INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH TIRUPATI

CLARIFICATION ON TENDER NUMBER – IISERT/PUR/0118/20 DATED: 26-JUNE-2020

REFER OUR PRESS TENDER NO. IISERT/PUR/0118/20 DATED: 26-JUNE-2020 FOR NETWORK CONTROLLER, SWITCHES, ACCESS POINTS, SINGLE MODE FIBER MODULE AT MAIN CAMPUS, YERPEDU

Pre-Bid meeting was held on July 3rd, 2020 at 15:30 via google meet and minutes of meeting is as under.

At the outset, the Chairman welcomed all the Members and the representative of the Prospective Bidders and briefed in general the scope of the Project and thereafter requested Assistant Registrar (S&P) to brief the vendors on the salient features of the commercial terms and the indenting Officer to read out the clarification sought by the Prospective Bidders and replied thereto as detailed in **Annexure –II & III**

The representatives present were satisfied with the replies given and it was informed that the corrections / additions / clarifications given, as discussed during the Pre-Bid Conference would be hosted on the website of IISER Tirupati and all the Prospective Bidders are required to take cognizance of the proceedings of the Pre-Bid Conference before submitting their bids as stipulated in the Bidding Documents.

The other terms & conditions of the notice issued on our IISER website http://www.iisertirupati.ac.in/ & CPPP portal will remain unchanged. No more correspondence in this regard will be entertained

The meeting ended with vote of thanks to the Chair

Sd/-

09.07.2020 Assistant Registrar (S&P)

ANNEXURE -II

PRE-BID CONFERENCE FOR NETWORK CONTROLLER, SWITCHES, ACCESS POINTS, SINGLE MODE FIBER MODULE AT MAIN CAMPUS, YERPEDU

TENDER NUMBER - IISERT/PUR/0118/20 **DATE: 03/07/2020**

TECHNICAL QUERIES AND CLARIFICATION

S.No	RFP Reference	Query/Clarification Sought	Clarification / Amendment
		Network Controller	
1	2.2	The Controller should have minimum of 4x 10/100/1000 RJ45 Ethernet Ports or 2 x 10G SFP+ Ports with required 10G transceivers	Tender Specification ammended as .. The Controller should have minimum of 4x 10/100/1000 RJ45 Ethernet Ports or 2 x 10G SFP+ Ports with required 10G transceivers
2	2.3	Controller should have Easy Setup through UPnP Network Discovery and Installation Wizard or equivalent Zero touch provisioning capability	Tender Specification ammended as .. Controller should have Easy Setup through UPnP Network Discovery and Installation Wizard or equivalent Zero touch provisioning capability
3	2.4	Controller should have capabilities to manage Switches or Switch/Wired policies	Tender Specification ammended as .. Controller should have capablities to manage switches. OR Controller should work with additional NMS from same OEM as controller to manage switches. Solution should be quoted along with Dedicated Server (atleast Xeon) hardware appliance to handle min. 100 switches scalable upto 500. To achieve single management functionality, NMS should also manage quoted controller and connected access points (320 nos) along with switches which is scablable as per the tender

4	2.7	Controller Should support network analytics engine or equivalent which uses Artificial intelligence-based Machine learning algorithm to pro-actively notify administrators about network issues. Licenses required for network analytics should be given as option.	Tender Specification ammended as .. Controller Should support network analytics engine or equivalent which uses Artificial intelligence-based Machine learning algorithm to pro-actively notify administrators about network issues. Licenses required for network analytics should be given as option.
5	3	Wired Management Features either natively or using the help of external NMS	Tender specification ammended as.. Controller or NMS should be able to provide Management features
6	4	Wireless Management Features either natively or using the help of external NMS	Tender specification ammended as.. Controller or NMS should be able to provide Management features
7	6.1	Controller should support AES256 Encrypted GRE-based tunnel or equivalent for Data forwarding	Tender specification prevails..
8	6.4	Controller should support minimum 4000 DPSK (Dynamic Pre-Shared Keys) or equivalent Multiple PSK technology	Tender Specification ammended as .. Controller should support minimum 4000 DPSK (Dynamic Pre-Shared Keys) or equivalent. All the required products to support DPSK or equivalent technology should be quoted from day 1.
9	7.6	Controller or NMS should be able to raise critical alarms by sending an email. The email client on the Controller should support SMTP outbound authentication and TLS encryption.	Tender Specification ammended as .. Controller or NMS should be able to raise critical alarms by sending an email. The email client on the Controller should support SMTP outbound authentication and TLS encryption.
		WiFi 6 Indoor AP – 20 number	
10	2.4	AP should provide 22dBm peak transmit power or EIRP on both radios, -95 dBm receive sensitivity.	Tender Specification ammended as .. AP should provide 21dBm peak Transmit power on both radios, -95 dBm receive sensitivity.

