S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
1	CORE L3 SWITCH	79	Modular switch in data centre design withIPv6 ready from day 1.	Firewall should support atleast 100 client based SSL vpn peers from day one internally or externally. Required licenses for the same should be provisioned from day one.	IPv6 logo certification would ensure that the switch has all necessary IPv6 protocols readily available within itself & it has passed by multiple internal as well as 3rd party tests organized by multiple audit firms. This will ensure a smooth IPv6 transition.	As per RFP
2	CORE L3 SWITCH	80	Addition Requested	Switch should support Multi-Hop FCoE, Data Center Ethernet Bridging (DCB), Data Center Interconnect (DCI), IEEE 802.1AE technology.	Multihop FCoE helps extend the flexibility and scalability of convergence further into the data center while preserving investments in Fibre Channel SANs. IEEE 802.1 Data Center Bridging (DCB) is a collection of standards-based extensions to classical Ethernet. It provides a lossless data center transport layer that helps enable the convergence of LANs and SANs onto a single unified fabric. In addition to supporting Fibre Channel over Ethernet (FCoE), DCB can enhance the operation of iSCSI, network-attached storage (NAS), and other business-critical storage traffic. he core switch would be used as Data Center core switch, however surprisingly there is no mention of Data Center features asked in the spec. Servers are asked as FCoE compliant. To have an end-to-end Data Center architecture & getting the best out of it from deisgn stand point of view, DCB standards, must be asked. 802.1AE is the IEEE MAC Security standard (also known as MACsec) which defines connectionless data confidentiality and integrity for media access independent protocols. The IEEE 802.1AE (MACsec) standard specifies a set of protocols to meet the security requirements for protecting data traversing Ethernet LANs. This norm assures incomplete network operations by identifying unauthorized actions on a	As per RFP

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					LAN and preventing communication from them.	
3	CORE L3 SWITCH	80	Addition Requested	Switch should support device virtualization by allowing creating multiple isolated zones within the switch hardware to enhance security	This feature would allow the administrators to put multiple servers into multiple isolated zones within the same switch by creating multiple contexts. This would ensure a proper security check happens when traffic moves between multiple contexts. Say, you have a DB server & DNS server connected on the same switch. DB server needs highest security standards to be maintained. You can put DB server in Context 1 & DNS serve in Context 2 & stop the communication between these 2 contexts completely. This would ensure traffic within the switch itself gets a proper check & no unwanted traffic is allowed. Using ACL it partial can be achieved but creating so many ACL in core switch will hamper switch performance, hence it is not suggested.	As per RFP
4	ACCESS L2 SWITCH	80	24 x 1G UTP with additional 4 x 1G SFP ports.	24 x 1G UTP with additional 4 x 1G SFP ports. Switch should support internal/external power supply.	We are requesting to add support for redundant power supply be it internal/external so that in future if high level of redundancy is required for any switch, redundancy from power point of view can be achieved.	As per RFP
5	ACCESS L2 SWITCH	80	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth to put minimum 6 switches into a single stack for easier management.	Stack allows single IP management for all the stacked switches. Other than easier management, Stack also allows easy configuration, proper bandwidth for each switch, hot swappable of any stack menebr without bringing down the entire stack. Minimum no of stack switches should be mentioned in a single stack group so that every OEM proposes a standard product line.	As per RFP
6	ACCESS L2 SWITCH	80	Should have minimum 8000 MAC address entries and minimum 250 VLANs.	Should have minimum 16000 MAC address entries and minimum 250 VLANs.	Being a L2 Switch, no of MAC addresses would be very high on numbers. These switches would be used to connect a lot	As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
					no of end devices, PC's etc where a large volume of MAC address needs to be retained.	
7	ACCESS L2 SWITCH	81	Should have RoHS compliance, EAL2 or NDPP.	Should have RoHS compliance, EAL2 or NDPP. Switch in should be IPv6 ready logo from day one.	IPv6 logo certification would ensure that the switch has all necessary IPv6 protocols readily available within itself & it has passed by multiple internal as well as 3rd party tests organized by multiple audit firms. This will ensure a smooth IPv6 transition.	As per RFP
8	ACCESS L2 POE+ SWITCH	81	24 x 1G UTP with additional 4 x 1G SFP ports.	24 x 1G UTP with additional 4 x 1G SFP ports. Switch should support internal/external power supply.	We are requesting to add support for redundant power supply be it internal/external so that in future if high level of redundancy is required for any switch, redundancy from power point of view can be achieved.	As per RFP
9	ACCESS L2 POE+ SWITCH	81	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Should support dedicated stacking	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Should support dedicated stacking ports with dedicated stacking bandwidth of 28 Gbps to put minimum 6 switches into a single stack for easier management.	Stack allows single IP management for all the stacked switches. Other than easier management, Stack also allows easy configuration, proper bandwidth for each switch, hot swappable of any stack menebr without bringing down the entire stack. Minimum no of stack switches should be mentioned in a single stack group so that every OEM proposes a standard product line.	As per RFP
10	ACCESS L2 POE+ SWITCH	81	Should have minimum 8000 MAC address entries and minimum 250 VLANs.	Should have minimum 16000 MAC address entries and minimum 250 VLANs.	Being a L2 Switch, no of MAC addresses would be very high on numbers. These switches would be used to connect a lot no of end devices, Access Points/Cameras or even desktop etc where a large volume of MAC address needs to be retained.	As per RFP
11	ACCESS L2 POE+ SWITCH	81	Should have RoHS compliance, EAL2 or NDPP.	Should have RoHS compliance, EAL2 or NDPP. Switch in should be IPv6 ready logo from day one.	IPv6 logo certification would ensure that the switch has all necessary IPv6 protocols readily available within itself & it has passed by multiple internal as well as 3rd party tests organized by multiple audit firms. This will ensure a smooth IPv6 transition.	As per RFP
12	WIRELESS	86	Should include suitable service	Request to delete this clause	Not all OEM supports this. Removal of	This clause stands

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	NMS		operation management flexibility for the network administrator to assign task to an Individual network engineer and assign ownership / track the status of the issue resolution in adherence to ITILv3.0. Should have service flow management from ticket creation, status checks, and execution to resolution, close, and after-audit operations		this clause will allow multiple OEM to participate in this prestigious project.	deleted
13	WIRELESS NMS	86	Should support extending the NMS deployment to HA mode in 1+N redundancy configuration through optional add-on license/software in future. Should support centralized as well as distributed deployment.	Should support extending the NMS deployment to HA mode in 1+1 redundancy configuration through optional add-on license/software in future.	1+N redundancy for NMS is not required at all as without NMS wireless network can work without any issues, only management piece of it would be hampered for time being.	Please read as below " Should support centralized as well as distributed deployment"
14	WIRELESS NMS	87	Offered software should have compatibility with Microsoft Windows and Linux operating systems	Offered software should have compatibility with Microsoft Windows or Linux operating systems	Every OEM has their own NMS architecture that works with specific operating system. To allow maximum participation, we would request you to kindly relax this clause.	Please read as below "Offered software should have compatibility with Microsoft Windows or Linux operating systems"
15	INTERNET SECURITY FIREWALL	93	Firewall should support atleast 2500 client based SSL vpn peers from day one internally or externally. Required licenses for the same should be provisioned from day one.	Firewall should support atleast 100 client based SSL vpn peers from day one internally or externally. Required licenses for the same should be provisioned from day one.	Is this required to be provisioned from day one? As WiFi would allow LAN network extension to the remote places, SSL license can be avoided so many from day one.	As per RFP
16	Wireless Controller	82	Should support policy based forwarding to classify data traffic based on ACLs	This does not seems to be a wireless requirement. Does it refer to support policy based on application?	Clarification required	As per RFP
17	WIRELESS CONTROLLER (B12)	82	Should support minimum 100 SSIDs.	Should support minimum 16 SSIDs.	Is it really required to support minimum 100 SSID in a controller? Very few OEM supports 100 SSID in a controller	As per RFP
18	WIRELESS CONTROLLER (C7)	83	Should support a user role based or SSID based firewall embedded in WLAN Controller	Request to delete this clause	Not all OEM supports embedded Firewall. Moreover the solution should not overload the wireless controller with multiple box features and should allow to	This clause stands deleted

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					have only the controller functionalities to have better user experience. Anyway you have asked for a firewall & IPS within the network which would take care of the security aspect.	
19	Rf Modulation Scheme Point no. 42 RF connectivity PTP vide Clause 7	115, 116	BPSK, QPSK, CCK, QAM4, QAM64 and OFDM	QAM16 is not part of specification and should be included as standard requirement as QAM16 will give significantly higher throughput than CCK and QAM4		Please refer corrigendum
20	Output Power	115	adjustable 0 to 27dBm	Output power range should be between -5 to 25 dBm enabling use of higher gain antenna for better directivity and minimize interference with narrow beam width of antenna with minimal exposure to wide angles		Please refer corrigendum below
21	Router	115	Required	Routing feature is not required as built-in feature in PTP Link. Routing is done by the Core/Edge routers in any customers network. This requirement in the radios should be waived off.		Please refer corrigendum below
22	802.1x support	115	Shall Support 802.1X	802.1x is usually required in case of Wi-Fi setup. In case of PTP connectivity, over the air encryption is very much important. AES 128 can be included in the specification which is certified to carry information over the air up to classification of "SECRET" by NSA and should be duly certified by International Accredited Government agency (FIPS-197 certified).		Please refer corrigendum below
23	Repeater Mode	115	Built-in Mode	Please clarify should built-in repeater mode operate in same frequency band - Can a repeater be created using a second PTP link		Please refer corrigendum below
24	RF Collision Management	115	Combined TDD / OFDM and FEC	Kindly elaborate the requirement. In fact a hub site sync mechanism is needed to mitigate interference between collocated radios by TDD timing synchronization which		Please refer corrigendum below

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				is not part of required feature/ specification.		
25	Remote Management	115	http web,ssh,telnet	SNMPv3 should be included which is highly secure and NMS should also support SNMPv3 SSH and telnet are based on manual commands which is difficult to remember and less user friendly		Please refer corrigendum below
26	SNMP (Read &Write) with Traps	115	V2	This specification should be based on latest SNMP version available. The latest available SNMP version is SNMPv3 which is highly secure		Please refer corrigendum below
27	Power Adapter Requirement	116	230 VAC and +/- 48AC 7V - 18V DC, +/- 48v DC	Need clarification if 230VAC and ±48VDC both are required simultaneously or anyone of them needs to be proposed		Please refer corrigendum below
28	7.Minimum Specification for Wi-Fi Components	79	All Active Devices like Indoor Router, Indoor Switches, Wireless Indoor APs, Wireless Controller, Core Switch and NMS, should be from the same manufacturer so that manageability can be lowered.	All Active Devices like Indoor Router, Indoor Switches, ~~Wireless Indoor APs, Wireless Controller,~~ Core Switch and NMS, should be from the same manufacturer so that manageability can be lowered.	Adding wifi with router and switches will limit the reputed OEM's to participate. Kindly exclude wifi and controller.	Please Read as below " All Active Devices like Indoor Router, Indoor Switches, Core Switch and NMS, should be from the same manufacturer so that manageability can be increased.
29	1)CORE L3 SWITCH	79	Should have required accessories for rack mounting. Switch should support minimum 8 payloads and 2 slot for controller/management module.	Switch should be chassis based or Modular	Asking chassis for 24 port 10 gig and 12 port 1GIg is not advisable all leading OEM's can provide asked configuration and scalability in a rack mountable modular Switch.	As per RFP
30		80	Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps -1000 mpps from day 1.	Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps ~~-1000 mpps from day 1~~.	Scalability for 1000Mpps is not required for 480Gbps of switching capacity and not required from day one.	Please read as below " Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps from day 1"
31	Access L2 Switch	80	Minimum 56 Gbps switching capacity & minimum 41 Mpps	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Switch	These switch gone place in locations near cameras and wifi only single switch will	As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	should have Stacking feature from day one.	be required at each location.	
32	3)ACCESS L2 POE+ SWITCH	81	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Should support dedicated stacking	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Should have stacking	These switch gone place in locations near cameras and wifi only single switch will be required at each location.	As per RFP
33	35)Indoor Router	106	The Router should have complete security suite by supporting IPSec & SSL VPN, Firewall (Zone based & Stateful firewall), IPS, Content Filtering functionalities into a single box along with full support for dynamic routing protocols. If any of the mentioned features can't be provided into a single box solution by any vendor, multiple boxes must be quoted to achieve these features from day one.	The Router should have complete security suite by supporting IPSec ~~& SSL VPN~~, Firewall (Zone based & Stateful firewall), IPS, Content Filtering functionalities into a single box along with full support for dynamic routing protocols. If any of the mentioned features can't be provided into a single box solution by any vendor, multiple boxes must be quoted to achieve these features from day one.	SSL VPN is a dedicated solution required for connecting remote internet users to connect at a central site. Asking SSL VPN on Router will degrade the routing feature.	Please read as below " The Router should have complete security suite by supporting IPSec, Stateful, Firewall, IPS, Content Filtering functionalities into a single box along with full support for dynamic routing protocols. If any of the mentioned features can't be provided into a single box solution by any vendor, multiple boxes must be quoted to achieve these features from day one"
34	35)Indoor Router	106	Router should have minimum 4 slots to accommodate large variety of interface & should support FE, GE (both Ethernet based & fiber based), Serial V.35, ports, G.703 ports, E1, Chn E1, PRI etc.	Router should have minimum 4 slots to accommodate large variety of interface & should support FE, GE (both Ethernet based & fiber based), Serial V.35, ports, G.703 ports, E1, Chn E1~~, PRI~~ etc.	PRI is required for terminating Voice trunk on router which is not a scenario in current RFP scope. Also it will limit major OEM's to participate.	Please read as below " Router should have minimum 4 slots to accommodate large variety of interface & should support FE, GE (both Ethernet based &

