

# NATIONAL LAW UNIVERSITY DELHI

SECTOR-14, DWARKA NEW DELHI-110078

## TENDER NOTICE

1. Date of Invitation of quotations : 4<sup>th</sup> February, 2019
2. Last date of submission : 1.00 PM on 14<sup>th</sup> February, 2019
3. Date of opening : 20<sup>th</sup> February, 2019 at 3.00 PM

National Law University Delhi invites sealed quotations from competent and reputed Dealers/Contractors for “**Supply & Installation of WiFi Access Points**”.

The quotation is required to be submitted in a sealed cover addressed to the Registrar, National Law University Delhi, Sector- 14, Dwarka, New Delhi – 110078 so as to reach the University on or before 1.00 P.M on 20<sup>th</sup> February, 2019 duly superscripting the work quotation for “Supply & Installation of WiFi Access Points” on the top of sealed envelope. The tender box is available in the Main Reception of the University where quotation/tender is to be dropped.

**Scope of work:** Supply & Installation of WiFi Access Points.

Sr. No.	Name of item	Quantity
1.	<b>WiFi Access Points</b> (Should be compatible with Motorola Controller RFS 6000) <i>Specification: Annexure - I</i>	15 Nos.
2.	<b>WiFi Access Points (Cambium/Aruba/Ruckus)</b> (Standalone Controller Based) <i>Specification: Annexure - II</i>	33 Nos.
3.	<b>Buyback Access Points</b> (i) Motorola AP 6511 – 38 Nos. (ii) Motorola AP 6521 – 04 Nos. (iii) Allied AP WA7400 – 41 Nos.	83 Nos.

### **Terms and conditions:**

1. The agency should have OEM Authorization for the supplied product.
2. University may increase or decrease the quantity at any stage of tender.
3. Quoted price should be inclusive of installation.
4. The agency is required to submit its bids/quotation on their letter head.
5. Copy of PAN card is to be enclosed.
6. Copy of GST Registration certificates is to be enclosed.
7. Registration certificate as per existing norms (indicating the legal status-company/partnership firm/proprietorship concern etc.) to be enclosed.
8. Cutting and overwriting in the quotation are not allowed. If, there is cutting and overwriting such quotation will not be entertained.
9. The quotation received after last date and time of submission will not be entertained.
10. The conditional tenders /quotations would not be accepted.

Sd/-  
Registrar

**Specification of WiFi Access Points**  
(Compatible with Motorola Controller RFS 6000)

Qty.: 15 Nos

	<b>Make:</b>	<b>Model:</b>	<b>Complied (Y/N)</b>
Standards	IEEE 802.11a/b/g/n/ac. Others: 802.11 h/d/r/u/w/ Wi-Fi alliance certified		
Features	The wireless AP should be based on single radio band unlocked and thin AP		
	The 802.11 N Access Point 2x2 MIMO, single radio to be configured either in 2.4 /5 or to perform as sensor for IPS		
	The Access Point should have one Auto sensing 10/100/1000 Ethernet interfaces 802.11n Access Point should be able to power up using standards 802.3af POE input.		
	The AP should be able to do local forwarding		
	The AP should be able to perform encryption/decryption, QOS, and RF Management at its level without the need of controller		
	The AP should be able to provide captive portal facility on its self.		
	80211a Radio specifications	Operating Frequency: 5.725- 5.850 GHz as per India country regulatory requirements.	
Available Channels: Mobility Controller-managed, dependent upon configured regulatory domain Modulation: Orthogonal Frequency Division Multiplexing (OFDM)			
Transmit Power: 18-20 dBm / 100 mW* (within country regulations)			
Tx power Configurable in increments of 1dbm			
Association Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 with automatic fallback			
80211b Radio Specifications	Operating Frequency : 2.4-2.5 GHz		
	Available Channels: Mobility Controller-managed, dependent upon configured regulatory domain		
	Modulation: Direct-Sequence Spread-Spectrum (DSSS)		
	Transmit Power: 18-20dbm/100mw (within country regulations)		
	Tx power Configurable in increments of 1dbm		
	Association Rates Mbs : 11, 5.5, 2, 1 with automatic fallback Operating Frequency : 2.4-2.5 GHz ;		
80211 g Radio specifications	Available Channels: Mobility Controller-managed, dependent upon configured regulatory domain		
	Modulation: Orthogonal Frequency Division Multiplexing (OFDM)		

