



Institute of
Business Administration
Karachi

Purchase Order

Leadership and Ideas for Tomorrow

IBA Karachi
IBA MAIN CAMPUS
KARACHI
Pakistan

Approval Status: Approved

Purchase Order IBA-0000003120	Issue Date 28, June, 2019	
Payment Terms 30 Days	Ship Via ROAD	
Buyer Purchase Department	Phone +922138104700 Ext 2150, 2152, 2112	Currency PKR
Requestor Department ICT DEPARTMENT REQUESTER		

Supplier: V02020

M/S NEW

HORIZON

COMPUTER

F-18 12-A, KDA Scheme # 5, Block 7,

Clifton

Karachi

Pakistan

Ship To: Store, IBA Main Campus, University Road

Bill To: Purchase Department, IBA Main Campus
University Road, Karachi
Pakistan

S. No.	Item / Description Specification	Qty. (UOM)	PO Price	Extended Amount	Delivery Date
1	WIRELESS LAN CONTROLLER WITH 100 LICENSE WIRELESS LAN CONTROLLER GENERAL REQUIREMENT THE CONTROLLER SHOULD HAVE: BRAND AND MODEL: DELL EMC RUCKUS 1. 2 X 10G & 4 X GE PORTS. 2. SEPARATE CONTROL PLANE AND DATA PLANE 3. SURVIVABLE AP ARCHITECTURE I.E., IN THE EVENT OF BACKHAUL OUTAGE, NEW APS AND CLIENTS CAN BE ADDED AND FULL WLAN FUNCTIONALITY PERSISTS 1.COMPLIANT STANDARDS IEEE 802.11A , IEEE 802.11B , IEEE 802.C, IEEE 802.11D , IEEE 802.11E, IEEE 802.11G , IEEE 802.11H , IEEE 802.11I , IEEE 802.11N , IEEE 802.1D , IEEE 802.1Q , IEEE 802.1X , IEEE 802.3 , IEEE 802.3U, 802.11AC 2. FEATURES ARP SUPPORT, DHCP SUPPORT, MAC ADDRESS FILTERING, MANAGEABLE, SYSLOG SUPPORT, VLAN SUPPORT, CENTRALIZED SECURITY POLICIES, WIRELESS INTRUSION PREVENTION SYSTEM, RF MANAGEMENT, QUALITY OF SERVICE (QOS) FOR VOICE AND VIDEO,	1.00 EA	1497474.00	1497474	23-Aug-19

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	<p>THE APS AND CONTROLLER SHOULD BE CAPABLE OF 802.11Q VLAN TAGGING OF MANAGEMENT TRAFFIC INDEPENDENT OF VLANS UTILIZED BY THE WLANS (SSID). FURTHER:</p> <p>A. THE APS AND CONTROLLER MAY UTILIZE DIFFERENT VLAN TAGS</p> <p>3. NETWORK TRANSPORT PROTOCOL ARP , , DHCP , ICMP/IP , TCP/IP , UDP/IP</p> <p>4. SWITCHING PROTOCOL ETHERNET</p> <p>5. TYPE NETWORK MANAGEMENT DEVICE</p> <p>6. OTHER FEATURES WIRED SPEED, NO BLOCKING PERFORMANCE FOR 802.11N AND OPTIMIZED FOR 802.11AC NETWORKS</p> <p>SEPARATE SSID TUNNELS ALLOW BOTH CORPORATE AND PERSONAL INTERNET ACCESS</p> <p>SUPPORT FOR UP TO 1000 ACCESS POINTS AND 25,000 CLIENTS WITH 55 LICENSES OF AP</p> <p>DESIGNED TO SUPPORT BOTH 802.11N AND 802.11AC NETWORKS</p> <p>ABILITY TO MANAGE 1000 ACCESS POINTS SIMULTANEOUSLY</p> <p>OPTION TO ADD ADDITIONAL ACCESS POINTS AND FEATURE LICENSES OVER TIME ALLOWS ACCESS POINTS TO DYNAMICALLY ESTABLISH WIRELESS CONNECTIONS WITHOUT THE NEED FOR A PHYSICAL CONNECTION TO THE WIRED NETWORK</p> <p>WARRANTY & SUPPORT (ENTIRE EQUIPMENT INCLUDING OPTIONS AND ACCESSORIES)</p> <p>REPLACEMENT WITH EQUAL OR HIGHER BACKUP WITHIN 24 HOURS OF REPORTING PROBLEM</p> <p>3 YEARS' COMPREHENSIVE WARRANTY INCLUDING MAINTENANCE.</p> <p>24X7 ON-SITE SUPPORT WITH 2 HRS. INITIAL RESPONSE TIME & 4 HRS. TURNAROUND TIME</p> <p>TRANSPORTATION AND LABOR INCLUSIVE</p> <p>FULLY BACKED BY PRINCIPAL MANUFACTURER.</p> <p>M/S NEW HORIZON COMPUTER SHOULD PROVIDE TRAINING TO CONCERNED STAFF OF IBA FOR THE PROPOSED</p>				