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						fiber based), Serial V.35, ports, G.703 ports, E1, Chn E1 etc."
35	35)Indoor Router	107	The router should support minimum 50 Mbps of WAN link termination with minimum 350 kpps of forwarding rate for both IPv4 & IPv6.	The router should support minimum 50 Mbps of WAN link termination with minimum 250 ~~350~~ kpps of forwarding rate for both IPv4 & IPv6.	For providing 50 Mbps of bandwidth 250Mpps performance of the router is enough. Kindly make 300Mpps performance for both IPv4 and IPv6	As per RFP
36	35)Indoor Router	107	3 x 1 Gigabit Ethernet Interfaces from day one, out of which minimum 1 port should be SFP based.	6 x 1 Gigabit Ethernet Interfaces from day one, out of which minimum 1 port should be SFP based.	Router should have atleast 4 gig copper interface for terminating multiple ISP's and multiple LAN side interface.	As per RFP
37	37)L2 Switch POE 8-port (Indoor)	108	Switch should support IGMP, MLD, MSDP, PIM, static routing, RIP from day one	Switch should support ~~IGMP, MLD, MSDP, PIM,~~ static routing, RIP from day one	Kindly remove this advance layer 3 features from 8 port switch for leading OEM's to participate.	Please read as below "Switch should support L2 multicasting features for IPv4 and IPv6"
38	Server	103	Internal/external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage	Pl clarify meaning of support- Dell support 16X2.5" HDD and 8X3.5" Hdd		External Storage not required. Master Server for VMS added in Bill of Material.
39	section 4	14	No mention of USAL license for bandwidth to be provided for WIFI	USAL license should be mandatory		As per RFP
40	section 4 point 5	15	The Prime bidder should have executed/executing minimum of 1 project in India in the last three years involving the supply, installation, commissioning, AMC and Facility Management Services of WLAN active and passive components at the client site having at least 150 Nodes at Government/ Central Government/ PSU.	reduce to 50 nodes. Please modify "Prime bidder should have executed.." to "Prime Bidder OR consortium partner should have executed.." and "at Government/ Central Government/ PSU" to "any government or private sector"		As per RFP
41	section 5.6.3 3(a)	25	project experience Number of Projects in India where WLAN Networking Solutions for at least 150 Nodes implemented/	selection criteria to be modified to 50, 100, 150. Please modify "at Government/ Central Government/ PSU" to "any government or		As per RFP

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			implementing by the the Prime Bidder and/or consortium partners in India in last three years. Completed / Running /Awarded Projects as on 31.01.15 in State / Central Govt./ PSU/ Other Government Institutions	private sector"		
42	section 5.6.3 3(c)	26	Number of Projects in India where Outdoor WLAN Networking Solutions implemented/implementing by the Prime Bidder and/or consortium partners in India in last three years. Completed / Running /Awarded Projects as on 31.01.15 in State / Central Govt./ PSU/ Other Government Institutions	reduce to 50 nodes		As per RFP
43	section 5.20.5 point b	38	In the event of failure of maintaining the SLA, penalty should be imposed on basis of the cost of concerned hardware equipment as per mentioned in SLA would be levied subject to a maximum of 20% of the total hardware / supply/service cost.	reduce to 10-12%		As per RFP
44	section 5.23 SLA	43	Central & Site Equipment	sla to be reduced to 98.5 to 99%		As per RFP
45	Section 5.34	48	40% of the Agreement/ Purchase Order /Work Order Value on Per Site Basis.	to be increased to 50%		As per RFP
46	section 6.2 point 7	60	The Internet Bandwidth of minimum 10Mbps per site shall be made available at NOC by CHiPS. The SI shall be responsible to establish connectivity from NOC to each Site through leased/MPLS/RF connection for traffic requirements relating to wireless access for citizens, NMS, EMS and IP Camera. The proposed solution should be capable to provision a bandwidth	Bandwidth should be minimum of 45 mbps		As per RFP

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			of minimum 10Mbps from NOC to each SITE and upgradable to 20 MbPS.			
47	section 6.3 point 10 C.1	69	Site survey as per List provided in LoI • Submission of Site Survey report 2 Weeks	increase to 3 weeks		As per RFP
48	section 6.3 point 10 C.3	69	supply of hardware	increase to 10-12 weeks		As per RFP
49	section 6.6	71	ROW if required	CHIPS to facilitate ROW and necessary permission for this project		Necessary permission shall be provided by CHiPS and SI shall be coordinating with the department for executing the same.
50	section 6.6	71	Leased oFC network	CHIPS should allow leased ofc network from operator for this project where ever possible. Will help in reducing cost		As per RFP
51	additional point		CCTV on Internet	Is chips ok with CCTV on internet network		As per RFP
52	Section 5	26	project experience	Max mark mentioned is 10. Clarification on per project marks required. E.g. can two project details of 40Cr be provided for achieving 5+5=10Marks ? OR separate 5 marks for CCTV experience is mandate		As per RFP
53	Broad Scope, Pt 27	62	Proposed wireless network shall utilize dual-band dual radio wireless access points based on the IEEE 802.11n standard with minimum 3x3:3 MIMO configuration for the outdoor to achieve an over-the-air data rate of 450Mbps per-radio and minimum 2x2:2 configuration in the indoor to achieve an over-the-air date rate of 300Mbps per-radio.	These specifications are contradictory / conflicting to the specifications mentioned under the access point specifications as they have been reversed. Please clarify		Already clarified in technical specification
54	Section 7	79	All routers and switches should have EAL-2 or NDPP (Network Device Protection Profile)	It is requested to remove the clause or add it consistently across all active devices	NDPP/EAL2 certification is a security compliance which is relevant for security appliances and vulnerable operating	Please read as below " All routers and switches

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			certification.		systems. OS loaded on switches are hardened OS customized only for switching/routing and therefore do not require such protection. A more advisable approach may be to opt for vulnerability assessment or flow collection tools to mitigate the threats from the networks. Also this is favoring to only selective OEM's as it has not been asked consistently throughout the network, if it is a must compliance. As per the standard, the network would not be fully complied unless all the components including servers, wireless controllers etc. are also EAL-2 / NDPP compliant	(except outdoor router and outdoor switches) should have EAL-2 or NDPP (Network Device Protection Profile) certification"
55	Section 7	79	The Bidder should provide Router and Switches (exclude Outdoor Router & Outdoor Switch) based on top 5 companies/OEM as per IDC report in last 2 years so that manageability can be lowered.	It is requested to amend the specifications as follows: "The Bidder should provide Router and Switches (exclude Outdoor Router & Outdoor Switch) based on top 5 companies/OEM as per IDC report in last 2 years OR vendor should be in the Leaders/Visionaries quadrant in "Wired and Wireless LAN" in last 2 years so that manageability can be lowered."	There are other credible research and advisory firms such as Gartner which should also be considering while assessing the product vendors.	As per RFP
56	Section 7	79	All Active Devices like Indoor Router, Indoor Switches, Wireless Indoor APs, Wireless Controller, Core Switch and NMS, should be from the same manufacturer so that manageability can be lowered.	It is requested to remove the clause	Usually vendors manufacturing routing and security are separate than the vendors for switching and wireless. Request you to provide flexibility such that more vendors can participate. Also, manageability is always achieved on standard protocols such as SNMP which does not provide any benefit over products from same OEM. For e.g. Gartner Magic Quadrant considers OEM's in "Leaders" and "Visionaries" to be among the preferred vendors	Please Read as below " All Active Devices like Indoor Router, Indoor Switches, Core Switch and NMS, should be from the same manufacturer so that manageability can be increased.
57	Section 7.1,	79	Should support minimum 320000	It is requested to amend the specifications	Currently mentioned MAC addresses are	As per RFP

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	CORE L3 SWITCH, Pt 3		MAC address entries and minimum 1000 VLANs.	as follows: "Should support minimum 64,000 or better MAC address entries and minimum 1000 VLANs."	very high and not in line to current requirements since it is not expected to have so many devices ever on the network. At max. even if we assume 25,000 users will concurrently connect (as per user specifications mentioned under wireless controller), total count will never exceed even 32,000 MAC addresses. You may even provision for double capacity for future to be on safer side.	
58	Section 7.1, CORE L3 SWITCH, Pt 4	79	Should have required accessories for rack mounting. Switch should support minimum 8 payloads and 2 slot for controller/management module.	It may be removed to save space and reduce complexity	Considering current interface requirements, similar or better interfaces can be provisioned on a standalone switch instead of provisioning a chassis switch and provisioning so much rack space. Also similar resiliency like power, fans etc. can be achieved on standalone switch.	As per RFP
59	Section 7.1, CORE L3 SWITCH, Pt 9	80	Should support dynamic routing protocols like OSPF and BGP from day 1 for both IPv4 and IPv6.The same switch should also support data centre Ethernet bridging and data centre interconnect. Shall support minimum 128K IPV4, IPV6 unicast routes	It is requested to amend the specifications as follows: "Should support dynamic routing protocols like OSPF and BGP from day 1 for both IPv4 and IPv6. The same switch should also support data centre Ethernet bridging and data centre interconnect. Shall support minimum 8K IPV4, IPV6 unicast routes	As mentioned previously as well, if the users being catered are max. 25000 then 128K routes will never be required to be supported on the switch. Currently mentioned routes are very high and such high routes capability would only be required for any service provider requirement. Considering standard Enterprise scenario designed on dynamic routing, it would never exceed over 1000 routes safely considering even only 25 users per subnet. We can still provision for 8000 routes to be on safer side	As per RFP
60	Section 7.1, CORE L3 SWITCH, Pt 15	80	Should have RoHS compliance, EAL 2 or NDPP.	It is requested to remove the clause or add it consistently across all active devices	NDPP/EAL2 certification is a security compliance which is relevant for security appliances and vulnerable operating systems. OS loaded on switches are hardened OS customized only for switching/routing and therefore do not require such protection. A more advisable approach may be to opt for vulnerability assessment or flow	As per RFP

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					collection tools to mitigate the threats from the networks. Also this is favoring to only selective OEM's as it has not been asked consistently throughout the network, if it is a must compliance. As per the standard, the network would not be fully complied unless all the components including servers, wireless controllers etc. are also EAL-2 / NDPP compliant	
61	Section 7.2, ACCESS L2 SWITCH, Pt 1	80	24 x 1G UTP with additional 4 x 1G SFP ports.	May be amended as: "24 x 1G UTP with shared 4 x 1G SFP ports."	This is specific to a single OEM	As per RFP
62	Section 7.2, ACCESS L2 SWITCH, Pt 10	80	Should have RoHS compliance, EAL2 or NDPP.	It is requested to remove the clause or add it consistently across all active devices	NDPP/EAL2 certification is a security compliance which is relevant for security appliances and vulnerable operating systems. OS loaded on switches are hardenened OS customized only for switching/routing and therefore do not require such protection. A more advisable approach may be to opt for vulnerability assessment or flow collection tools to mitigate the threats from the networks. Also this is favoring to only selective OEM's as it has not been asked consistently throughout the network, if it is a must compliance. As per the standard, the network would not be fully complied unless all the components including servers, wireless controllers etc. are also EAL-2 / NDPP compliant	As per RFP
63	Section 7.3, ACCESS L2 SWITCH, Pt 1	80	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Minimum 52 Gbps switching capacity & minimum 38 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Needs to get modified as per the revise port count	As per RFP
64	Section 7.3,	81	24 x 1G POE+ UTP with additional 4	May be amended as:	This is specific to a single OEM	As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	ACCESS L2 POE+ SWITCH, Pt 1		x 1G SFP ports.	"24 x 1G POE+ UTP with shared 4 x 1G SFP ports."		
65	Section 7.3, ACCESS L2 POE+ SWITCH, Pt 1	81	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Minimum 52 Gbps switching capacity & minimum 38 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Needs to get modified as per the revise port count	As per RFP
66	Section 7.3, ACCESS L2 POE+ SWITCH, Pt 10	81	Should have RoHS compliance. EAL 2 or NDPP certification.	It is requested to remove the clause or add it consistently across all active devices	NDPP/EAL2 certification is a security compliance which is relevant for security appliances and vulnerable operating systems. OS loaded on switches are hardenened OS customized only for switching/routing and therefore do not require such protection. A more advisable approach may be to opt for vulnerability assessment or flow collection tools to mitigate the threats from the networks. Also this is favoring to only selective OEM's as it has not been asked consistently throughout the network, if it is a must compliance. As per the standard, the network would not be fully complied unless all the components including servers, wireless controllers etc. are also EAL-2 / NDPP compliant	As per RFP
67	Section 7.4, WIRELESS CONTROLLER	81	New specifications	Wireless solution should be either centralized or distributed architecture with application control at the edge and seamless scalability. Wireless controller is required in case solution offered is centralized architecture. In case distributed architecture is proposed, the functionality of the controller should still be met alternatively through hardware/software option.	Considering different architectures available, it is requested to provide flexibility to propose alternate solutions to meet the same requirements without compromising any features	As per RFP
68	Section 7.4, WIRELESS	82	Should support Static IP routing for both IPv4 and IPv6 networks	It is requested to delete this specifications	This feature is part of switching and should not be mixed with wireless	This clause stands deleted

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	CONTROLLER, Pt A11				solution.	
69	Section 7.5, OUTDOOR WIRELESS AP, Pt 2	83	Should be a three spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.	Should be a two spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.	Three spatial streams supported on 2 x 2 MIMO configuration is biased to only single vendor. By industry standards, 2x2 MIMO supports only 2 spatial streams	Please read as below "Should be a two spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration."
70	Section 7.5, OUTDOOR WIRELESS AP, Pt 6	83	Should have IP67 compliant with operating temperature in the range of -10°C to 55°C.	May be amended as: "Should have IP65 or better compliant with operating temperature in the range of -10°C to 55°C."	The difference between IP65 and IP67 is only that the outdoor access points will not be supported under water immersion up to 1m. Considering the access points will be installed on high poles or masts or walls, there may not be any requirement for protection against water immersions. Therefore it is requested to provide flexibility to offer an IP65 compliant access point	As per RFP
71	Section 7.7, WIRELESS NMS, Pt 14	86	Should include suitable service operation management flexibility for the network administrator to assign task to an Individual network engineer and assign ownership / track the status of the issue resolution in adherence to ITILv3.0. Should have service flow management from ticket creation, status checks, and execution to resolution, close, and after-audit operations	Please delete this clause	This clause is related to help desk functionality and has nothing to do with product capability.	This clause stands deleted
72	Section 7.7, WIRELESS NMS, Pt 17	86	Should support virtualization management	Please delete this clause	Wireless NMS is for management of wireless solution. Not clear what is required by virtualization management.	Please read as below “Should support virtualization management; management and

