



Securities and Exchange Commission of Pakistan
63-NIC Building, Blue Area, Islamabad
(Support Services Division)
(Administration Department)

Subject: Procurement of Wireless Access Points

The Commission intends to purchase Wireless Access Points. Detailed requirement / specifications are attached as Annex "A"

Terms & Conditions

- **Interested Firms must be** registered with sales tax department and having national tax number (NTN).
- **Price** must be inclusive of all taxes applicable by Govt. of Pakistan.
- **Delivery** time within one week of receiving of P.O.
- **Validity** Minimum 30 Days from quoted date.
- **Delivery of item(s) will be at SECP Head Office, Islamabad.**
- **Bid Submission Time:** As per SECP Website.
- **Quantity** required may increase or decrease.
- **Evaluation Criteria** to evaluate received quotations will be followed as under:
 - Technical Weightage 60%
 - Financial Weightage 40%
- **Warranty Period:** Must be **01** years repair or replace warranty.

If you are interested, please submit sealed quotation for the above item to the undersigned SECP, 63-NICL Building, Jinnah Avenue, Blue Area, and Islamabad within the specified period.

With best regards.

M. Ubaidullah Khalid
Assistant Director (Admin)

Wireless Access Point (Required Quantity = 03)

Specifications	
Standards	Draft IEEE 802.11n, IEEE 802.11g, IEEE 802.11b, IEEE 802.3, IEEE 802.3u, IEEE 802.3af (Power over Ethernet), 802.1x (security authentication), 802.11i security WPA/WPA2, WMM
Ports	Ethernet, Power
Buttons	Reset
Cabling type	Unshielded twisted pair (UTP) Category 5e or higher
LEDs	Power, Ethernet, Wireless, PoE
Setup/Configuration	
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
Management	
Simple Network Management	SNMP version 1, 2c
Event logging	<ul style="list-style-type: none"> • Event logging • Email logging • Remote syslog
Web firmware upgrade	Firmware upgradeable through web browser
Diagnostics.	Flash, RAM, LAN, WLAN
Dynamic Host Configuration	DHCP client
HTTP Redirect	Redirects initial user access to an external web server to display company logo or network usage policy
IPv6 host	<ul style="list-style-type: none"> • Support for management and control of access point over IPv6 • Supports RFC2460 (IPv6 protocol) and RFC4294 (IPv6 node requirements)
Network Capabilities	
Multiple BSSID	Supports up to 4 BSSIDs, allowing the creation of multiple virtual access points
VLANs	Supports 802.1q - up to 4 VLANs
SSID to VLAN mapping	Supports mapping of SSIDs to VLANs to securely separate workgroups across wireless and wired domains
Spanning Tree	Supports 802.1d Spanning Tree Protocol to prevent loops when using wireless distribution system (WDS) links as redundant links in a distribution system
Operating modes	Access point mode, point-to-point bridge mode, point-to-multipoint bridge mode, repeater mode, wireless client mode
Load balancing	Allows bandwidth control with user-defined CPU usage ratios
Auto-channel selection	On boot-up, the access point selects the least congested channel
802.11d regulatory domain	Enables the access point to provide radio channel settings for client devices, facilitating easy client access as they move across regulatory domains
Security	
WEP/WPA/WPA2	Wired Equivalent Privacy (WEP) 64-bit/128-bit, WPA-Pre-Shared Key (WPA-PSK), WPA2-PSK, WPA-ENT, WPA2-ENT
Access control	Wireless connection control: MAC-based
SSID broadcast	SSID broadcast enable/disable
Client isolation	Supports wireless client isolation between and within SSIDs
802.1X	Wireless clients can be authenticated through IEEE 802.1X
802.1X supplicant	Supports 802.1X supplicant on the Ethernet port to allow the access point to authenticate itself to the network
RADIUS server	Up to 2 RADIUS servers can be configured for redundancy purposes

WPS	Supports WPS, a WI-FI Alliance specification for simple and secure setup of a wireless network
Rogue access point detection	New access points detected that have not been categorized as known are logged as rogue access points, allowing the administrator to clamp down on unapproved devices in the network
Quality of Service	
QoS	<ul style="list-style-type: none"> • 4 queues • 802.1p VLAN priority • WMM wireless priority • Mapping of 802.1p VLAN priority to WMM wireless priority to maintain end-to-end QoS
Wireless	
Spec/modulation	Radio and modulation type: 802.11b/DSSS, 802.11g/OFDM, 802.11n/OFDM
Channels	Operating channels: 11 North America, 13 most of Europe (ETSI and Japan)
Transmit power	Transmit power @ normal temp range for FCC: 802.11b: 16 dBm @ 1TX, 19 dBm @ 2TX, 20.5 dBm @ 3TX 802.11g: 13 dBm @ 1TX, 16 dBm @ 2TX, 17.5 dBm @ 3TX 802.11n: 17 dBm @ 1TX @ MCS0~5/8~13, 13 dBm @ 1TX @ MCS6/14, 11 dBm @ 1TX @ MCS7/15, 20 dBm @ 2TX@MCS0~5/8~13, 16 dBm @ 2TX @ MCS6/14, 14 dBm @ 2TX @ MCS7/15, 21.5 dBm @ 3TX@MCS0~5/8~13, 17.5 dBm @ 3TX @ MCS6/14, 15.5 dBm @ 3TX @ MCS7/15 Transmit power @ normal temp range for ETSI: 11b/g/n: 13 dBm @ 1TX, 16 dBm @ 2TX, 17.5 dBm @ 3TX
Antenna gain in dBi	2
Receiver sensitivity	802.11.n: 300 Mbps at -69dBm 802.11.g: 54 Mbps at -73dBm 802.11.b: 11 Mbps at -88dBm
Environmental	
Power	<ul style="list-style-type: none"> • 12V 1A DC input, and IEEE 802.3af compliant PoE • Max power draw: 10.1W
Certification	FCC, CE, IC
Operating temperature	32°to 104°F (0°to 40°C)
Storage temperature	-4°to 158°F (-20°to 70°C)
Operating humidity	10% to 85%, noncondensing
Storage humidity	5% to 90%, noncondensing