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	<p>SOLUTION PROPOSED SOLUTION SHOULD HAVE PTA TYPE APPROVAL.</p> <p>DESCRIPTION QUANTITY 5 DELL EMC NETWORKING RUCKUS OUTDOOR WIRELESS ACCESS POINT, 11ACWAVE 2, T710, WORTD WIDE [OUTDOOR AP-T7101 BOXING LABELMOD 1 DELLEMC NETWORKING RUCKUS POEINJECTOR 10/100/1K WITH UK/IE PLUG ONLY, 6 1 FEET DELLEMC NETWORKING RUCKUS RAILMOUNTING BRACKET KIT FOR T600 AND T700 1 FOR SADMG COUNTRIES ONLY - NO INSTALLATION SERVICE REQUIRED 1 TECHNICAL SUPPORT-EMERGING DBS 1 OEM SUBSCRIPTION SERVICE 1 INFO MOD - FACTORY PASS THROUGH PROCESS 1 LIMRTED WARRANTY:YR1(PARTS)-EMERGING DBS 1 3YR PROSUPPORT:NEXT BUSINESS DAY ONSRTE SERVICE-EMERGING DBS 1 YR1 PROSUPPORT:NEXT BUSINESS DAY ONSRTE SERVICE-EMERGING DBS 1 YR2-3 PROSUPPORT:NEXT BUSINESS DAY ONSITE SERVICE-EMERGING DBS 1 3YR PROSUPPORT (7X24) TECHNICAL SUPPORT & ASSISTANCE-EMERGING DBS 1 NO REMOTE ADVISORY SERVICES PURCHASED -INDO, VN,PH,BRU & SADMG 1 VISIT //V/W'1.DELL.COM/CONTACTDELL 1 MOD SPECS INFO (SADMG) 1 EX-HUB FROM APCC PENANG(DDD) 1 EX-FACTORY DELIVERY 1 1 DELL EMC NETWORKING RUCKUS SMARTZONE 124,WORTD WIDE,WITH CHOSEN COUNBRY POWER CORD [WIFI CONTROLLER- SZ124) DELLEMC NETWORKING RUCKUS CONTROLLER POWER CORD,250V,10A, 6 FEET,EU 1 BOXING LABELMOD 1 FOR SADMG COUNTRIES ONLY - NO INSTALLATION SERVICE REQUIRED 1 TECHNICAL SUPPORT-EMERGING DBS 1</p>				