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						monitoring of both physical and virtual networks. It should provide insight into and management of virtual networks and reduce migration complexity by aligning and automatic network policies with virtual images"
73	4.Eligibility criteria, clause 3	13	The Prime Bidder, a single legal entity registered in India, should have an average annual turnover during each of the last three financial years (as per the last published Balance sheets), should have a minimum of Rs. 50 Crore that is generated from IT Hardware supply and their associated maintenance services packaged software etc. The company should not be a loss making identity.	Central PSUs may be exempted from profitability clause		As per RFP
74	4.Eligibility criteria, clause 2	14	The Prime Bidder (In case of Consortium) must have a proven track record of successfully implemented/implementing at least any one of the following project for, Supply, commissioning and Maintenance of IT Infrastructure including Networking equipments in India: - One project of similar nature not less than the amount of Rs. 8 Crore; OR - Two projects of similar nature not less than the	This clause may be allowed to met as consortium		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			amount equal toRs.5 Crores each; for Central Government / any of the State/UT governments / PSU in India in last five years.			
75	4.Eligibility criteria, clause 3	14	The Prime Bidder (In case of Consortium) must have a proven track record of successfully implemented/implementing at least any one of the following project for, Supply, commissioning and Maintenance of IT Infrastructure including Networking equipments in India: - One project of similar nature not less than the amount of Rs. 8 Crore; OR - Two projects of similar nature not less than the amount equal toRs.5 Crores each; for Central Government / any of the State/UT governments / PSU in India in last five years.	The projects executed in last 10 Years may be allowed to consider to meet this clause.		As per RFP
76	4.Eligibility criteria, clause 3	14	The Prime Bidder (In case of Consortium) must have a proven track record of successfully implemented/implementing at least any one of the following project for, Supply, commissioning and Maintenance of IT Infrastructure including Networking equipments in India: - One project of similar nature not less than the amount of Rs. 8 Crore; OR - Two projects of similar nature not less than the amount equal toRs.5 Crores each;	This clause may be modified as "The Prime Bidder (In case of Consortium) must have a proven track record of successfully implemented/implementing at least any one of the following project for, Supply, commissioning and Maintenance of IT Infrastructure including Networking equipments in India: - One project of similar nature not less than the amount of Rs. 4 Crore; OR - Two projects of similar nature not less than the amount equal toRs.2 Crores each; for Central Government / any of the		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			for Central Government / any of the State/UT governments / PSU in India in last five years.	State/UT governments / PSU in India in last five years.		
77	4.Eligibility criteria, clause 5	15	The Prime bidder should have executed/executing minimum of 1 project in India in the last three years involving the supply, installation, commissioning, AMC and Facility Management Services of WLAN active and passive components at the client site having at least 150 Nodes at Government/ Central Government/ PSU.	This clause may be allowed to be met as consortium		As per RFP
78	4.Eligibility criteria, clause 5	15	The Prime bidder should have executed/executing minimum of 1 project in India in the last three years involving the supply, installation, commissioning, AMC and Facility Management Services of WLAN active and passive components at the client site having at least 150 Nodes at Government/ Central Government/ PSU.	This clause may be allowed to be met from multiple projects (for meeting 150 nodes) in last 5 years		As per RFP
79	4.Eligibility criteria, clause 5	15	The Prime bidder should have executed/executing minimum of 1 project in India in the last three years involving the supply, installation, commissioning, AMC and Facility Management Services of WLAN active and passive components at the client site having at least 150 Nodes at Government/ Central Government/ PSU.	The projects executed in last 10 years allowed to considered to meet this clause.		As per RFP
80	4.Eligibility criteria, clause 10	16	The bidder should have technical manpower (Minimum 10 certified engineers in Networking).	We understand that ,this clause can be met as consortium		As per RFP

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81	TECHNICAL EVALUATION MATRIX, clause 3(b)	27	Single Project in India where no. of Sites for Completed / Running /Awarded for WLAN Networking Solutions as on 31.01.15 in State /Central Govt./ PSU/ Other Government Institutions by Prime Bidder.	This clause may be allowed to met as a consortium		As per RFP
82	Core project team , Annexure XVI	179	Core project team	We understand that man power requirement can be met as consortium		As per RFP
83	General		Extension of bid submission due date	Being a central PSU, it requires more time to finalize the consortium partner as we have to follow the PSU procedures. Hence the due date of bid submission may be extended further by four to five weeks		Please refer corrigendum
84	31 (3) & (10)	103	RAID Controller - Embedded RAID 1/5 4 ports SAS/SATA AND Internal/external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage	clause 3 is asking for RAID 1 or 5 with Four Ports but Clause 10 is asking for RAID 6 with 9 Ports	Video Recording is a Vital Information, hence its advised that the Storage be external (as Mandated by the BoQ) but with its own specification. Hence We kindly request deletion of clause 3 & 10 from the VMS Server Specification and provide for separate Specification for External Storage.	Please read as below " RAID 0/1/5/6 SAS/SATA and Internal/external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage"
85	33 (19)	105	Casing: IP67/NEMA 4x Rated Outdoor Housing	IP67 is rated for two components of the environment 6-> Dust Tight and 7->Immersion up to 1m, Hence is the Tender contemplating immersion of the camera under water..? If this is the case then all the other items which are mounted at lesser height should also be IP67 rated. Like Outdoor Cabinet, UPS, Out Door Network Switches, etc	Its Suggest that the clause be revised to IP66: 6-> Dust Tight and 6->Powerful water jets (Water volume: 100 liters per minute with Pressure: 100 kPa at distance of 3Mtrs)	Please read as below "IP66/NEMA 4x Rated Outdoor Housing"
86	33 (20)	105	Connectors: RJ 45 for 10BASE-T/100BASE-TX, IP67-rated RJ-	same as above	IP66 rated RJ45 Connector Kit.	Please read as below "Connectors:

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			45 connector kit			RJ 45 for 10BASE-T/100BASE-TX, IP66-rated RJ-45 connector kit"
87	33			The specification is for outdoor camera and these camera operate 24hrs, hence the specification does not provide for IR Illumination for Night Time Operation	Pls Consider Inserting the following: Built-in Adaptive IR with 25Mtrs Range	Please add in camera specification "Built-in Adaptive IR with 25Mtrs Range"
88	33 (23)	105	Support materials: …. windows decoder 1-user license	Pls clarify what is meaning of "windows decoder Licenses" if this is H.264 Licenses then Pls inform why 1 user, when the tender is asking for 8 Clients and also Web Casting (live Streaming) for 43 (G) on page 129 of the tender	Pls kindly delete this as all Licensing is part of the VMS as the VMS is the Central Interface point to all sub systems, further the VMS should be able to provide cohesive integration of all makes & types of Camera, irrespective on the Camera OEM.	This clause stands deleted
89	34 (13)	106	External Control: RS232C (in /out), RJ45	the Monitors uses the HDMI Cable itself for control, hence RS232C is very old technology, no longer supported by most manufactures	Pls kindly delete the clause as all controls of the Display is via the HDMI port already provided in 34 (11)	RS232C deleted from specification
90	34 (14) & (15)	106	Media Player Option Type & Special Features	Built-in Software which is Embedded in Monitors are Proprietary and with user modification of these voids the warranty, further these monitors are controlled via the application software asked in the tender	Its brought to the consideration of the tender committee that Play JPEG, Flash Player, Video, PPS File through USB, is basically used to browse the Internet and Play YouTube and such media, In a control room is dedicated for display of Critical Information these Internet activities is to be avoided. Pls delete this clause.	As per RFP
91	43 (G) a	129	Live Streaming on Web Portal: ….. the live streaming and through Web based Portal to the citizen without any licensing requirement.	We bring to the notice the comments of MHA on Live Streaming: the Home Ministry had said such live coverage not only affects the secrecy and effectiveness of the operation but also puts the safety of security forces, common people and journalists in jeopardy. Information and Broadcasting Minister has indicated that there could soon be norms for media coverage of terror-related operations by saying that the issue is under “serious and very advanced consideration” of the government.	as the norms are awaited from MHA / MoI&B, Its suggested that this clause be amended to "streaming of recorded camera video with user defined delays and at user defined resolution for web based portal to citizen without licensing". OR this clause be differed as "ability to integrate with Streaming service of recorded video at user defined delay, at user defined resolution for web based portal to citizen without licensing".	This clause stands deleted. Web based live streaming is not required for citizen.

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
92	44 (G) a	130	Live Streaming on Web Portal: ….. the live streaming and through Web based Portal to the citizen without any licensing requirement.	any live streaming of video is high utilization of computation and bandwidth. Hence appropriate sizing of the Web Server for Web based Portal, is essential for successful deployment. Hence Pls inform the concurrent citizens able to login at a time and also the frame rate and resolution of the streams. Its also advised to have authentication of the citizen for this sensitive information	any live streaming is considered sensitive, hence authentication of the Citizen / User Pulling the stream from Web Portal would be need of the MHA. If the design is contemplating using of the recourses like firewall, router & switches used for the Wi-Fi & IP Camera is used for Web Portals then the all these equipment's would require higher capacities and security to prevent hacking & DOS attacks.	This clause stands deleted. Web based live streaming is not required for citizen.
93	6.2 Broad Scope, 9) c.	60	The infrastructure for establishing the external database shall be provided by CHiPS.	Pls clarify on the database platform, version, and maximum space that can be allocated. We understand the same database will also be used for NMS and EMS as required.		Please refer corrigendum
94	6.2 Broad Scope, 11)	61	The offered solution should be capable of storing the footage backup up to 15 days, The 72TB Raw storage capacity of server should be provided from day 1. If any additional internal storage is required, than 4 TB storage will be provided in available slots.	We understand that 72TB Raw storage capacity need to be provided on 2 VMS recording servers (36TB each per server based on 4TB HDDs) for recording of camera footage. Pls clarify and request consider a server for VMS Master role with only 2 x suitable HDDs.		As per RFP
95	6.2 Broad Scope, 17)	61	Outdoor access points shall be installed at Outdoor sites to provide seamless wireless Internet connectivity within the Indoor site.	We understand outdoor access points will cater to outdoor coverage. Pls clarify.		Please Read as below "Outdoor access points shall be installed at Outdoor sites to provide seamless wireless Internet connectivity within the Outdoor site"
96	6.2 Broad Scope, 19)	62	Offered solution shall allow seamless roaming between different access points in a particular SITE provided he/she remains in the Minimum 85-foot radius of the nearby wireless access point(s).	We understand that any wireless client should get RF signal levels above -70dBm within the asked 85-foor radius as wireless coverage areas/regions with signal levels below -70dBm provide insufficient coverage for standard use of voice, video and data in a seamless manner. Pls clarify.		As per RFP
97	6.2 Broad Scope,	62	Proposed wireless solution is basically intended to provide	We understand that the proposed wireless will be primarily for delivery of G2C services		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	20)		wireless Internet access service in Outdoor SITE(s) with inbuilt provision for limited-time free access or charged access based on pre-paid charge plans.	from Government to citizens on a limited-time complementary access basis and no charge-plans like pre-paid or post-paid will be applicable. However, offered portal solution from SI should have readiness to provision such charge-plans as and when required in future. Pls clarify.		
98	6.2 Broad Scope, 26)	62	Proposed wireless solution should conform to applicable WPC regulations for both indoor and outdoor use of license-free spectrums in terms of EIRP. A declaration to this effect must be submitted which must be supplemented by periodic compliance reports during the project period.	We understand that this declaration is to be provided by SI. Pls clarify.		Yes declaration to be submitted by SI.
99	6.6. Parameters of the site design	72	Fiber optic transceivers should not be used along with switches for connectivity between buildings.	We understand FO transceivers are the only standard way of inter-building connectivity over fiber. Do you mean not to use media converters for such interconnection? Pls clarify.		Yes media converter should not be used.
100	6.6. Parameters of the site design	72	Racks used in the network for terminating the passive (cable and Jack panel) and active components (switches) shall be of the following.	Rack depth has not been mentioned. Pls consider minimum 600mm depth for the rack to accommodate latest PoE/Non-PoE switches in those racks.		As per RFP
101	6.10. Technical documentation after installation	74	Warranty certificate indicating 5 year's warranty from the Principal Bidder for Active Components.	We understand that the warranty certificate for 5-years for active componnets should be from the corresponding active OEMs and not principal bidder. Pls clarify.		Please read as below " Warranty certificate indicating 5 year's warranty from the OEM for all Active Components and during Final Acceptance test (FAT) "
102	6.16. Product warranty	76	In case the Bidder is unable to fulfill his obligations during the warranty period, the warranty obligations will fully and automatically devolve upon the Manufacturer of the goods.	We understand the warranty support is desired directly from the OEM and not through any SI so that the OEM's direct warranty support is ensured if at all the said SI fails to provide the warranty support. Pls clarify.		Yes Product Warranty should be provided by OEM

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103	Section 7	79	All equipments should be IPv6 ready from day 1.	We understand that the offered equipments shall include required IPv6 licenses as applicable from day 1. Pls clarify.		As per RFP
104	Section 7	79	All routers and switches should have EAL-2 or NDPP (Network Device Protection Profile) certification.	Pls consider revising as "All routers and switches at NOC should have EAL-2 or NDPP (Network Device Protection Profile) certification." Switches and routers for other sites are usually access layer products that even include 8-port switches and this inclines towards a single OEM.		Please read as below " All routers and switches (except outdoor router and outdoor switches) should have EAL-2 or NDPP (Network Device Protection Profile) certification"
105	Section 7	79	Modular switch in data centre design withIPv6 ready from day 1.	Pls consider revising as "Modular switch in data center design and in distributed architecture with dedicated fabric modules in addition to management/supervisor modules and with IPv6 ready from day 1." Data center design is very generic and does not imply the desired architecture of the desired switch.		As per RFP
106	Section 7	79	Should support minimum 320000 MAC address entries and minimum 1000 VLANs.	Pls consider revising as "Should support 128000 MAC address entries and minimum 1000 VLANs". As per the solution desired, 128000 MAC addresses at core switch level are much sufficient.		As per RFP
107	Section 7	79	Should have required accessories for rack mounting. Switch should support minimum 8 payloads and 2 slot for controller/management module.	Pls consider adding here as "Switch should have redundant controller/management modules and redundant fabric modules in a distributed architecture". All the leading OEMs do have their fabric modules separate than the management modules in data center design switches.		As per RFP
108	Section 7	80	Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps -1000 mpps from day 1.	Pls consider the minimum packet forwarding rate as 2857 mpps from day 1. As per industry standard designs, 480Gbps per slot in a 8 slot modular switch would translate to 3840Gbps of forwarding capacity per switch and 2857 mpps of packet forwarding throughput accordingly. Switches in centralized forwarding architecture often fail		Please read as below " Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps from day