11	**2.6**	Antenna should dynamically choose antenna patterns in real-time environment to establish the best possible connection with every device or equivalent technology to achieve best client RF performance	Tender Specification ammended as .. Antenna should dynamically choose antenna patterns in real-time environment to establish the best possible connection with every device or equivalent technology to achieve best client RF performance.
12	2.7	Antenna should direct the radio signals per-device on a packet-by-packet in real-time to support high device density environments or equivalent for band steering. Should have 3 dBi gain.	Tender Specification ammended as .. Antenna should direct the radio signals per-device on a packet-by-packet in real-time to support high device density environments or equivalent per-packet Tx power technology. Should have 3 dBi gain. Antenna operates without the need for device feedback to support devices using legacy standards.
13	3.2	It should have less than 30Watts power consumption for full functionality including USB port on PoE/PoE+	Tender Specification ammended as .. It should have less than 30Watts power consumption for full functionality including USB port on PoE
14	7.2	AP should support industry-standard network speed testing tool. Bidder should provide software for both computers and mobile during installation.	Tender Specification ammended as .. AP should have inbuilt Zap or iPerf network speed testing tool. AP should act as Zap or iPerf server and clients should be able to run respective tool's client application. Bidder should provide software for both computers and mobile during installation.
		WiFi-6 Indoor AP – 300 number	
15	2.2	AP should have 4 antennas for transmission and receiving (2x2:2 + 2x2:2) and four (4) in total spatial streams. Should support MU-MIMO.	Tender Specification ammended as AP should have 4 antennas for transmission and receiving (2x2:2 + 2x2:2) and four (4) in total spatial streams. Should support MU-MIMO.
16	2.4	AP should provide 22dBm peak transmit power or EIRP on both radios, -93 dBm receive sensitivity.	Tender Specification ammended as .. AP should provide 21dBm peak Transmit power on both radios, -95 dBm receive sensitivity.

17	2.6	Antenna should dynamically choose antenna patterns in real-time environment to establish the best possible connection with every device or equivalent technology to achieve best client RF performance	Tender Specification ammended as .. Antenna should dynamically choose antenna patterns in real-time environment to establish the best possible connection with every device or equivalent technology to achieve best client RF performance.
18	2.7	Antenna should direct the radio signals per-device on a packet-by-packet in real-time to support high device density environments or equivalent for band steering. Should have 3 dBi gain.	Tender Specification ammended as ..Antenna should direct the radio signals per-device on a packet-by-packet in real-time to support high device density environments or equivalent per-packet Tx power technology. Should have 3 dBi gain. Antenna operates without the need for device feedback to support devices using legacy standards.
19	3.1	AP should have 1x1Gbps RJ-45 based Ethernet PoE port.	Tender Specification ammended as .. AP should have 1x1 Gbps RJ-45 based Ethernet PoE port.
20	3.2	It should have less than 30Watts power consumption for full functionality including USB port on PoE/PoE+	Tender Specification ammended as .. It should have less than 30Watts power consumption for full functionality including USB port on PoE
21	7.2	AP should support industry-standard network speed testing tool. Bidder should provide software for both computers and mobile during installation.	Tender Specification ammended as .. AP should have inbuilt Zap or iPerf network speed testing tool. AP should act as Zap or iPerf server and clients should be able to run respective tool's client application. Bidder should provide software for both computers and mobile during installation.
		48 Port PoE + Switches	
22	2.2	The Access Switch should have Forty Eight (48) 1GbE PoE+ RJ45 ports and 4 SFP 56(1/10/25/50G) uplink ports	Tender Specification ammended as .. The Access Switch should have Forty-Eight (48) 1GbE PoE+ RJ45 ports, and should have Four 1GbE/10GbE SFP+ Slots.

23	2.3	Access Switch should support Stacking up to 8 Switches with more than 40 Gbps stacking bandwidth per Switch. Mixed mode Stacking should be supported where 1G, 2.5G and fiber switches stacked together.	Tender Specification ammended as .. Access Switch should support Stacking of switches 10 (Ten)and above with more than 40 Gbps stacking bandwidth per Switch. Mixed mode Stacking should be supported where 1G, 2.5G and fiber switches stacked together.
24	3.1	Request to change switch fabric capacity to 175Gbps or more	Tender specification prevails.. Switching Bandwidth: Should provide Non-Blocking switch fabric capacity of 176 Gbps or more.
25	3.2	Request to packet forwarding to 130Mbps or more	Tender specification prevails.. Forwarding Capacity: Should provide wire-speed packet forwarding of 130 Mpps or more.
26	5.2	Should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from day 1. Should have support for VRRP-E /VSRP/VRRP or equivalent.	Tender Specification ammended as .. Should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from day 1. Should have support for VRRP-E /VSRP/VRRP.
27	5.3	Should have the following Dynamic IPv4 & IPv6 Routing protocols and Multicast Routing Protocols from day 1	Tender specification prevails..
28	5.3 b,c	PIM-SSM, PIM DM or equivalent features for ipv4 and IPv6	Tender specification prevails..
29	5.3 b,c	PIM-SSM, PIM DM or equivalent features for ipv4 and IPv6	Tender specification prevails..