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	<p>OEM SUBSCRIPTOIN SERVICE 1 INFO MOD - FACTORY PASS THROUGH PROCESS 1 LIMRTED WARRANTY:YR1 (PARTS)-EMERGING DBS 1 3YR PROSUPPORT:NEXT BUSINESS DAY ONSRTE SERVICE-EMERGING DBS 1 YR1PROSUPPORT:NEXT BUSINESS DAY ONSRTE SERVICE-EMERGING DBS 1 YR2-3 PROSUPPORT:NEXT BUSINESS DAY ONSITE SERVICE-EMERGING DBS 1 3YR PROSUPPORT (7X24) TECHNICAL SUPPORT & ASSISTANCE-EMERGING DBS 1 NO REMOTE ADVISORY SERVICES PURCHASED -INDO, VN,PH,BRU & SADMG 1 VISIT //V/W'1.DELL.COM/CONTACTDELL 1 MOD SPECS INFO (SADMG) 1 EX-HUB FROM APCC PENANG(DDD) 1</p> <p>S QTY DESCRIPTION QUANTITY EX-FACTOR,DELIVERY 50 DELL EMC NETWORKING RUCKUS INDOOR WIRELESS ACCESS POINT,11AC WAVE 2, R720, WORLD WIDE NDOOR AP - R720] BOXING LABELMOD DELLEMC NETWORKING RUCKUS POEINJECTOR 10/100/1K WITH EU PUL G ONLY, 6 FEET DELLEMC NETWORKING RUCKUS SECURE MOUNTING BRACKET V.ITHOUT PADLOCK FOR SADMG COUNTRIES ONLY - NO INSTALLATION SERVICE REQUIRED EXTENDELIFE LIMITEDDELL STANDARD TECLLNICALSUPPORT-EMERGING DBS OEM SUBSCRIPT ON SERVICE INFO MOD - FACTORY PASS THROUGH PROCESS EXTENDELIFE LIMITEDHARDWARE WARRANTY (PARTS)-EMERGING DBS YR1-3 PROSUPPORT:NEXT BUSINESS DAY ONSITE SERVICE-EMERGING DBS 3YR PROSUPPORT (7X24) TECHNICAL SUPPORT & ASSISTANCE-EMERGING</p>				



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	<p>DBS</p> <p>3YR PROSUPPORT:NEXT BUSINESS DAY</p> <p>ONSITE SERVICE-EMERGNI G DBS</p> <p>NO REMCTE ADVISORY ERVICES</p> <p>PURCHASED - INDO, VN, PH. ORU & NADMG</p> <p>VISIT1/VM.V.DELL.COM/CONTACTDELL</p> <p>MOD SPE•:S INFO (SADMG)</p> <p>EX-HUBOM APCC PENANG(DDD) EX-FACTOR,DELIVERY</p> <p>DELL EMC NETWORKING RUCKUS</p> <p>SMARTCELL INSIGHT ACCESS POINT LICENSE [AP LICENSES FOR SCIVA)</p> <p>DELLEMC NETWORKING RUCKUS</p> <p>SMARTCELL LNSIGHT ACCESS POINT 55</p> <p>FOR SADMG COUNTRIES ONLY - NO</p> <p>INSTALLATION SERVICE REQUIRED 1</p> <p>OEM SUBSCRIPTION SERVICES</p> <p>EMERGING DBS 55</p> <p>3YR PROSUPPORT FOR</p> <p>SOFTWARE,RUCKUS, SCI, ACCESS</p> <p>POINT LICENSE EMERGING DBS 55</p> <p>3YR PROSUPPORT FOR</p> <p>SOFTWARE,CONTRACT EMERGING DBS</p> <p>1</p> <p>MOD SPE•:S INFO (SADMG) 1</p> <p>DELL EMC NETWORKING RUCKUS</p> <p>SMARTZONE ACCESS POINT LICENSE [SZ124</p> <p>LICENSE FOR AP'S)</p> <p>DELLEMC NETWORKING RUCKUS</p> <p>SMARTZONE ACCESS POINT LICENSE</p> <p>55</p> <p>FOR SADMG COUNTRIES ONLY - NO</p> <p>INSTALLATION SERVICE REQUIRED 1</p> <p>OEM SUBSCRIPTION SERVICES</p> <p>EMERGING DBS 55</p> <p>YR PRNSUPF)()RT FNR SOFTWM;</p> <p>EMERGING DBS</p> <p>.RUR.KU.SM:=UT7NNA, AR-R.M.POINT I</p> <p>IR.P..N A 55</p> <p>3YR PROSUPPORT FOR</p> <p>SOFTWARE,CONTRACT EMERGING DBS</p> <p>MOD SPE•:S INFO (SADMG)</p> <p>DELL EMC NETWORKING RUCKUS</p> <p>SMARTCELL INSIGHT</p> <p>VIRTUALAPPLIANCE</p> <p>[REPORTING TOOL-</p> <p>SCIVIRTUALAPPLIANCE]</p>				