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				to achieve this non-blocking wire-speed forwarding in certain switches and such switches does not fit well to be categorized as data center ready.		1"
109	Section 7	80	Should have redundant fan trays.	Pls revise as "Should have redundant fan assemblies". Different OEMs have their own optimized cooling mechanisms designed based on their design of the modular switches.		Pls read as below "Should have redundant Fan tray/ fan assemblies".
110	Section 7	80	Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Pls consider removing this clause as stacking would not be required in this solution for any switch. This would increase capex for the overall solution. However, if at all stacking is required, request please consider standard stacking bandwidth of minimum 40Gbps.		As per RFP
111	Section 7	81	Should have RoHS compliance, EAL2 or NDPP.	Pls consider marking "EAL2 or NDPP" as preferable. This is too restrictive for many OEMs to participate.		As per RFP
112	Section 7	81	Should support dedicated stacking	Pls consider removing this clause as stacking would not be required in this solution for any switch. This would increase capex for the overall solution. However, if at all stacking is required, request please consider standard stacking bandwidth of minimum 40Gbps.		As per RFP
113	Section 7	81	EAL 2 or NDPP certification	Pls consider marking "EAL2 or NDPP" as preferable. This is too restrictive for many OEMs to participate.		As per RFP
114	Section 7	81	Should have 2 or more x 10G SFP+ ports populated with 10G-Base-SR transceivers.	Pls consider at least 4 x 10G SFP+ ports as that would be the minimum requirement of overall solution requirement here.		As per RFP
115	Section 7	81	Should support minimum 100 802.11a/b/g/n/ac access points from day 1 and should be upgradeable up to 1000 access points without any hardware or software upgrade.	Pls consider minimum 500 access points from day 1 and upgradable up to 1250. The day 1 requirement here translates to 456 access points.		As per RFP
116	Section 7	83	Should be a three spatial-stream 802.11n access point with integrated/external dual	Pls consider 3x3 MIMO configuration here as that is the ratified 802.11n standard requirement.		Please read as below "Should be a two spatial-stream

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			band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.			802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration."
117	Section 7	83	Should have two RJ-45 auto-sensing 10/100/1000 Mbps PoE(802.3af/at) port and a console port.	Pls consider one RJ-45 auto-sensing 10/100/1000 Mbps PoE port which is the minimum requirement.		As per RFP
118	Section 7	84	Should support data rates up to 300 Mbps per radio under 802.11n	Pls consider data rates up to 450 Mbps per radio under 802.11n as it is asked 3 spatial streams		As per RFP
119	Section 7	84	Should be a two spatial-stream 802.11ac access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 3X3 MIMO configuration.	Pls consider 2x2 MIMO configuration here for the 802.11ac standard requirement as it is asked for 2 spatial streams.		Please read as below "Should be a three spatial-stream 802.11ac access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 3X3 MIMO configuration.
120	Section 7	84	Should have two RJ-45 auto-sensing 10/100/1000 Mbps PoE(802.3af/at) port and a console port.	Pls consider one RJ-45 auto-sensing 10/100/1000 Mbps PoE port which is the minimum requirement.		As per RFP
121	Section 7	85	Should support minimum 100 wired and wireless devices from day 1 and the solution should be scalable upto 1000 wired and wireless devices without any hardware or software up-gradation.	Pls consider minimum 500 wired and 500 wireless devices from day 1 which is near equal to the actual requirement from day 1. Pls consider scalability up to 1250 wired and 1250 wireless devices without any hardware or software up-gradation.		As per RFP
122	Section 7	90	The appliance should have following certifications EAL/FIPS-level-2	Pls consider marking "EAL" as preferable. This is too restrictive for many OEMs to participate.		As per RFP

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123	Section 7	91	Firewall should support 2 virtual firewalls from day one & support licensed based scalability upto 50 virtual firewalls as & when required with licenses. Firewall should be provisioned with the required memory & CPU to support 50 virtual firewalls from day one.	Pls consider removing this clause. Virtual firewall is specially design for multiple datacenter or ISP requirement. This also would increase the overall capex of the solution.		As per RFP
124	Section 7	93	Firewall should support atleast 2500 client based SSL vpn peers from day one internally or externally. Required licenses for the same should be provisioned from day one.	Pls consider for at least 4000 ssl licenses as there would be a requirement to provide secure VPN connectivity to government employees/offices on the proposed wireless LAN network.		As per RFP
125	Section 7	96	Enclosure shall have suitable cooling arrangement for visibility in low light conditions	Pls consider revising - "Enclosure shall have suitable cooling arrangement and visibility in low light conditions"		Please read as below "Enclosure shall have suitable cooling arrangement and visibility in low light conditions"
126	Section 7	103	Motherboard - Dual Intel E5-2620 2.0 GHz Xeon 6-core CPU, dual 8 GB DDR3 RAM	Request you to change to "Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM". V3 is the current generation processor and DDR4 is the current generation memory. Also 8 GB memory for VMS servers are very less and therefore the same need to be minimum of 64GB for performance.		Please read as below " Motherboard - Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM"
127	Section 7	103	Operating temperature - 32 to104°F (0to40°C)	Request you to change the same to "Operating temperature: 50 to 95 °F (10 to 35°C)". 0-degree centigrade is a freezing temperature and therefore the same is non effective and also temperature beyond 35-degree is higher and non operating.		Please read as below " Operating temperature: 10 to 35°C
128	Section 7	103	Non-operating temperature - 40 to 158°F (-40 to 70°C)	Request you to change the same to "Non-operating temperature - 22 to 140°F (-30 to 60°C)" -- Reduced the range for all inclusion of the server operating environment.		Please read as below "Non-operating temperature: (-)30

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						to 60°C
129	Section 7	103	Internal/external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage	Request you to change the same to "external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage and should have 20GB cache per controller and the storage need to be for dual controller including thin provisioning and thin reclaim feature from day one." -- The storage need to be external due to virtualization architecture and also the same should have dual controller for redundancy and thin provisioning and thin reclaim for better matrix.		External Storage not required. Master Server for VMS added in Bill of Material.
130	Section 7	103	On-board storage repositories – Server should have min 1 for RAID-5 configuration for video surveillance application	Please change the same to "On-board storage repositories – Server should have min 1TB for RAID-5 configuration for video surveillance application" -- Please make the capacity in TB for understanding.		Please read as below "On-board storage repositories – Server should have min 1TB for RAID-5 configuration for video surveillance application"
131	Section 7	New Query	Please add 6 no of PCI slots for PCI expandability	Please add "Minimum 6 PCI slots" - for inclusion of different PCI cards the same is required .		Please consider minimum 6 PCI slots in server specification"
132	Section 7	103	Motherboard - Dual Intel E5-2620 2.0 GHz Xeon 6-core CPU, dual 8 GB DDR3 RAM	Request you to change to "Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM" -- V3 is the current generation processor and DDR4 is the current generation memory. Also 8 GB memory for VM servers is very less and therefore the same need to be minimum of 64GB for performance.		Please read as below " Motherboard - Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM"
133	Section 7	104	Operating temperature - 32 to104°F (0to40°C)	Request you to change the same to "Operating temperature - 50 to 95 °F (10 to 35°C)" -- 0-degree centigrade is a freezing temperature and therefore the same is non effective and also temperature beyond 35-degree is higher and non operating.		Please read as below " Operating temperature: 10 to 35°C

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
134	Section 7	104	Non-operating temperature -40 to 158°F (-40 to 70°C)	Request you to change the same to "Non-operating temperature - 22 to 140°F (-30 to 60°C)" -- Reduced the range for all inclusion of the server operating environment.		Please read as below "Non-operating temperature: (-)30 to 60°C
135	Annexure XII: Financial Proposal Format/2B Server & Storage for VMS	156/157	B2 External Storage of 25 TB capacity in RAID 6 configuration	Request you to change the same to "External Storage of 70 TB capacity in RAID 6 configuration with dual controller, 20 GB cache per controller, thin provisioning and thin reclaim feature" -- The storage need to be external due to virtualization architecture and also the same should have dual controller for redundancy and thin provisioning and thin reclaim for better matrix.		As per RFP
136	Section 7	New Query	Please add 6 no of PCI slots for PCI expandability	Please add "Minimum 6 PCI slots" - for inclusion of different PCI cards the same is required .		Please consider minimum 6 PCI slots in server specification"
137	Section 7	106	Architecture	Pls consider revising the specification as this is much inclined to certain vendors.		Please refer calrification provided in specification
138	Section 7	106	Interface support	Please consider minimum 2 slots as the connectivity for WAN and LAN here would only be on Ethernet and other slots would not be required at all.		Please read as below " Router should have minimum 4 slots to accommodate large variety of interface & should support FE, GE (both Ethernet based & fiber based), Serial V.35, ports, G.703 ports, E1, Chn E1 etc."
139	Section 7	107	Performance	Pls consider the forwarding rate asked here which is very low as compared to desired WAN link capacity.		As per RFP
140	Section 7	107	3 x 1 Gigabit Ethernet Interfaces from day one, out of which	Pls consider 3 x 1 Gigabit Ethernet interfaces which is the minimum requirement. SFP if at		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			minimum 1 port should be SFP based.	all required should be additional.		
141	Section 7	107	The Router should be minimum EAL2 or NDPP certified	Pls consider "EAL2 or NDPP" as preferable.		As per RFP
142	Section 7	107-108		This is not required considering suitable outdoor enclosure has already been desired. Secondly, this sort of products are not manufactured by all the router manufacturers and by adding this, overall TCO will increase without any considerable value addition in the overall solution.		As per RFP
143	Section 7	108	Switch should support 4000 VLAN ID, Minimum 512 VLAN's	Pls revise as "Switch should support minimum 250 VLAN's". 250 VLAN support is much sufficient for a 8-port access L2 switch.		Please read as below " Switch should support Minimum 250 VLAN's"
144	Section 7	108	Switch should support IGMP, MLD, MSDP, PIM, static routing, RIP from day one	Pls consider revise as "Switch should support IGMP and MLD". Rest features as asked are not required in 8-port access L2 switch.		Please read as below "Switch should support L2 multicasting features for IPv4 and IPv6"
145	Section 7	108	Switch should support UDLD, Auto-Smart ports, Resilient Ethernet Protocol from day one	Please consider removing this as features asked are not required in 8-port access L2 switch.		Please read as below " Switch should support UDLD, Auto-Smart ports from day one"
146	Section 7	108	Switch should be EAL2 or NDPP certified	Pls consider "EAL2 or NDPP" as preferable.		As per RFP
147	Section 7	111	Operating temperature: 0 - 50 °C	Pls consider as 0 - 40°C which is standard.		Please read as below " Mininum Operating temperature: 0 - 40 °C"
148	Section 7	110	Technology: SPWM, IGBT/MOSFET	Pls consider "PWM, IGBT" here. MOSFET based UPS are now technologically obsolete.		Please read as below "Technology: PWM/SPWM, IGBT/MOSFET"
149	8. Bill of Materials	130	Server with Operating System	Please consider 4 quantities of servers with suitable virtualization to plan required HA for desired services such as Helpdesk, NMS,		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
				DHCP, DNS, Proxy and Portal.		
150	8. Bill of Materials	131	VMS Solution	Pls consider adding a suitable workstation for the VMS professional display.		As per RFP
151	8. Bill of Materials	131	Server & Storage for VMS	Pls consider 2 servers for VMS master in HA and minimum 4 recording servers from day 1 for targeted 176 nos of cameras. Recording servers can be considered 2 at first and later, the same can be added considering the qty of cameras.		Please refer corrigendum below. Master server for VMS added
152	8. Bill of Materials	132	Outdoor MIMO Antenna	Pls consider adding a note that the qty will be 8 if the offered antenna assembly does not include antennas for both 2.4GHz and 5GHz.		As per RFP
153	8. Bill of Materials	132	Antenna Lightning Arrester	Pls note that the qty of lightening arrester shall depend upon the outdoor AP and outdoor MIMO antenna offered by SI. SI should be asked to provide lightening arresters in all antenna posts in the offered AP.		As per RFP
154			ADDITION REQUEST for CORE Switch	Pls consider "8 hardware queues for all switches and routers". The proposed network is expected to carry large amounts of video traffic in addition to other data traffic that require low latency in an end-to-end manner. Having 8 hardware queues in equipments will help in overall optimization of the solution in aggregate.		Please add following specification in Core Switch: "8 hardware queues for core switches"
155	Section 7	111	Operating temperature: 0 - 50 °C	Please consider as 0 - 40°C which is standard Or 0-50 deg C with system duration.		Please read as below " Minimum Operating temperature: 0 - 40 °C"
156	Section 7	110	Technology: SPWM, IGBT/MOSFET	Please consider "PWM, IGBT" here. MOSFET based online UPS are now technologically obsolete.		Please read as below "Technology: PWM/SPWM, IGBT/MOSFET"
157	Section 7	110	Input voltage range -160 to 282V AC	Please consider as to 160-280V AC		Please read as below " Input voltage range -160 to 280V AC"
158	5.20.2	37	Notwithstanding CHiPS s right to	Request Liquidated damages to be		As per RFP