30	7.1	Should support manageability using Network Management Software with Web based Graphical User Interface (GUI), Integrated Standard based Command Line Interface (CLI). Hardware should support Standalone, Stackable, Fabric and Cloud based deployments. Should have single IP management for up to 8 switches in fabric mode deployments.	Tender specificationammended as... Should support manageability using Network Management Software with Web based Graphical User Interface (GUI), Integrated Standard based Command Line Interface (CLI). Hardware should support Standalone, Stackable, Fabric and Cloud based deployments. Should support fabric mode deployments.
31	7.2	Should support ANSIBLE or equivalant automation tools, REST-ful API. Should be centrally monitored and controlled by Network Controller.Switch should support Openflow/SDN."	Tender Specification ammended as .. Should support ANSIBLE automation tools, REST-ful API and equivalent if any. Should be centrally monitored and controlled by Network Controller.
32	7.3	Should support NetFlow or sFlow or equivalent.	Tender specification prevails..
33	8.2	PoE Power Budget: The Switch should provide 1440 watts of PoE+ power.	Tender specification ammended as.. PoE Power Budget: The Switch should provide 1440 watts of PoE+ power or better from day 1.
34	Addition	Controller	Controllers to be configured in tunnel mode/centralized mode to encrypt all data traffic from wireless client to the controller at the time of deployment.
35	Addition	Access points	All the WiFi Devices supplied need to be Wi-Fi 6 certified by Wi-Fi alliance and should submit the certificate to IISER at the time of Submission.

ANNEXURE -III

IISER TIRUPATI
PRE-BID CONFERENCE FOR NETWORK CONTROLLER, SWITCHES, ACCESS POINTS, SINGLE MODE FIBER MODULE AT MAIN CAMPUS, YERPEDU

TENDER NUMBER - IISERT/PUR/0118/20 **DATE: 03/07/2020**

COMMERCIAL QUERIES AND CLARIFICATION

Sr.No	Query/Clarification Sought	Clarification / Amendment
1.	The deliveries & installation must be completed within 30 days, after placement of purchase order	The deliveries & installation must be completed within **45 days**, after placement of purchase order
2.	Proof that the bidder has supplied and effectively maintained a computational physics / chemistry laboratory for a period of at least three years. Necessary report of satisfactory support provided by the direct end-user, to be submitted as a part of eligibility criteria.	Proof that the bidder had supplied and effectively maintained a computational physics / chemistry laboratory (or) a similar Networking setup with stacking of 10 switches and deployed controller along with a minimum of 300 Access Points in any Government Sector/PSU for a minimum period of at least three years. Necessary report of satisfactory support provided by the direct end-user, to be submitted as a part of eligibility criteria.
3.	**Fall Clause** The Bidder undertakes that he has not supplied/is not supplying the similar systems or subsystems at a price lower than that offered in the present bid in respect of any other Defense/ Public Sector Undertakings/Public sector undertakings/Ministry of Defense and if it is found at any stage that the similar	**Fall Clause** The OEM or the bidder authorized by the OEM to participate in this tender must undertake that they had not supplied the similar systems or subsystems at a price lower than that offered in the present bid in respect of any other State/Central Government bodies/ Public Sector Undertakings/Autonomous bodies and if it is found at any stage that the similar system or sub-system was supplied by the BIDDER to any Government office at a lower price than offered to IISER, then that very price,

	system or sub-system was supplied by the BIDDER to any other Defence Public Sector Undertakings/Public Sector Undertaking/Ministry of Defence at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the BUYER, if the contract has already been concluded.	with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to IISER TIRUPATI, if the contract has already been concluded..
4.	**Additional Clause** **Make in India**	The Purchaser shall compare all substantially responsive bids to determine the lowest valuated bid. This Institute is following and abide with the Public Procurement (Preference to Make in India), Order 2017, DIPP, MoCI Order No. P45021/2/2017-B.E.II dated 15th June 2017 and subsequent amendments to the order. Accordingly, preference will be given to the Make in India products while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India product along with respective documentary evidence as stipulated in the aforesaid order and the quality as mentioned in the tender in the technical bid itself