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	<p>S QTY DESCRIPTOI N QUANTITY</p> <p>DELL EMC NETWORKING RUCKUS SMARTCELLINSIGHT VIRTUALAPPBANCE 1 FOR SADMG COUNTRIES ONLY - NO INSTALLATION SERVICE REQUIRED 1 OEM SUBSCRIPTION SERVICES EMERGING DBS 1 3YR PROSUPPORT FOR SOFTWARE,RUCKUS,SCIVLLTUALAPPLIA NCE LICENSE EMERGING 1 DBS 3YR PROSUPPORT FOR SOFTWARE,CONTRACT EMERGING DBS MOD SPECS INFO (SADMG)</p>				
2	<p>ACCESS POINTS</p> <p>WIRELESS ACCESS POINT IN DOOR BAND & MODEL: DEL EMC RUCKUS</p> <p>1.COMPLIANT STANDARDS: IEEE 802.11A , IEEE 802.11AC , IEEE 802.11C, IEEE 802.11B , IEEE 802.11D , IEEE 802.11G , IEEE 802.11H , IEEE 802.11I , IEEE 802.11N , IEEE 802.1X , IEEE 802.3AF , IEEE 802.3AT, WMM/802.11E</p> <p>2. CONNECTIVITY TECHNOLOGY: WIRELESS</p> <p>3.DATA LINK PROTOCOL: IEEE 802.11A , IEEE 802.11AC , IEEE 802.11B , IEEE 802.11G , IEEE 802.11N</p> <p>4. OTHER FEATURES SUPPORTING CHANNELS UP TO160MHZ</p> <p>WIDE DYNAMIC BANDWIDTH SELECTION</p> <p>ALLOWS THE ACCESS POINT TO DYNAMICALLY WITCH BETWEEN 20-, 40-, 80-, AND 160-MHZ CHANNELS</p> <p>SUPPORTING FOUR SPATIAL STREAMS, MU-MIMO ENABLES ACCESS POINTS TOSPLIT SPATIAL STREAMS BETWEEN CLIENT DEVICES, TO MAXIMIZE THROUGHPUT. ENABLES BOTH RADIOS TO OPERATE IN 5-GHZ CLIENT SERVING MODE, ALLOWING AN INDUSTRY-LEADING 2.5 GBPS OVER-THE-AIRSPEEDS WHILE INCREASING CLIENT CAPACITY. ALLOWS THE ACCESS POINTS TO INTELLIGENTLY DETERMINE THE OPERATING MODE OF SERVING RADIOS BASED ON THE RF ENVIRONMENT. THE ACCESS POINTS MUST OPERATE IN THE</p>	50.00 EA	109185.82	5459291	23-Aug-19