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	Liquidated damages		cancel the order, liquidated damages for late delivery at 1% (One percent) of the undelivered portion of order value per week will be charged for every week's delay in the specified delivery schedule subject to a maximum of 10% of the value of the order value. For eg. If Server is delivered but delivery of power cord, to be supplied along with Server, is delayed then LD would be calculated on the total cost of the Server and not on the cost of the power cord alone.	considered for the delivery portion as 0.5% per week subject to a maximum of 5% for the undelivered portion of the material.		
159	5.20.2 Liquidated damages	37	Liquidated damages for late commissioning at 1% (One percent) of the order value per week will be charged for every week s delay in commissioning to a maximum of 10% of the value of the order value.	Request to delete the Liquidated Charges for commissioning as one of the reason for late commissioning will be the delay in site readiness.		As per RFP
160	5.20.2 Liquidated damages	37	Please note that the above LD for delay in delivery and delay in commissioning are independent of each other and shall be levied as the case may be.	Please retain the LD clause only for the delivery as stated above		As per RFP
161	5.20.5 Penalty	38	In the event of failure of maintaining the SLA, penalty should be imposed on basis of the cost of concerned hardware equipment as per mentioned in SLA would be levied subject to a maximum of 20% of the total hardware / supply/service cost.	Request to clarify is this the LD or additional to LD clause mentioned in point 5.20.2		As per RFP
162	2.Elgibilty criteria	13	The company should not be a loss making identity.	can this clause be deleted		As per RFP
163	4.1	16	All partners of the Consortium shall be liable jointly and severally for the execution of the contract in accordance with the contract.	Can the consortium partner meet the qualification criteria or is it required for the primary bidder to meet all the qualification criteria		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
164	5.4.3 EMD and 5.25 PBG	20, 44	Bank Guarantee payable at Raipur	Can the BG be payable at Mumbai		As per RFP
165	5.22 category of SLA's	41	LD and penalty	The LD and penalty should not be applicable for the delay caused from CHiPS for site readiness and dependencies.		As per RFP
166	5.26 statutory requirements	44	Customs and foreign currency changes not indemnifieble to Chips	Since the price validity is for one year from the agreement, request Chips to agree to accept the changes in the statutory levis, like sales tax, service tax, customs etc and the foreign currency fluctuations		As per RFP
167	4. Eligibility Criteria	14	Similar Project Reference from Central Government / any of the State/UT governments / PSU in India	References from Educational / Universities may also be considered.		Government educational institute / University order will be considered
168	4. Eligibility Criteria	16	EMD - The EMD should be in the form of a Demand Draft/ Bank Guarantee issued by a Nationalized / Scheduled Bank, in favour of CEO, Chhattisgarh Infotech & Biotech Promotional Society, payable at Raipur.	BG issued by a Bank from Mumbai (MAH) may be accepted		As per RFP
169	5.20.5 - Penalty	38	In the event of failure of maintaining the SLA, penalty should be imposed on basis of the cost of concerned hardware equipment as per mentioned in SLA would be levied subject to a maximum of 20% of the total hardware / supply/service cost.	Penalty should be Max. 10%		As per RFP
170	6.17 - Insurance	76	The period of insurance shall be up to the date the ownership and possession is transferred to CHIPS provided in the agreement. The bidder shall provide a copy of the necessary insurance policy to CHIPS.	Need clarification on possession & transferred to CHiPS.		The Insurance is required till end of contract period.
171	5.34 - Payment Schedule	47, 48	On Supply of Equipment at NOC and Site provided as per Agreement/ Purchase	Request to amend the payment against supply as 60% and also request Confirmation on payment realization with in how many		As per RFP

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			Order/Work Order - 40% of the Agreement/ Purchase Order /Work Order Value on Per Site Basis.	days after supply.		
172	5.34 - Payment Schedule	47, 48	On Supply and Successful Installation of WLAN and Camera System, including Design, site preparation, Supply and installation as per Purchase Order/Work Order with Final Acceptance Test Per Site Basis - 40% of the Purchase Agreement/ Order/Work Order Value on Per Site Basis.	Confirmation on payment realization with in how many days after FAT / ITC		As per RFP
173	6.2 Broad Scope (7)	60	The SI shall be responsible to establish connectivity from NOC to each Site through leased/MPLS/RF connection for traffic requirements relating to wireless access for citizens, NMS, EMS and IP Camera.	How will Chips operationalize the payments for leased line/ MPLS to SI. Can the payment be made directly to Service provider by CHiPS		please read as below " The SI shall be responsible to establish connectivity from NOC to each Site through RF connection for traffic requirements relating to wireless access for citizens, NMS, EMS and IP Camera. However, if RF is not feasible than CHiPS shall provide connectivity through other modes like MPLS/ Leased Line etc. and SI shall coordinate with ISP to establish connectivity. CHiPS will bear all cost related to the bandwidth.
174	10 c Delivery	69	site survey, delivery , installation timeline is from LOI	Request timeline should be from Purchase order and agreement sign off.		Please refer corrigendum below

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	schedule					
175	5.23 SLAs	42, 43	Downtime percentage for PBH and Downtime percentage for ESH	Pls clarify on the PBH and ESH timings.		PBH : 08 AM to 08 PM ESH: 08:00 PM to 08:00 AM
176	6.2 Broad Scope, 4) e.	59	Wi-Fi infrastructure& IP Camera at 20 locations including areas such as educational, business, garden etc. having high public footprint across the Greater Raipur Region (Outdoor Location)	Pls provide the list of such locations.		List will be provided with LoI
177	6.2 Broad Scope, 4) f.	59	Wi-Fi infrastructure & IP Camera at 20 locations including areas such as educational, business, garden etc. having high public footprint across the State of Chhattisgarh (Outdoor Location)	Pls provide the list of such locations.		List will be provided with LoI
178	6.2 Broad Scope, 9) b.	60	The Portal shall be capable to manage any no. of sites and users considering future upgradation/scalability requirement.	Pls clarify the estimated number of such sites and users at least for proposed project period of 5-years.		As per RFP
179	6.2 Broad Scope, 9) c.	60	The infrastructure for establishing the external database shall be provided by CHiPS.	Pls clarify on the database platform, version, and maximum space that can be allocated.		Please refer corrigendum
180	6.2 Broad Scope, 11)	61	The offered solution should be capable of storing the footage backup up to 15 days, The 72TB Raw storage capacity of server should be provided from day 1. If any additional internal storage is required, than 4 TB storage will be provided in available slots.	We understand that 72TB Raw storage capacity can only be provisioned in a storage and number of such storages including number of HDDs on them will be as per overall camera count. HDDs on RAID-1 are required per server only for OS and other applications. Storage of camera footage will only be in the external storage. Pls clarify.		As per RFP
181	6.2 Broad Scope, 17)	61	Outdoor access points shall be installed at Outdoor sites to provide seamless wireless Internet connectivity within the Indoor site.	We understand outdoor access points will cater to outdoor coverage. Pls clarify.		Please read as below " Outdoor access points shall be installed at Outdoor sites to provide seamless wireless Internet connectivity within

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
						the Outdoor site.
182	6.2 Broad Scope, 19)	62	Offered solution shall allow seamless roaming between different access points in a particular SITE provided he/she remains in the Minimum 85-foot radius of the nearby wireless access point(s).	We understand that any wireless client should get RF signal levels above -70dBm within the asked 85-foor radius as wireless coverage areas/regions with signal levels below -70dBm provide insufficient coverage for standard use of voice, video and data in a seamless manner. Pls clarify.		As per RFP
183	6.2 Broad Scope, 20)	62	Proposed wireless solution is basically intended to provide wireless Internet access service in Outdoor SITE(s) with inbuilt provision for limited-time free access or charged access based on pre-paid charge plans.	We understand that the proposed wireless will be primarily for delivery of G2C services from Government to citizens on a limited-time complementary access basis and no charge-plans like pre-paid or post-paid will be applicable. However, offered portal solution from SI should have readiness to provision such charge-plans as and when required in future. Pls clarify.		AS per RFP
184	6.2 Broad Scope, 24)	62	Necessary electrical power shall be made available by CHiPS to SI of 1-phase/230VAC type. It will be SI's responsibility to extend the electrical power within each Site as per requirement.	We understand that the billing against this electrical power will be taken care of by CHiPS. Pls clarify.		Yes electricity charges not in scope of SI.
185	6.2 Broad Scope, 26)	62	Proposed wireless solution should conform to applicable WPC regulations for both indoor and outdoor use of license-free spectrums in terms of EIRP. A declaration to this effect must be submitted which must be supplemented by periodic compliance reports during the project period.	We understand that the declaration is to be provided by SI. Pls clarify.		Yes declaration to be submitted by SI.
186	6.3 Broad Outline of Scope of Work, Deliverables and Timeline 6) b.	65	SI shall be responsible for integration with existing or 3rd party payment gateway.	We understand the payment gateway subscription charges, if any, will not be on SI's scope. Pls clarify.		Yes

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187	6.3 Broad Outline of Scope of Work, Deliverables and Timeline 6) c.	65	SI shall be responsible for integration with existing or 3rd party SMS gateway.	We understand the SMS gateway subscription charges, if any, will not be on SI's scope. Pls clarify.		Yes
188	6.6. Parameters of the site design	71	Future expansion of around 20% shall be provided in the design.	We understand that this 20% provisioning for future expansion is applicable for licenses in wireless controller, wireless NMS, and VMS. Pls clarify.		As per RFP
189	6.6. Parameters of the site design	72	Unmanaged switches should be used only where the number of connects is restricted to less than 12 connect and future expansion is also not possible. Managed switches should be used at all locations where the current number of connects is more than 12 connects. Also at offices where external fiber is required to be used, only managed switches are suggested irrespective of the number of connects.	We understand the overall wireless solution is intended to be of complete managed type and in such a case, unmanaged switches does not fit in with the overall solution. Pls clarify.		As per RFP
190	6.6. Parameters of the site design	72		We understand FO transceivers are the only standard way of inter-building connectivity over fiber. Pls clarify.		Yes media converter should not be used.
191	6.6. Parameters of the site design	72	Racks used in the network for terminating the passive (cable and Jack panel) and active components (switches) shall be of the following.	Rack depth has not been mentioned. Pls consider minimum 600mm depth for the rack to accommodate latest switches in those racks.		As per RFP
192	6.10. Technical documentation after installation	74	Warranty certificate indicating 5 year’s warranty from the Principal Bidder for Active Components.	We understand that the warranty certificate for 5-years for active components should be from the corresponding active OEMs and not principal bidder. Pls clarify.		Please read as below " Warranty certificate indicating 5 year’s warranty from the OEM for all Active Components and during Final Acceptance test

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						(FAT) "
193	6.16. Product warranty	76	In case the Bidder is unable to fulfill his obligations during the warranty period, the warranty obligations will fully and automatically devolve upon the Manufacturer of the goods.	We understand the warranty support is desired directly from the OEM and not through any SI so that the OEM's direct warranty support is ensured if at all the said SI fails to provide the warranty support. Pls clarify.		Yes Product Warranty should be provided by OEM
194	Section 7	79	All equipments should be IPv6 ready from day 1.	We understand that the offered equipments shall include required IPv6 licenses, if applicable from day 1. Pls clarify.		As per RFP
195	Section 7	79	All routers and switches should have EAL-2 or NDPP (Network Device Protection Profile) certification.	Pls consider revising as "All routers and switches at NOC should have EAL-2 or NDPP (Network Device Protection Profile) certification." Switches and routers for other sites are usually access layer products and OEMs do not go for such certification at this product level.		Please read as below " All routers and switches (except outdoor router and outdoor switches) should have EAL-2 or NDPP (Network Device Protection Profile) certification"
196	Section 7	79	Modular switch in data centre design withIPv6 ready from day 1.	Pls consider revising as "Modular switch in data center design with distributed architecture and with IPv6 ready from day 1." Data center design is very generic and does not imply the architecture of the desired switch.		As per RFP
197	Section 7	79	Should support minimum 320000 MAC address entries and minimum 1000 VLANs.	Pls consider revising as "Should support 128000 MAC address entries and minimum 1000 VLANs".		As per RFP
198	Section 7	79	Should have required accessories for rack mounting. Switch should support minimum 8 payloads and 2 slot for controller/management module.	Pls consider adding here as "Switch should have redundant controller/management modules and redundant fabric modules in a distributed architecture". All the leading OEMs do have their fabric modules separate than the management modules in data center design switches.		As per RFP
199	Section 7	80	Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps -1000 mpps from day 1.	Pls consider the minimum packet forwarding rate as 2857 mpps from day 1. 480Gbps per slot in a 8 slot modular switch would translate to 3840Gbps of forwarding capacity per switch and 2857 mpps of packet		Please read as below " Should have minimum switching capacity of 480 Gbps per slot, and

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				forwarding throughput accordingly. Switches in centralized forwarding architecture often fail to achieve this wire-speed line rate forwarding in certain switches.		minimum packet forwarding rate of 357 Mpps from day 1"
200	Section 7	80	Shall support minimum 128K IPV4, IPV6 unicast routes	Pls consider revising as minimum 8K IPv4, IPv6 unicast routes. Desired features are for service-provider requirements.		As per RFP
201	Section 7	80	Should have redundant fan trays.	Pls revise as "Should have redundant fan assemblies". Different OEMs have their own optimized cooling mechanisms designed based on their design of the modular switches.		Pls read as below "Should have redundant Fan tray/ Fan assemblies".
202	Section 7	80	Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Pls consider removing this clause as stacking would not be required in this solution for any switch. This would increase TCO for the overall solution.		As per RFP
203	Section 7	81	Should have RoHS compliance, EAL2 or NDPP.	Pls consider marking "EAL2 or NDPP" as preferable.		As per RFP
204	Section 7	81	Should support dedicated stacking	Pls consider removing this clause as stacking would not be required in this solution for any switch. This would increase TCO for the overall solution.		As per RFP
205	Section 7	81	EAL 2 or NDPP certification	Pls consider marking "EAL2 or NDPP" as preferable.		As per RFP
206	Section 7	81	Should have 2 or more x 10G SFP+ ports populated with 10G-Base-SR transceivers.	Pls consider at least 4 x 10G SFP+ ports as that would be the minimum requirement of overall solution requirement here.		As per RFP
207	Section 7	81	Should support minimum 100 802.11a/b/g/n/ac access points from day 1 and should be upgradeable up to 1000 access points without any hardware or software upgrade.	Pls consider minimum 500 access points from day 1 and upgradable up to 1250. The day 1 requirement is 456 access points.		As per RFP
208	Section 7	83	Should be a three spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.	Pls consider 3x3 MIMO configuration here as that is the ratified 802.11n standard requirement.		Should be a two spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2

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						MIMO configuration
209	Section 7	83	Should have two RJ-45 auto-sensing 10/100/1000 Mbps PoE(802.3af/at) port and a console port.	Pls consider one RJ-45 auto-sensing 10/100/1000 Mbps PoE port which is the minimum requirement.		As per RFP
210	Section 7	84	Should support data rates up to 300 Mbps per radio under 802.11n	Pls consider data rates up to 450 Mbps per radio under 802.11n which ratified 802.11n standard requirement.		As per RFP
211	Section 7	84	Should be a two spatial-stream 802.11ac access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 3X3 MIMO configuration.	Pls consider 2x2 MIMO configuration here for the 802.11ac standard requirement.		Please read as below "Should be a three spatial-stream 802.11ac access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 3X3 MIMO configuration.
212	Section 7	84	Should have two RJ-45 auto-sensing 10/100/1000 Mbps PoE(802.3af/at) port and a console port.	Pls consider one RJ-45 auto-sensing 10/100/1000 Mbps PoE port which is the minimum requirement.		As per RFP
213	Section 7	85	Should support minimum 100 wired and wireless devices from day 1 and the solution should be scalable upto 1000 wired and wireless devices without any hardware or software up-gradation.	Pls consider minimum 500 wired and 500 wireless devices from day 1 which is near equal to the actual requirement from day 1. Pls consider scalability up to 1250 wired and 1250 wireless devices without any hardware or software up-gradation.		As per RFP
214	Section 7	90	The appliance should have following certifications EAL/FIPS-level-2	Pls consider EAL as preferable		As per RFP
215	Section 7	91	Firewall should support 2 virtual firewalls from day one & support licensed based scalability upto 50 virtual firewalls as & when required with licenses. Firewall should be provisioned with the required memory & CPU to	Pls consider removing this clause. Virtual firewall is specially design for multiple datacenter or ISP requirement. **This Virtual firewall will heavely increase the price of Firewall.**		As per RFP