	Transmit Power: 18-20 dBm / 100mW*(within country regulations)	
	Tx power Configurable in increments of 1 dBm	
	Association Rates (Mb s): 54, 48, 36, 24, 18, 12, 9, 6 with automatic Fallback	
80211n Radio specifications	Operating Frequency : 2.4-2.5 GHz and 5.150 GHz - 5.950 GHz`	
	Available Channels: Mobility Controller-managed, dependent upon configured regulatory domain	
	Modulation: 802.11 n draft 2.0	
	Transmit Power: 18-20 dBm / 100 mW*(within country regulations)	
	Tx power Configurable in increments of 1 dBm	
	Association Rates (Mb s): MSC0 - MSC15 6.5Mb s - 300Mb s	
	Radio: 2x2 Multiple-In, Multiple-Out (MIMO), with two spatial streams	
	High-Throughput (HT) Support: HT 20/40	
	Packet Aggregation: A-MPDU	
Antenna Characteristics	Integrated or external with 3 dBi on 2.4 Ghz and 5 dBi on 5 GHz	
	External Antenna Gain:	
	2.4 GHz-2.5 GHz / 3 dBi 5.150 GHz- 5.875 GHz / 5 dBi	
Regulatory	FCC certified	
	Industry of Canada	
	CE Mark	

Note: Above supplied AP should be compatible with Motorola Controller RFS 6000

**Annexure - II**

**Specification of WiFi Access Points**  
(Standalone Controller Based)

**Qty.: 33 Nos**

	<b>Make:</b>	<b>Model:</b>	<b>Complied (Y/N)</b>
Standards	IEEE 802.11a/b/g/n/ac. Others: 802.11 h/d/r/u/w/ Wi-Fi alliance certified		
Antenna	2x2 MIMO streams		
Range	180 m (650 Ft)		
Concurrent Clients	256		
Max Data Rates	+1.167 Gpbs		
SSID	16 SSIDs across 2 radios		
Standards	4.55 dBi (2.4 GHz)/4.25 dBi (5 GHz)		
Polarization	5 GHz dual Polarized antenna		
Antenna Coverage	Omni (360°)		
Ethernet Ports	One (1) x 1 Gigabit Ethernet (10/100/1000 Mbps)		
Frequency bands	2.4 GHz: 2400-2484 MHz 5 GHz: 5150-5850 MHz with DFS band support		
Power Supply	Standard 802.3af injector (supplied) or any PoE switch		
Dimensions (CM)	18 cm x 18 cm x 3 cm		
Weight	350g		
Controller modes	Autonomous Controller-less operations (E.g.: roaming) Cloud Managed On-premise virtualized controller		
Secure WLAN	WPA-TKIP, WPA2 AES, 802.1x 802.11w (Protected Management Frames)		
Hotspot 2.0/Passpoint	Yes		
Captive Portal	• cnMaestro Controller • Stand-alone AP based • Redirection to external RADIUS • Server DNS logging		
Scheduled SSID	Turn SSID ON/OFF on a daily/weekly/time of day basis		
Guest Access	Yes. With Active Directory Integration		
Meshing	Multi-hop meshing supported (3)		
Firewall	Yes. NAT logging		
Band Steering and Balancing	Yes		
Tunneling	L2TP, L2oGRE PPPoE		
Certifications	FCC, ETSI, CE, EN 60601-1-2 (Medical EMC) UL2043 Plenum rated		

## FINANCIAL BID

To

The Registrar  
National Law University, Delhi  
Sector-14, Dwarka  
New Delhi-110078

**Subject: Financial Bid for Supply and Installation of WiFi Access Points against Buyback.**

Sir,

I/we have gone through the tender document, understood it fully and declare that I/we shall abide by the terms and conditions mentioned therein for supply of the items required.

S. No.	Particulars	Qty.	Rate Per Pc.	Tax	Grand Total
	(1)	(2)	(3)	(4)	(5)
1.	Supply and Installation of WiFi Access Points <b>(Compatible with Motorola Controller RFS 6000)</b>	15 Nos.			
2.	Supply and Installation of WiFi Access Points <b>(Standalone Controller based)</b>	33 Nos.			
3.	<b>Buy back Items</b> (i) Motorola AP 6511 (38 Nos.) (ii) Motorola AP 6521 (04 Nos.) (iii) Allied AP WA7400 (41 Nos.)	83 Nos.			

I/we certify that information furnished above is true and correct. All the terms and Conditions mentioned in the tender documents are acceptable to us.

Documents Attached:

- 1) Copy of PAN Card is to be enclosed
- 2) Copy of GST Registration Certificates is to be enclosed.
- 3) Registration certificate as per existing norms (indicating the legal status-company/partnership firm/proprietorship concern, etc.)
- 4) OEM Authorization for supply of product.

(Authorized Signature)

Name of the Authorized person: \_\_\_\_\_

Name of the Company: \_\_\_\_\_

Address of the Company: \_\_\_\_\_

Contact No: \_\_\_\_\_

Email Id: \_\_\_\_\_