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	<p>FOLLOWING MODES:</p> <p>2.4-GHZ AND 5-GHZ MODE: ONE RADIO WILL SERVE CLIENTS IN 2.4-GHZMODE, WHILE THE OTHER SERVES CLIENTS IN 5-GHZ MODE.</p> <ul style="list-style-type: none"> • WMM, POWER SAVE, LDPC, STBC, 802.11R/K/V • HOTSPOT • HOTSPOT 2.0 • CAPTIVE PORTAL • WISPR <p>5. SUPPORTED CHANNELS • 2.4GHZ: 1-13</p> <p>• 5GHZ: 36-64, 100-144, 149-165</p> <p>6. MIMO TECHNOLOGY • 4X4 SU-MIMO</p> <ul style="list-style-type: none"> • 4X4 MU-MIMO <p>7. SECURITY • WPA-PSK, WPA-TKIP, WPA2 AES, 802.11I, DYNAMIC PSK</p> <ul style="list-style-type: none"> • WIPS/WIDS <p>8. SUPPORTED RATES • 802.11AC: 6.5 TO 1,733MBPS (MCS0 TO MCS9, NSS = 1 TO 4 FOR VHT20/40/80)</p> <ul style="list-style-type: none"> • 802.11N: 6.5 MBPS TO 600MBPS (MCS0 TO MCS31) • 802.11A/G: 54, 48, 36, 24, 18, 12, 9, 6MBPS • 802.11B: 11, 5.5, 2 AND 1 MBPS <p>9. ANTENNA GAIN • MIN UP TO 3DBI</p> <p>10. ETHERNET • MIN TWO ETHERNET PORTS; MIN ONE 2.5GBE & ONE 1GBE PORT</p> <ul style="list-style-type: none"> •POWER OVER ETHERNET(802.3AF/AT/BT)WITH CATEGORY 5/5E/6 CABLE • LINK AGGREGATION (LACP) <p>11. CLIENT CAPACITY • UP TO 500 CLIENTS PER AP</p> <p>12. SSID • MIN UP TO 16 PER AP</p> <p>13. PERFORMANCE AND CAPACITY •</p> <ul style="list-style-type: none"> 2.4GHZ: 500MBPS OR HIGHER • 5GHZ: 1700MBPS OR HIGHER <p>14. NETWORKING • CONTROLLER BASED PLATFORM SUPPORT.</p> <ul style="list-style-type: none"> • SUPPORTED WIRELESS MESHING TECHNOLOGY • IPV4, IPV6, DUAL-STACK • VLAN, 802.1Q , 802.1X, TUNNELING TECHNOLOGY , POLICY MANAGEMENT TOOLS WILL BE REQUIRED. 				



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S. No.	Item / Description Specification	Qty. (UOM)	PO Price	Extended Amount	Delivery Date
	<ul style="list-style-type: none"> • USB 1 USB 2.0 PORT, TYPE A 15. CERTIFICATIONS AND COMPLIANCE •WI-FI ALLIANCE4 • WI-FI CERTIFIED™ A, B, G, N, AC •PASSPOINT®, VANTAGE •STANDARDS COMPLIANCE5 • EN 60950-1 SAFETY • EN 60601-1-2 MEDICAL • EN 61000-4-2/3/5 IMMUNITY • EN 50121-1 RAILWAY EMC • EN 50121-4 RAILWAY IMMUNITY • IEC 61373 RAILWAY SHOCK & VIBRATION • UL 2043 PLENUM • EN 62311 HUMAN SAFETY/RF EXPOSURE • WEEE & ROHS • ISTA 2A TRANSPORTATION WARRANTY & SUPPORT (ENTIRE EQUIPMENT INCLUDING OPTIONS AND ACCESSORIES) REPLACEMENT WITH EQUAL OR HIGHER BACKUP WITHIN 24 HOURS OF REPORTING PROBLEM 3 YEARS' COMPREHENSIVE WARRANTY INCLUDING MAINTENANCE. 24X7 ON-SITE SUPPORT WITH 2 HRS. INITIAL RESPONSE TIME & 4 HRS. TURNAROUND TIME TRANSPORTATION AND LABOR INCLUSIVE FULLY BACKED BY PRINCIPAL MANUFACTURER. M/S NEW HORIZON COMPUTER SHOULD PROVIDE TRAINING TO CONCERNED STAFF OF IBA FOR THE PROPOSED SOLUTION PROPOSED SOLUTION SHOULD HAVE PTA TYPE APPROVAL. 				
3	<p>ACCESS POINTS</p> <p>WIRELESS ACCESS POINT OUT DOOR</p> <p>BRAND & MODEL: DEL EMC RUCKUS</p> <p>1.COMPLIANT STANDARDS: IEEE 802.11A , IEEE 802.11AC (DRAFT 5.0) , IEEE 802.11C, IEEE 802.11B , IEEE 802.11D , IEEE 802.11G , IEEE 802.11H , IEEE 802.11I , IEEE 802.11N , IEEE 802.1X , IEEE 802.3AF , IEEE 802.3AT, WMM/802.11E</p> <p>2. CONNECTIVITY TECHNOLOGY:</p>	5.00 EA	248701.00	1243505	23-Aug-19