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			support 50 virtual firewalls from day one.			
216	Section 7	93	Firewall should support atleast 2500 client based SSL vpn peers from day one internally or externally. Required licenses for the same should be provisioned from day one.	Pls consider for at least 4000 ssl licenses as there would be a requirement to provide secure VPN connectivity to government employees/offices on the proposed wireless LAN network.		As per RFP
217	Section 7	96	Enclosure shall have suitable cooling arrangement for visibility in low light conditions	Pls consider revising - "Enclosure shall have suitable cooling arrangement and visibility in low light conditions"		Please read as below "Enclosure shall have suitable cooling arrangement and visibility in low light conditions"
218	Section 7	103	Motherboard - Dual Intel E5-2620 2.0 GHz Xeon 6-core CPU, dual 8 GB DDR3 RAM	Request you to change to "Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM". V3 is the current generation processor and DDR4 is the current generation memory. Also 8 GB memory for VMS servers are very less and therefore the same need to be minimum of 64GB for performance.		Please read as below " Motherboard - Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM"
219	Section 7	103	Operating temperature - 32 to104°F (0to40°C)	Request you to change the same to "Operating temperature: 50 to 95 °F (10 to 35°C)". 0-degree centigrade is a freezing temperature and therefore the same is non effective and also temperature beyond 35-degree is higher and non operating.		Please read as below " Operating temperature: 10 to 35°C
220	Section 7	103	Non-operating temperature - 40 to 158°F (-40 to 70°C)	Request you to change the same to "Non-operating temperature - 22 to 140°F (-30 to 60°C)" -- Reduced the range for all inclusion of the server operating environment.		Please read as below "Non-operating temperature: (-)30 to 60°C
221	Section 7	103	Internal/external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage	Request you to change the same to "external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage and should have 20GB cache per controller and the storage need to be for		External Storage not required. Master Server for VMS added in Bill of Material.

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				dual controller including thin provisioning and thin reclaim feature from day one." -- The storage need to be external due to virtualization architecture and also the same should have dual controller for redundancy and thin provisioning and thin reclaim for better matrix.		
222	Section 7	103	On-board storage repositories – Server should have min 1 for RAID-5 configuration for video surveillance application	Please change the same to "On-board storage repositories – Server should have min 1TB for RAID-5 configuration for video surveillance application" -- Please make the capacity in TB for understanding.		Please read as below "On-board storage repositories – Server should have min 1TB for RAID-5 configuration for video surveillance application"
223	Section 7	New Query	Please add 6 no of PCI slots for PCI expandability	Please add "Minimum 6 PCI slots" - for inclusion of different PCI cards the same is required .		Please consider minimum 6 PCI slots in server specification"
224	Section 7	103	Motherboard - Dual Intel E5-2620 2.0 GHz Xeon 6-core CPU, dual 8 GB DDR3 RAM	Request you to change to "Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM" -- V3 is the current generation processor and DDR4 is the current generation memory. Also 8 GB memory for VM servers are very less and therefore the same need to be minimum of 64GB for performance.		Please read as below " Motherboard - Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM"
225	Section 7	104	Operating temperature - 32 to104°F (0to40°C)	Request you to change the same to "Operating temperature - 50 to 95 °F (10 to 35°C)" -- 0-degree centigrade is a freezing temperature and therefore the same is non effective and also temperature beyond 35-degree is higher and non operating.		Please read as below " Operating temperature: 10 to 35°C
226	Section 7	104	Non-operating temperature -40 to 158°F (-40 to 70°C)	Request you to change the same to "Non-operating temperature - 22 to 140°F (-30 to 60°C)" -- Reduced the range for all inclusion of the server operating environment.		Please read as below "Non-operating temperature: (-)30 to 60°C
227	Annexure XII:	156/157	B2 External Storage of 25 TB capacity in	Request you to change the same to "External Storage of 70 TB capacity in RAID 6		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	Financial Proposal Format/2B Server & Storage for VMS		RAID 6 configuration	configuration with dual controller, 20 GB cache per controller, thin provisioning and thin reclaim feature" -- The storage need to be external due to virtualization architecture and also the same should have dual controller for redundancy and thin provisioning and thin reclaim for better matrix.		
228	Annexure XII: Financial Proposal Format/2B Server & Storage for VMS	156/157	Internal Storage of 4 TB capacity in RAID 6 configuration for server expansion slot	Request you to change the same to "Internal Storage of 1TB capacity in RAID 6 configuration for server expansion slot" -- as the servers will be in virtualization environment, therefore internal capacity will be less in use. Request you to reduce the same.		As per RFP
229	7. Minimum Specification for Wi-Fi components) 35. Indoor router	106	Architecture	Pls consider revising the specification as this is vendor specific.		Please refer clarification provided in specification
230	7. Minimum Specification for Wi-Fi components) 35. Indoor router	106	Interface support	Please consider minimum 2 slots as the connectivity for WAN and LAN here would only be on Ethernet and other slots would not be required at all.		Please read as below "Router should have minimum 4 slots to accommodate large variety of interface & should support FE, GE (both Ethernet based & fiber based), Serial V.35, ports, G.703 ports, E1, Chn E1 etc."
231	7. Minimum Specification for Wi-Fi components) 35.	107	Performance	Pls consider the forwarding rate asked here which is very low as compared to desired WAN link capacity.		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	Indoor router					
232	7. Minimum Specification for Wi-Fi components) 35. Indoor router	107	3 x 1 Gigabit Ethernet Interfaces from day one, out of which minimum 1 port should be SFP based.	Pls consider 3 x 1 Gigabit Ethernet interfaces which is the minimum requirement. SFP if at all required should be additional.		As per RFP
233	7. Minimum Specification for Wi-Fi components) 35. Indoor router	107	The Router should be minimum EAL2 or NDPP certified	Pls consider "EAL2 or NDPP" as preferable.		AS per RFP
234	7. Minimum Specification for Wi-Fi components) 36. Indoor router	107-108		This is not required considering suitable outdoor enclosure has already been desired. Secondly, this sort of products are not manufactured by all the router manufacturers and by adding this, overall TCO will increase without any considerable value addition in the overall solution.		As per RFP
235	7. Minimum Specification for Wi-Fi components) 37. L2 switch PoE 8-port (Indoor)	108	Switch should support 4000 VLAN ID, Minimum 512 VLAN's	Pls revise as "Switch should support minimum 250 VLAN's". 250 VLAN support is much sufficient for a 8-port access L2 switch.		Please read as below " Switch should support Minimum 250 VLAN's"
236	7. Minimum Specification for Wi-Fi components) 37. L2 switch PoE 8-port (Indoor)	108	Switch should support IGMP, MLD, MSDP, PIM, static routing, RIP from day one	Pls consider revise as "Switch should support IGMP and MLD". Rest features as asked are not required in 8-port access L2 switch.		Please read as below "Switch should support L2 multicasting features for IPv4 and IPv6"
237	7. Minimum Specificatio	108	Switch should support UDLD, Auto-Smart ports, Resilient Ethernet	Please consider removing this as features asked are not required in 8-port access L2		Please read as below " Switch

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	n for Wi-Fi components) 37. L2 switch PoE 8-port (Indoor)		Protocol from day one	switch.		should support UDLD, Auto-Smart ports from day one
238	7. Minimum Specification for Wi-Fi components) 37. L2 switch PoE 8-port (Indoor)	108	Switch should be EAL2 or NDPP certified	Pls consider "EAL2 or NDPP" as preferable.		As per RFP
239	7. Minimum Specification for Wi-Fi components) 38. L2 switch PoE 8-port (Outdoor)			Industrial Switch is not required as we have already considered suitable outdoor IP66 enclosure, it is unnecessarily increasing the cost of project. Secondly, no point in adding an 100Mbps Industrial switch as we have already considered 1000 Mbps wireless access points, or please change 100Mbps wire less AP in place of 1000 Mbps. Further, 8-port switch will not suffice as per requirement minimum 16 port is required.		As per RFP
240	7. Minimum Specification for Wi-Fi components) 39. UPS online 1Kva with 1 hour backup	111	Operating temperature: 0 - 50 °C	Outdoor UPS is not required as you have already considered suitable outdoor IP66 enclosure, it is unnecessarily increasing the cost of project. So please consider standard UPS in place of Industrial UPS with Operating temperature 0-45°C.		As per RFP
241	8. Bill of Materials	130	Link Load Balancer	Please consider 2 quantities for redundancy and 99.5% availability.		As per RFP
242	8. Bill of Materials	130	Server with Operating System	Please consider 4 quantities of servers with virtualization or 8 servers without virtualization to plan required HA for desired services such as Helpdesk, NMS, DHCP, DNS, Proxy and Portal.		As per RFP
243	8. Bill of Materials	131	VMS Solution	Pls consider adding a suitable workstation for the VMS professional display.		As per RFP

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244	8. Bill of Materials	131	Server & Storage for VMS	Pls consider 2 servers for VMS master in HA and minimum 4 recording servers from day 1 for targeted 176 nos of cameras.		Master server added in Bill of Material.
245	8. Bill of Materials	131	External Storage of 25 TB capacity in RAID 6 configuration	Pls consider 70TB as 25TB will not cater to desired retention period of 15 days for 176 nos of cameras.		External Storage not required. Master Server for VMS added in Bill of Material.
246	8. Bill of Materials	132	Outdoor MIMO Antenna	Pls consider adding a note that the qty will be 8 if the offered antenna assembly does not include antennas for both 2.4GHz and 5GHz.		As per RFP
247	8. Bill of Materials	132	Antenna Lightning Arrester	Pls note that the qty of lightening arrester shall depend upon the outdoor AP and outdoor MIMO antenna offered by SI. SI should be asked to provide lightening arresters in all antenna posts in the offered AP.		As per RFP
248	Broad Scope, Pt 27	62	Proposed wireless network shall utilize dual-band dual radio wireless access points based on the IEEE 802.11n standard with minimum 3x3:3 MIMO configuration for the outdoor to achieve an over-the-air data rate of 450Mbps per-radio and minimum 2x2:2 configuration in the indoor to achieve an over-the-air date rate of 300Mbps per-radio.	These specifications are contradictory / conflicting to the specifications mentioned under the access point specifications as they have been reversed. Please clarify		Please read as below "Proposed wireless network shall utilize dual-band dual radio wireless access points based on the IEEE 802.11n standard with minimum 3x3:3 MIMO configuration for the Indoor to achieve an over-the-air data rate of 450Mbps per-radio and minimum 2x2:2 configuration in the Outdoor to achieve an over-the-air date rate of 300Mbps per-radio"
249	Section 7, Minimum	79	All routers and switches should have EAL-2 or NDPP (Network	It is requested to remove the clause or add it consistently across all active devices	NDPP/EAL2 certification is a security compliance which is relevant for security	Please read as below " All routers

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	Specification for Wi-Fi Components		Device Protection Profile) certification.		appliances and vulnerable operating systems. OS loaded on switches are hardenened OS customized only for switching/routing and therefore do not require such protection. A more advisable approach may be to opt for vulnerability assessment or flow collection tools to mitigate the threats from the networks. Also this is favouring to only selective OEM's as it has not been asked consistently throughout the network, if it is a must compliance. As per the standard, the network would not be fully complied unless all the components including servers, wireless controllers etc. are also EAL-2 / NDPP compliant	and switches (except outdoor router and outdoor switches) should have EAL-2 or NDPP (Network Device Protection Profile) certification"
250	Section 7, Minimum Specification for Wi-Fi Components	79	The Bidder should provide Router and Switches (exclude Outdoor Router & Outdoor Switch) based on top 5 companies/OEM as per IDC report in last 2 years so that manageability can be lowered.	It is requested to amend the specifications as follows: "The Bidder should provide Router and Switches (exclude Outdoor Router & Outdoor Switch) based on top 5 companies/OEM as per IDC report in last 2 years OR vendor should be in the Leaders/Visionaries quadrant in "Wired and Wireless LAN" in last 2 years so that manageability can be lowered."	There are other credible research and advisory firms such as Gartner which should also be considering while assessing the product vendors.	As per RFP
251	Section 7, Minimum Specification for Wi-Fi Components	79	All Active Devices like Indoor Router, Indoor Switches, Wireless Indoor APs, Wireless Controller, Core Switch and NMS, should be from the same manufacturer so that manageability can be lowered.	It is requested to remove the clause	Usually vendors manufacturing routing and security are separate than the vendors for switching and wireless. Request you to provide flexibility such that more vendors can participate. Also, manageability is always achieved on standard protocols such as SNMP which does not provide any benefit over products from same OEM. For e.g. Gartner Magic Quadrant considers OEM's in "Leaders" and "Visionaries" to be among the preferred vendors	Please Read as below " All Active Devices like Indoor Router, Indoor Switches, Core Switch and NMS, should be from the same manufacturer so that manageability can be increased.

