Equivalent Privacy (WEP), integrated/external 802.1X with multiple Extensible Authentication Protocol (EAP) types, including Protected EAP (PEAP), EAP with Transport Layer

		Security (EAP-TLS), EAP with Tunnelled TLS (EAP-TTLS)
13		Should support Management frame protection for the authentication of 802.11 management frames by the wireless network infrastructure.
14		WLC should have WIDS/WIPS feature and should be able to detect attacks like Broadcast deauthentication, NULL probe, for all access points
15		WLC should have profiling of devices based on protocols like HTTP/DNS/DHCP and more to identify the end devices on the network
16	Guest Wireless	WLC should provide Guest management system with Voucher based authentication, local SMS server integration for OTP, Google, Twitter, Office 365 and Facebook authentication. Should support major SMS providers like SMS country, Gupshup/Victory Link SMS and Twillio.
17		It should also provide Guest access policy based on time, bandwidth and quota (bandwidth consumption).
18		Shall support guest users details capture and export same details like Guest Users Session start time MAC address, Cell number when authenticated using OTP E-mail address Access Point details WLAN details for security audit purpose
19		Must support internal and external web authentication.
20	Functionality	Must be able to set a maximum per-user bandwidth limit on a per-SSID basis.
21		Controller must provide Mesh capability for Mesh supported AP.
22	Roaming:	Should support Roaming including "Fast Roaming, Intra-subnet/inter-subnet roaming"
23	Operational:	AP Shall support zero touch deployment through automatic discovery of controller
24		Wi-Fi system Must have feature for recovery without re-authentication of the client in the event of LAN and WLAN infrastructure disruption to deliver a non-stop client session
25		Shall support multiple profile configuration to push configurations to Access Points
26		Shall maintain history / inventory of configuration task for

		future audit purpose
27		Must support generation of different types of reports with minimum 1 month of historical customized reports.
28		Must support AP over-the-air packet capture for export to a tool such as Wire shark.
29		Should provide real-time charts showing interferers per access point, on a per-radio, per-channel basis.
30		Should support encrypted mechanism to securely upload/download software images to and from wireless controllers.
31		WLC shall support Quality of Service features like 802.11e based QoS enhancements, WMM or equivalent and U-APSD to provide best performance on Video applications.
32		Shall support Google location view for Wi-Fi site and support placing APs on floor plan and visual indication of AP online and offline
33		System shall support Reporting functionality with/without any external server.
34		Should support following Information through SNMP/API. i) Connected APs (count) , Connected Clients (count). ii) Connected Stations (count), Admin Status (on/off) ,Broadcast SSID (on/off). iii) AP name, AP IP address, AP Model , AP uptime , AP admin status , Ethernet speed , number of clients and AP mode .
35	WMM/ QOS	WLAN system should be wifi pass point 2 certified and should support 802.11e /WMM.
36		WLAN system shall integrate with firewall for seamless network security.
37	Warranty	Should have OEM TAC support and should offer WLC with support for 3 Years.