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	<p>WIRELESS</p> <p>3.DATA LINK PROTOCOL: IEEE 802.11A , IEEE 802.11AC , IEEE 802.11B , IEEE 802.11G , IEEE 802.11N</p> <p>4. OTHER FEATURES SUPPORTING CHANNELS UP TO 80 MHZ WIDE DYNAMIC BANDWIDTH SELECTION ALLOWS THE ACCESS POINT TO DYNAMICALLY SWITCH BETWEEN 20-, 40-, AND 80-, MHZ CHANNELS SUPPORTING FOUR SPATIAL STREAMS, MU-MIMO ENABLES ACCESS POINTS TO SPLIT SPATIAL STREAMS BETWEEN CLIENT DEVICES, TO MAXIMIZE THROUGHPUT. ENABLES BOTH RADIOS TO OPERATE IN 5-GHZ CLIENT SERVING MODE, ALLOWING AN INDUSTRY-LEADING 2.5 GBPS OVER-THE-AIRSPEEDS WHILE INCREASING CLIENT CAPACITY. ALLOWS THE ACCESS POINTS TO INTELLIGENTLY DETERMINE THE OPERATINGMODE OF SERVING RADIOS BASED ON THE RF ENVIRONMENT. THE ACCESS POINTS MUST OPERATE IN THE FOLLOWING MODES:</p> <p>2.4-GHZ AND 5-GHZ MODE: ONE RADIO WILL SERVE CLIENTS IN 2.4-GHZMODE, WHILE THE OTHER SERVES CLIENTS IN 5-GHZ MODE.</p> <ul style="list-style-type: none"> • WMM, POWER SAVE, TX BEAMFORMING, LDPC, STBC, 802.11R/K/V • HOTSPOT • HOTSPOT 2.0 • CAPTIVE PORTAL • WISPR <p>5.SUPPORTED CHANNELS • 2.4GHZ: 1-13</p> <ul style="list-style-type: none"> • 5GHZ: 36-64, 100-144, 149-165 <p>6.MIMO TECHNOLOGY • 4X4 SU-MIMO</p> <ul style="list-style-type: none"> • 4X4 MU-MIMO <p>7.SECURITY • WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i, DYNAMIC PSK</p> <ul style="list-style-type: none"> • WIPS/WIDS <p>8.SUPPORTED RATES • • 802.11AC:</p> <p>29.3MBPS – 1733 MBPS (80MHZ)</p> <ul style="list-style-type: none"> • 802.11N: 6.5MBPS – 216.7 MBPS(20MHZ) 13.5 MBPS – 800MBPS (40MHZ) • 802.11A: 54, 48, 36, 24, 18, 12, 9 AND 6MBPS 				



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	<ul style="list-style-type: none"> • 802.11B: 11, 5.5, 2 AND 1MBPS • 802.11G: 54, 48, 36, 24, 18, 12, 9 AND 6MBPS 9. ANTENNA GAIN • OMNI - MIN UP TO 3DBI • SECTOR – UP TO 8DBI 10. ETHERNET • 2 X 1GBE PORTS • SUPPORT FOR LACP (LINK AGGREGATION CONTROL PROTOCOL) TO MAXIMIZE THE BACKHAUL BANDWIDTH USING BOTH ETHERNET PORTS • SFP FIBER INTERFACE PROVIDING FLEXIBILITY TO BACKHAUL TO FIBER 11. CLIENT CAPACITY • UP TO 500 OR HIGHER CLIENTS PER AP 12. SSID • MIN UP TO 16 PER AP OR HIGHER 13. PERFORMANCE AND CAPACITY • 2.4GHZ: 500MBPS OR HIGHER • 5GHZ: 1700MBPS OR HIGHER 14. NETWORKING • CONTROLLER BASED PLATFORM SUPPORT. • SUPPORTED WIRELESS MESHING TECHNOLOGY • IPV4, IPV6, DUAL-STACK • VLAN, 802.1Q, 802.1X, TUNNELING TECHNOLOGY, POLICY MANAGEMENT TOOLS WILL BE REQUIRED. 15. CERTIFICATIONS AND COMPLIANCE • WI-FI ALLIANCE4 • WI-FI CERTIFIED™ A, B, G, N, AC • PASSPOINT®, VANTAGE • STANDARDS COMPLIANCE5 • EN 60950-1 SAFETY • EN 60601-1-2 MEDICAL • EN 61000-4-2/3/5 IMMUNITY • EN 50121-1 RAILWAY EMC • EN 50121-4 RAILWAY IMMUNITY • IEC 61373 RAILWAY SHOCK & VIBRATION • UL 2043 PLENUM • EN 62311 HUMAN SAFETY/RF EXPOSURE • WEEE & ROHS • ISTA 2A TRANSPORTATION <p>WARRANTY & SUPPORT (ENTIRE EQUIPMENT INCLUDING OPTIONS AND ACCESSORIES) REPLACEMENT WITH EQUAL OR HIGHER</p>				