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252	Section 7.1, CORE L3 SWITCH, Pt 3	79	Should support minimum 320000 MAC address entries and minimum 1000 VLANs.	It is requested to amend the specifications as follows: "Should support minimum 64,000 or better MAC address entries and minimum 1000 VLANs."	Currently mentioned MAC addresses are very high and not in line to current requirements since it is not expected to have so many devices ever on the network. At max. even if we assume 25,000 users will concurrently connect (as per user specifications mentioned under wireless controller), total count will never exceed even 32,000 MAC addresses. You may even provision for double capacity for future to be on safer side.	As per RFP
253	Section 7.1, CORE L3 SWITCH, Pt 4	79	Should have required accessories for rack mounting. Switch should support minimum 8 payloads and 2 slot for controller/management module.	It may be removed to save space and reduce complexity	Considering current interface requirements, similar or better interfaces can be provisioned on a standalone switch instead of provisioning a chassis switch and provisioning so much rack space. Also similar resiliency like power, fans etc. can be achieved on standalone switch.	As per RFP
254	Section 7.1, CORE L3 SWITCH, Pt 9	80	Should support dynamic routing protocols like OSPF and BGP from day 1 for both IPv4 and IPv6.The same switch should also support data centre Ethernet bridging and data centre interconnect. Shall support minimum 128K IPV4, IPV6 unicast routes	It is requested to amend the specifications as follows: "Should support dynamic routing protocols like OSPF and BGP from day 1 for both IPv4 and IPv6. The same switch should also support data centre Ethernet bridging and data centre interconnect. Shall support minimum 8K IPV4, IPV6 unicast routes	As mentioned previously as well, if the users being catered are max. 25000 then 128K routes will never be required to be supported on the switch. Currently mentioned routes are very high and such high routes capability would only be required for any service provider requirement. Considering standard Enterprise scenario designed on dynamic routing, it would never exceed over 1000 routes safely considering even only 25 users per subnet. We can still provision for 8000 routes to be on safer side	As per RFP
255	Section 7.1, CORE L3 SWITCH, Pt 15	80	Should have RoHS compliance, EAL 2 or NDPP.	It is requested to remove the clause or add it consistently across all active devices	NDPP/EAL2 certification is a security compliance which is relevant for security appliances and vulnerable operating systems. OS loaded on switches are hardenened OS customized only for switching/routing and therefore do not require such protection. A more advisable approach may be to opt for	As per RFP

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					vulnerability assessment or flow collection tools to mitigate the threats from the networks. Also this is favoring to only selective OEM's as it has not been asked consistently throughout the network, if it is a must compliance. As per the standard, the network would not be fully complied unless all the components including servers, wireless controllers etc. are also EAL-2 / NDPP compliant	
256	Section 7.2, ACCESS L2 SWITCH, Pt 1	80	24 x 1G UTP with additional 4 x 1G SFP ports.	May be amended as: "24 x 1G UTP with shared 4 x 1G SFP ports."	This is specific to a single OEM	As per RFP
257	Section 7.2, ACCESS L2 SWITCH, Pt 10	80	Should have RoHS compliance, EAL2 or NDPP.	It is requested to remove the clause or add it consistently across all active devices	NDPP/EAL2 certification is a security compliance which is relevant for security appliances and vulnerable operating systems. OS loaded on switches are hardenened OS customized only for switching/routing and therefore do not require such protection. A more advisable approach may be to opt for vulnerability assessment or flow collection tools to mitigate the threats from the networks. Also this is favoring to only selective OEM's as it has not been asked consistently throughout the network, if it is a must compliance. As per the standard, the network would not be fully complied unless all the components including servers, wireless controllers etc. are also EAL-2 / NDPP compliant	As per RFP
258	Section 7.3, ACCESS L2 SWITCH, Pt 1	80	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with	Minimum 52 Gbps switching capacity & minimum 38 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Needs to get modified as per the revise port count	As per RFP

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			28GBPS of dedicated stacking bandwidth.			
259	Section 7.3, ACCESS L2 POE+ SWITCH, Pt 1	81	24 x 1G POE+ UTP with additional 4 x 1G SFP ports.	May be amended as: "24 x 1G POE+ UTP with shared 4 x 1G SFP ports."	This is specific to a single OEM	As per RFP
260	Section 7.3, ACCESS L2 POE+ SWITCH, Pt 1	81	Minimum 56 Gbps switching capacity & minimum 41 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Minimum 52 Gbps switching capacity & minimum 38 Mpps forwarding rate. Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Needs to get modified as per the revise port count	As per RFP
261	Section 7.3, ACCESS L2 POE+ SWITCH, Pt 10	81	Should have RoHScompliance. EAL 2 or NDPP certification.	It is requested to remove the clause or add it consistently across all active devices	NDPP/EAL2 certification is a security compliance which is relevant for security appliances and vulnerable operating systems. OS loaded on switches are hardenened OS customized only for switching/routing and therefore do not require such protection. A more advisable approach may be to opt for vulnerability assessment or flow collection tools to mitigate the threats from the networks. Also this is favoring to only selective OEM's as it has not been asked consistently throughout the network, if it is a must compliance. As per the standard, the network would not be fully complied unless all the components including servers, wireless controllers etc. are also EAL-2 / NDPP compliant	As per RFP
262	Section 7.4, WIRELESS CONTROLLER	81	New specifications	Wireless solution should be either centralized or distributed architecture with application control at the edge and seamless scalability. Wireless controller is required in case solution offered is centralized architecture. In case distributed architecture is proposed, the functionality of the	Considering different architectures available, it is requested to provide flexibility to propose alternate solutions to meet the same requirements without compromising any features	As per RFP

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				controller should still be met alternatively through hardware/software option.		
263	Section 7.4, WIRELESS CONTROLLER, Pt A11	82	Should support Static IP routing for both IPv4 and IPv6 networks	It is requested to delete this specifications	This feature is part of switching and should not be mixed with wireless solution.	This clause stands deleted
264	Section 7.5, OUTDOOR WIRELESS AP, Pt 2	83	Should be a three spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.	Should be a two spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.	Three spatial streams supported on 2 x 2 MIMO configuration is biased to only single vendor. By industry standards, 2x2 MIMO supports only 2 spatial streams	Please read as below "Should be a two spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration."
265	Section 7.5, OUTDOOR WIRELESS AP, Pt 6	83	Should have IP67 compliant with operating temperature in the range of -10°C to 55°C.	May be amended as: "Should have IP65 or better compliant with operating temperature in the range of -10°C to 55°C."	The difference between IP65 and IP67 is only that the outdoor access points will not be supported under water immersion up-to 1m. Considering the access points will be installed on high poles or masts or walls, there may not be any requirement for protection against water immersions. Therefore it is requested to provide flexibility to offer an IP65 compliant access point	As per RFP
266	Section 7.7, WIRELESS NMS, Pt 14	86	Should include suitable service operation management flexibility for the network administrator to assign task to an Individual network engineer and assign ownership / track the status of the issue resolution in adherence to ITILv3.0. Should have service flow management from ticket creation, status checks, and execution to resolution, close, and after-audit operations	Please delete this clause	This clause is related to help desk functionality and has nothing to do with product capability.	This clause stands deleted
267	Section 7.7, WIRELESS	86	Should support virtualization management	Please delete this clause	Wireless NMS is for management of wireless solution. Not clear what is	Please read as below " Should

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	NMS, Pt 17				required by virtualization management.	support virtualization management; management and monitoring of both physical and virtual networks. It should provide insight into and management of virtual networks and reduce migration complexity by aligning and automatic network policies with virtual images"
268	Eligibility Creteria Section 4, SNo 11	16	OEM whose products have been offered in the bid shall have 24X7 Technical Assistance Centre (TAC) through toll free No and TAC is based in India	As the penalty clause has been defined in the RFP on equipment availability and bidder has to appoint a dedicated manpower for 24x7 support. There in no need for TAC center. In addition, only few OEMs have their TAC center in India. In addition, this clause would favor those OEMs eliminating fair competition in the tender.	It is requested to remove this clause.	Please read as below " OEM (Network equipments, surveillance equipment, servers) whose products have been offered in the bid shall have 24X7 Technical Assistance Centre (TAC) through toll free No and TAC is based in India"
269	Section 7,Outdoor Wireless AP,Sno 14	84	should support either of wireless operation modes: Client Access, Local Mesh or packet capture	Capture mode is of no use as the equipment is equiped with site syurvey and Auto channel.	It is requested to change it to shall support AP,Client and mesh Nodes	As per RFP
270	Section 7,Outdoor Wireless AP,Sno 16	84	Should support direct source-to-destination traffic forwarding(distributed traffic forwarding) to maximize application delivery	This feature is provided by one or two OEM only . It can be cross checked. It will restrict others OEMs to offer their product.	It is requested to remove this clause.	As per RFP
271	Section7,Outdoor	84	Should support both centrally controlled mode(Configured and	it is recommended to keep outdoor wireless deployment independent of controller and	It is requested to change the clause: should be able to centrally managed and	Please read as below " should be

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	Wireless AP, SNo17		updated Via wireless controller) and autonomous mode (Without controller) which is software selectable	shall be managed by NMS as all the devices can be managed and monitored remotely. There is no advantage of controller for out door deployment. It will only increase the cost and restrict other solution based on NMS and AAA server.	controlled by wireless NMS	able to centrally managed and controlled via wireless controller or wireless NMS"
272	Section 7, Wireless NMS	85	Should allow monitoring and mangement of 3rd party devices	Wireless NMS is used to manage wireless equipments . In case the devices of X OEM is installed then their wireless NMS is going to handle their equipment only.	Request you to remove this clause	As per RFP
273	Section 7	114	The BTS coverage is not mentioned in the specs.	The coverage of the BTS should be 360 degrees.	Request you to mention that the coverage of the BTs should be 360 degrees using three or four sector BTS with either 90 degree or 120 degree antenna without any splitter.	Please refer corrigendum
274	5.20.3.	37	Acceptance test	who can participate in acceptance test,a bidder or any technical person from the company		As per RFP
275	5.23 SLAs	42, 43	Downtime percentage for PBH and Downtime percentage for ESH	Pls clarify on the PBH and ESH timings.		PBH : 08 AM to 08 PM ESH: 08:00 PM to 08:00 AM
276	6.2 Broad Scope, 4) e.	59	Wi-Fi infrastructure& IP Camera at 20 locations including areas such as educational, business, garden etc. having high public footprint across the Greater Raipur Region (Outdoor Location)	Pls provide the list of such locations.		As per RFP
277	6.2 Broad Scope, 4) f.	59	Wi-Fi infrastructure & IP Camera at 20 locations including areas such as educational, business, garden etc. having high public footprint across the State of Chhattisgarh (Outdoor Location)	Pls provide the list of such locations.		As per RFP
278	6.2 Broad Scope, 9) b.	60	The Portal shall be capable to manage any no. of sites and users considering future upgradation/scalability requirement.	Pls clarify the estimated number of such sites and users at least for proposed project period of 5-years.		As per RFP
279	6.2 Broad Scope,	60	The infrastructure for establishing the external database shall be	Pls clarify on the database platform, version, and maximum space that can be allocated.		Please refer corrigendum

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	9) c.		provided by CHiPS.			
280	6.2 Broad Scope, 11)	61	The offered solution should be capable of storing the footage backup up to 15 days, The 72TB Raw storage capacity of server should be provided from day 1. If any additional internal storage is required, than 4 TB storage will be provided in available slots.	We understand that 72TB Raw storage capacity can only be provisioned in a storage and number of such storages including number of HDDs on them will be as per overall camera count. HDDs on RAID-1 are required per server only for OS and other applications. Storage of camera footage will only be in the external storage. Pls clarify.		As per RFP
281	6.2 Broad Scope, 17)	61	Outdoor access points shall be installed at Outdoor sites to provide seamless wireless Internet connectivity within the Indoor site.	We understand outdoor access points will cater to outdoor coverage. Pls clarify.		Please read as below " Outdoor access points shall be installed at Outdoor sites to provide seamless wireless Internet connectivity within the Outdoor site.
282	6.2 Broad Scope, 19)	62	Offered solution shall allow seamless roaming between different access points in a particular SITE provided he/she remains in the Minimum 85-foot radius of the nearby wireless access point(s).	We understand that any wireless clent should get RF signal levels above -70dBm within the asked 85-foor radius as wireless coverage areas/regions with signal levels below -70dBm provide insufficient coverage for standard use of voice, video and data in a seamless manner. Pls clarify.		As per RFP
283	6.2 Broad Scope, 20)	62	Proposed wireless solution is basically intended to provide wireless Internet access service in Outdoor SITE(s) with inbuilt provision for limited-time free access or charged access based on pre-paid charge plans.	We understand that the proposed wireless will be primarily for delivery of G2C services from Government to citizens on a limited-time complementary access basis and no charge-plans like pre-paid or post-paid will be applicable. However, offered portal solution from SI should have readiness to provision such charge-plans as and when required in future. Pls clarify.		As per RFP
284	6.2 Broad Scope, 24)	62	Necessary electrical power shall be made available by CHiPS to SI of 1-phase/230VAC type. It will be SI's responsibility to extend the electrical power within each Site as per requirement.	We understand that the billing against this electrical power will be taken care of by CHiPS. Pls clarify.		Yes electricity charges not in scope of SI.
285	6.2 Broad	62	Proposed wireless solution should	We understand that the declaration is to be		Yes declaration to

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	Scope, 26)		conform to applicable WPC regulations for both indoor and outdoor use of license-free spectrums in terms of EIRP. A declaration to this effect must be submitted which must be supplemented by periodic compliance reports during the project period.	provided by SI. Pls clarify.		be submitted by SI.
286	6.3 Broad Outline of Scope of Work, Deliverables and Timeline 6) b.	65	SI shall be responsible for integration with existing or 3rd party payment gateway.	We understand the payment gateway subscription charges, if any, will not be on SI's scope. Pls clarify.		Yes
287	6.3 Broad Outline of Scope of Work, Deliverables and Timeline 6) c.	65	SI shall be responsible for integration with existing or 3rd party SMS gateway.	We understand the SMS gateway subscription charges, if any, will not be on SI's scope. Pls clarify.		Yes
288	6.6. Parameters of the site design	71	Future expansion of around 20% shall be provided in the design.	We understand that this 20% provisioning for future expansion is applicable for licenses in wireless controller, wireless NMS, and VMS. Pls clarify.		As per RFP
289	6.6. Parameters of the site design	72	Unmanaged switches should be used only where the number of connects is restricted to less than 12 connect and future expansion is also not possible. Managed switches should be used at all locations where the current number of connects is more than 12 connects. Also at offices where external fiber is required to be used, only managed switches are suggested irrespective of the	We understand the overall wireless solution is intended to be of complete managed type and in such a case, unmanaged switches does not fit in with the overall solution. Pls clarify.		As per RFP