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	BACKUP WITHIN 24 HOURS OF REPORTING PROBLEM 3 YEARS' COMPREHENSIVE WARRANTY INCLUDING MAINTENANCE. 24X7 ON-SITE SUPPORT WITH 2 HRS. INITIAL RESPONSE TIME & 4 HRS. TURNAROUND TIME TRANSPORTATION AND LABOR INCLUSIVE FULLY BACKED BY PRINCIPAL MANUFACTURER. M/S NEW HORIZON COMPUTER SHOULD PROVIDE TRAINING TO CONCERNED STAFF OF IBA FOR THE PROPOSED SOLUTION PROPOSED SOLUTION SHOULD HAVE PTA TYPE APPROVAL.				
4	000000000000002309 WIRELESS NETWORK REPORTING & DATA ANALYTICS BRAND & MODEL: DEL EMC RUCKUS 1.DEPLOYMENT & LICENSING OPTIONS • VIRTUALIZED ON-PREMISES (HYPER-V®, VMWARE® OR KVM™) • MUST INCLUDE 55 AP LICENSES FOR THE SOFTWARE TOOL ALONG WITH SUPPORT UPTO 1000 AP'S 2. FEATURES REQUIRED IN SOFTWARE • PROPOSED BIG DATA WI-FI ANALYTICS AND REPORTING ENGINE MUST BE PURPOSE BUILT TO HELP SERVICE PROVIDERS MAKE INFORMED BUSINESS DECISIONS REGARDING THE OPERATION OF THEIR WI-FI NETWORKS AND TO BE LOCATED IN THE NETWORK OPERATIONS CENTERS (NOCS) • THE SOFTWARE MUST PROVIDE COMPREHENSIVE NETWORK INTELLIGENCE BY COLLECTING AND AGGREGATING DATA FROM APPLICATIONS, DEVICES, ACCESS POINTS AND CONTROLLERS • PRE-PACKAGED AND CUSTOMIZABLE REPORTS, DASHBOARDS AND CORRELATIONS • GRANULAR DRILL-DOWN CAPABILITY— TO THE LEVEL OF INDIVIDUAL SESSIONS, CLIENTS AND ACCESS POINTS • PREDICTIVE ANALYTICS POWERED BY MACHINE LEARNING • THREE-YEAR DATA STORAGE	1.00 EA	193118.00	193118	23-Aug-19



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	<p>CAPACITY FOR UP TO 100,000 ACCESS POINTS AND MILLIONS OF CLIENTS</p> <ul style="list-style-type: none"> • OPEN APIS FOR INTEGRATION WITH NETWORK MANAGEMENT AND BUSINESS INTELLIGENCE SYSTEMS • THE PROPOSED BIG DATA ANALYTICS AND REPORTING ENGINE MUST BE ABLE TO PROVIDE REAL-TIME AND HISTORIC DATA IS ANALYSIS AND GRAPHICALLY DISPLAYED IT IN AN EASY TO UNDERSTAND FORMAT WITH A WIDE VARIETY OF VIEWS AND CUSTOMIZED REPORTS. • THE DATA GATHERED BY PROPOSED BIG DATA ANALYTICS AND REPORTING ENGINE MUST COVER DETAILS ESSENTIAL NETWORK STATISTICS SUCH AS TRAFFIC USAGE, CLIENT AND SESSION MEASUREMENT, NETWORK CHANGES, NETWORK LATENCY, AND INVENTORY. <p>REPORTING ENGINE MUST SUPPORT TRAFFIC STATISTICS ARE REPORTING BY SSID IN ADDITION TO PER RADIO AND CLIENT, PROVIDING A SERVICE (SSID) VIEW OF NETWORK USAGE, CLIENT CONNECTIONS AND PERFORMANCE STATISTICS.</p> <p>PROPOSED BIG DATA ANALYTICS AND REPORTING ENGINE MUST BE ABLE TO PROVIDE THE FOLLOWING METRICS:</p> <p>AP STATS:</p> <ul style="list-style-type: none"> • AP NAME, MAC, DESCRIPTION, SERIAL #, GPS • CONTROLLER NAME & MAC • CLIENT HOSTNAME & USERNAME • # OF SESSIONS • # OF SUB SESSIONS • # OF UNIQUE CLIENTS • SESSION LENGTH • TX & RX BYTES <p>CLIENT SESSION:</p> <ul style="list-style-type: none"> • AP NAME, MAC, DESCRIPTION, SERIAL #, GPS • CONTROLLER NAME & MAC • CLIENT DEVICE OS, HOSTNAME & USERNAME • # OF SESSIONS • # OF SUB SESSIONS • # OF UNIQUE CLIENTS • SESSION LENGTH 				



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	<ul style="list-style-type: none"> • TX & RX BYTES • CONNECTED TIME DURATION <p>EVENTS:</p> <ul style="list-style-type: none"> • AP NAME, MAC, DESCRIPTION, SERIAL #, GPS • CONTROLLER NAME & MAC • NUMBER OF EVENTS <p>CONTROLLER:</p> <ul style="list-style-type: none"> • CONTROLLER NAME & MAC • CLIENT COUNT • LICENSE COUNT • LICENSE UTILIZATION <p>WARRANTY & SUPPORT (ENTIRE EQUIPMENT INCLUDING OPTIONS AND ACCESSORIES) REPLACEMENT WITH EQUAL OR HIGHER BACKUP WITHIN 24 HOURS OF REPORTING PROBLEM 3 YEARS' COMPREHENSIVE WARRANTY INCLUDING MAINTENANCE. 24X7 ON-SITE SUPPORT WITH 2 HRS. INITIAL RESPONSE TIME & 4 HRS. TURNAROUND TIME TRANSPORTATION AND LABOR INCLUSIVE FULLY BACKED BY PRINCIPAL MANUFACTURER. M/S NEW HORIZON COMPUTER SHOULD PROVIDE TRAINING TO CONCERNED STAFF OF IBA FOR THE PROPOSED SOLUTION PROPOSED SOLUTION SHOULD HAVE PTA TYPE APPROVAL.</p>				

Total: 8393388.00

GST: 1426875.96

Total PO Amount: 9820263.96

Amount in Words: Ninety Eight Lakh Twenty Thousand Two Hundred Sixty Three and paise Ninety Six Only.

Terms & Conditions:

1. Material of this order is subject to final inspection at the time of delivery.
2. We reserve the right to cancel any or all the above items if material is not in accordance with our specification or if the delivery is delayed.
3. Payment will be made through crossed cheque after the receipt of the Invoice/Bill & delivery of above item(s).

Purchase Order

4. General Sales Tax will be paid on applicable items only.
5. Liquidity damage at the rate of 2% per month on actual will be imposed on delayed delivery.
6. The rate / item cost is final and no change what so ever will be accepted.
7. Government tax(es), levi(es) and charge(s) will be charged at actual as per SRO.
8. Competent Authority reserves the right to change / alter / remove any item or article or reduce / enhance quantity without assigning any reason.
9. Invoice/Bill to be submitted to Purchase Department.
10. Advance Payment subject to Bank Guarantee.
11. All Government taxes (including Income tax and stamp duty), levies and charges will be charged as per applicable rates / denomination of Purchase Order.
12. Stamp Duty 0.25% for Goods against total value of Purchase Order will be levied accordingly.



Senior Manager Purchase & Stores



General Manager Administration

28/19