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			number of connects.			
290	6.6. Parameters of the site design	72	Fiber optic transceivers should not be used along with switches for connectivity between buildings.	We understand FO transceivers are the only standard way of inter-building connectivity over fiber. Pls clarify.		Yes media converter should not be used.
291	6.6. Parameters of the site design	72	Racks used in the network for terminating the passive (cable and Jack panel) and active components (switches) shall be of the following.	Rack depth has not been mentioned. Pls consider minimum 600mm depth for the rack to accommodate latest switches in those racks.		As per RFP
292	6.10. Technical documentation after installation	74	Warranty certificate indicating 5 year's warranty from the Principal Bidder for Active Components.	We understand that the warranty certificate for 5-years for active components should be from the corresponding active OEMs and not principal bidder. Pls clarify.		Please read as below " Warranty certificate indicating 5 year's warranty from the OEM for all Active Components and during Final Acceptance test (FAT) "
293	6.16. Product warranty	76	In case the Bidder is unable to fulfill his obligations during the warranty period, the warranty obligations will fully and automatically devolve upon the Manufacturer of the goods.	We understand the warranty support is desired directly from the OEM and not through any SI so that the OEM's direct warranty support is ensured if at all the said SI fails to provide the warranty support. Pls clarify.		Yes Product Warranty should be provided by OEM
294	Section 7	79	All equipments should be IPv6 ready from day 1.	We understand that the offered equipments shall include required IPv6 licenses, if applicable from day 1. Pls clarify.		As per RFP
295	Section 7	79	All routers and switches should have EAL-2 or NDPP (Network Device Protection Profile) certification.	Pls consider revising as "All routers and switches at NOC should have EAL-2 or NDPP (Network Device Protection Profile) certification." Switches and routers for other sites are usually access layer products and OEMs do not go for such certification at this product level.		Please read as below " All routers and switches (except outdoor router and outdoor switches) should have EAL-2 or NDPP (Network Device Protection Profile) certification"
296	Section 7	79	Modular switch in data centre design withIPv6 ready from day 1.	Pls consider revising as "Modular switch in data center design with distributed architecture and with IPv6 ready from day 1." Data center design is very generic and		As per RFP

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				does not imply the architecture of the desired switch.		
297	Section 7	79	Should support minimum 320000 MAC address entries and minimum 1000 VLANs.	Pls consider revising as "Should support 128000 MAC address entries and minimum 1000 VLANs".		As per RFP
298	Section 7	79	Should have required accessories for rack mounting. Switch should support minimum 8 payloads and 2 slot for controller/management module.	Pls consider adding here as "Switch should have redundant controller/management modules and redundant fabric modules in a distributed architecture". All the leading OEMs do have their fabric modules separate than the management modules in data center design switches.		As per RFP
299	Section 7	80	Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps -1000 mpps from day 1.	Pls consider the minimum packet forwarding rate as 2857 mpps from day 1. 480Gbps per slot in a 8 slot modular switch would translate to 3840Gbps of forwarding capacity per switch and 2857 mpps of packet forwarding throughput accordingly. Switches in centralized forwarding architecture often fail to achieve this wire-speed linerate forwarding in certain switches.		Please read as below " Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps from day 1"
300	Section 7	80	Shall support minimum 128K IPV4, IPV6 unicast routes	Pls consider revising as minimum 8K IPv4, IPv6 unicast routes. Desired features are for service-provider requirements.		As per RFP
301	Section 7	80	Should have redundant fan trays.	Pls revise as "Should have redundant fan assemblies". Different OEMs have their own optimized cooling mechanisms designed based on their design of the modular switches.		Pls read as below "Should have redundant Fan tray/ fan assemblies".
302	Section 7	80	Switch should have dedicated stacking port separate from uplink port with 28GBPS of dedicated stacking bandwidth.	Pls consider removing this clause as stacking would not be required in this solution for any switch. This would increase TCO for the overall solution.		As per RFP
303	Section 7	81	Should have RoHS compliance, EAL2 or NDPP.	Pls consider marking "EAL2 or NDPP" as preferable.		As per RFP
304	Section 7	81	Should support dedicated stacking	Pls consider removing this clause as stacking would not be required in this solution for any switch. This would increase TCO for the overall solution.		As per RFP
305	Section 7	81	EAL 2 or NDPP certification	Pls consider marking "EAL2 or NDPP" as preferable.		As per RFP

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306	Section 7	81	Should have 2 or more x 10G SFP+ ports populated with 10G-Base-SR transceivers.	Pls consider at least 4 x 10G SFP+ ports as that would be the minimum requirement of overall solution requirement here.		As per RFP
307	Section 7	81	Should support minimum 100 802.11a/b/g/n/ac access points from day 1 and should be upgradeable up to 1000 access points without any hardware or software upgrade.	Pls consider minimum 500 access points from day 1 and upgradable up to 1250. The day 1 requirement is 456 access points.		As per RFP
308	Section 7	83	Should be a three spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.	Pls consider 3x3 MIMO configuration here as that is the ratified 802.11n standard requirement.		Please read as below "Should be a two spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration"
309	Section 7	83	Should have two RJ-45 auto-sensing 10/100/1000 Mbps PoE(802.3af/at) port and a console port.	Pls consider one RJ-45 auto-sensing 10/100/1000 Mbps PoE port which is the minimum requirement.		As per RFP
310	Section 7	84	Should support data rates up to 300 Mbps per radio under 802.11n	Pls consider data rates up to 450 Mbps per radio under 802.11n which ratified 802.11n standard requirement.		As per RFP
311	Section 7	84	Should be a two spatial-stream 802.11ac access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 3X3 MIMO configuration.	Pls consider 2x2 MIMO configuration here for the 802.11ac standard requirement.		Please read as below "Should be a three spatial-stream 802.11ac access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 3X3 MIMO configuration.
312	Section 7	84	Should have two RJ-45 auto-sensing 10/100/1000 Mbps	Pls consider one RJ-45 auto-sensing 10/100/1000 Mbps PoE port which is the		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			PoE(802.3af/at) port and a console port.	minimum requirement.		
313	Section 7	85	Should support minimum 100 wired and wireless devices from day 1 and the solution should be scalable upto 1000 wired and wireless devices without any hardware or software up-gradation.	Pls consider minimum 500 wired and 500 wireless devices from day 1 which is near equal to the actual requirement from day 1. Pls consider scalability up to 1250 wired and 1250 wireless devices without any hardware or software up-gradation.		As per RFP
314	Section 7	90	The appliance should have following certifications EAL/FIPS-level-2	Pls consider EAL as preferable		As per RFP
315	Section 7	91	Firewall should support 2 virtual firewalls from day one & support licensed based scalability upto 50 virtual firewalls as & when required with licenses. Firewall should be provisioned with the required memory & CPU to support 50 virtual firewalls from day one.	Pls consider removing this clause. Virtual firewall is specially design for multiple datacenter or ISP requirement. This also restricts other leading firewall OEMs to participate in the tender.		As per RFP
316	Section 7	93	Firewall should support atleast 2500 client based SSL vpn peers from day one internally or externally. Required licenses for the same should be provisioned from day one.	Pls consider for at least 4000 ssl licenses as there would be a requirement to provide secure VPN connectivity to government employees/offices on the proposed wireless LAN network.		As per RFP
317	Section 7	96	Enclosure shall have suitable cooling arrangement for visibility in low light conditions	Pls consider revising - "Enclosure shall have suitable cooling arrangement and visibility in low light conditions"		Please read as below "Enclosure shall have suitable cooling arrangement and visibility in low light conditions"
318	Section 7	103	Motherboard - Dual Intel E5-2620 2.0 GHz Xeon 6-core CPU, dual 8 GB DDR3 RAM	Request you to change to "Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM". V3 is the current generation processor and DDR4 is the current generation memory. Also 8 GB memory for VMS servers are very less and therefore the		Please read as below " Motherboard - Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
				same need to be minimum of 64GB for performance.		DDR4 RAM"
319	Section 7	103	Operating temperature - 32 to104°F (0to40°C)	Request you to change the same to "Operating temperature: 50 to 95 °F (10 to 35°C)". 0-degree centigrade is a freezing temperature and therefore the same is non effective and also temperature beyond 35-degree is higher and non operating.		Please read as below " Operating temperature: 10 to 35°C
320	Section 7	103	Non-operating temperature - 40 to 158°F (-40 to 70°C)	Request you to change the same to "Non-operating temperature - 22 to 140°F (-30 to 60°C)" -- Reduced the range for all inclusion of the server operating environment.		Please read as below "Non-operating temperature: (-)30 to 60°C
321	Section 7	103	Internal/external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage	Request you to change the same to "external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage and should have 20GB cache per controller and the storage need to be for dual controller including thin provisioning and thin reclaim feature from day one." -- The storage need to be external due to virtualization architecture and also the same should have dual controller for redundancy and thin provisioning and thin reclaim for better matrix.		External Storage not required. Master Server for VMS added in Bill of Material.
322	Section 7	103	On-board storage repositories – Server should have min 1 for RAID-5 configuration for video surveillance application	Please change the same to "On-board storage repositories – Server should have min 1TB for RAID-5 configuration for video surveillance application" -- Please make the capacity in TB for understanding.		Please read as below "On-board storage repositories – Server should have min 1TB for RAID-5 configuration for video surveillance application"
323	Section 7	New Query	Please add 6 no of PCI slots for PCI expandability	Please add "Minimum 6 PCI slots" - for inclusion of different PCI cards the same is required .		Please consider minimum 6 PCI slots in server specification"
324	Section 7	103	Motherboard - Dual Intel E5-2620 2.0 GHz Xeon 6-core CPU, dual 8	Request you to change to "Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64		Please read as below "

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			GB DDR3 RAM	GB DDR4 RAM" -- V3 is the current generation processor and DDR4 is the current generation memory. Also 8 GB memory for VM servers are very less and therefore the same need to be minimum of 64GB for performance.		Motherboard - Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM"
325	Section 7	104	Operating temperature - 32 to104°F (0to40°C)	Request you to change the same to "Operating temperature - 50 to 95 °F (10 to 35°C)" -- 0-degree centigrade is a freezing temperature and therefore the same is non effective and also temperature beyond 35-degree is higher and non operating.		Please read as below " Operating temperature: 10 to 35°C
326	Section 7	104	Non-operating temperature -40 to 158°F (-40 to 70°C)	Request you to change the same to "Non-operating temperature - 22 to 140°F (-30 to 60°C)" -- Reduced the range for all inclusion of the server operating environment.		Please read as below "Non-operating temperature: (-)30 to 60°C
327	Annexure XII: Financial Proposal Format/2B Server & Storage for VMS	156/157	B2 External Storage of 25 TB capacity in RAID 6 configuration	Request you to change the same to "External Storage of 70 TB capacity in RAID 6 configuration with dual controller, 20 GB cache per controller, thin provisioning and thin reclaim feature" -- The storage need to be external due to virtualization architecture and also the same should have dual controller for redundancy and thin provisioning and thin reclaim for better matrix.		As per RFP
328	Annexure XII: Financial Proposal Format/2B Server & Storage for VMS	156/157	Internal Storage of 4 TB capacity in RAID 6 configuration for server expansion slot	Request you to change the same to "Internal Storage of 1TB capacity in RAID 6 configuration for server expansion slot" -- as the servers will be in virtualization environment, therefore internal capacity will be less in use. Request you to reduce the same.		As per RFP
329	Section 7, 31) SERVER (Server for VMS)	New Query	Please add 6 no of PCI slots for PCI expandability	Please add "Minimum 6 PCI slots" - for inclusion of different PCI cards the same is required .		Please consider minimum 6 PCI slots in server specification"
330	Section 7, 31) Server	New Query	Please add 2 nos of SAN switches for server to storage connectivity.	SAN switches need to be added in HA architecture for interconnecting server &		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	& Storage			storage over FC.		
331	Section 7, 35. Indoor router	106	Architecture	Pls consider revising the specification as this is vendor specific.		Please refer clarification provided in specification
332	Section 7, 35. Indoor router	106	Interface support	Please consider minimum 2 slots as the connectivity for WAN and LAN here would only be on Ethernet and other slots would not be required at all.		Please read as below " Router should have minimum 4 slots to accommodate large variety of interface & should support FE, GE (both Ethernet based & fiber based), Serial V.35, ports, G.703 ports, E1, Chn E1 etc."
333	Section 7, 35. Indoor router	107	Performance	Pls consider the forwarding rate asked here which is very low as compared to desired WAN link capacity.		As per RFP
334	Section 7, 35. Indoor router	107	3 x 1 Gigabit Ethernet Interfaces from day one, out of which minimum 1 port should be SFP based.	Pls consider 3 x 1 Gigabit Ethernet interfaces which is the minimum requirement. SFP if at all required should be additional.		As per RFP
335	Section 7, 35. Indoor router	107	The Router should be minimum EAL2 or NDPP certified	Pls consider "EAL2 or NDPP" as preferable.		As per RFP
336	Section 7, 36. Indoor router	107, 108		This is not required considering suitable outdoor enclosure has already been desired. Secondly, this sort of products are not manufactured by all the router manufacturers and by adding this, overall TCO will increase without any considerable value addition in the overall solution.		As per RFP
337	Section 7, L2 switch PoE 8-port (Indoor)	108	Switch should support 4000 VLAN ID, Minimum 512 VLAN's	Pls revise as "Switch should support minimum 250 VLAN's". 250 VLAN support is much sufficient for a 8-port access L2 switch.		Please read as below " Switch should support Minimum 250 VLAN's"
338	7. Minimum	108	Switch should support IGMP, MLD,	Pls consider revise as "Switch should support		Please read as

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	Specification for Wi-Fi components) 37. L2 switch PoE 8-port (Indoor)		MSDP, PIM, static routing, RIP from day one	IGMP and MLD". Rest features as asked are not required in 8-port access L2 switch.		below "Switch should support L2 multicasting features for IPv4 and IPv6"
339	Section 7, L2 switch PoE 8-port (Indoor)	108	Switch should support UDLD, Auto-Smart ports, Resilient Ethernet Protocol from day one	Please consider removing this as features asked are not required in 8-port access L2 switch.		Please read as below " Switch should support UDLD, Auto-Smart ports from day one
340	Section 7, L2 switch PoE 8-port (Indoor)	108	Switch should be EAL2 or NDPP certified	Pls consider "EAL2 or NDPP" as preferable.		As per RFP
341	Section7, L2 switch PoE 8-port (Outdoor)			This is not required considering suitable outdoor enclosure has already been desired. Secondly, no point in adding an 100Mbps switch to 1000Mbps wireless access points does not hold good. Further, 8-port switch will not suffice as per requirement.		As per RFP
342	Section 7 UPS online 1Kva with 1 hour backup	111	Operating temperature: 0 - 50 °C	Pls consider as 0 - 40°C which is standard.		Please read as below " Mininum Operating temperature: 0 - 40 °C"
343	Section 7 UPS online 1Kva with 1 hour backup	110	Technology: SPWM, IGBT/MOSFET	Pls consider "PWM, IGBT" here. MOSFET based UPS are now technologically obsolete.		Please read as below "Technology: PWM/SPWM, IGBT/MOSFET"
344	8. Bill of Materials	130	Link Load Balancer	Please consider 2 quantities for redundancy and 99.5% availability.		As per RFP
345	8. Bill of Materials	130	Server with Operating System	Please consider 4 quantities of servers with virtualization or 8 servers without virtualization to plan required HA for desired services such as Helpdesk, NMS, DHCP, DNS, Proxy and Portal.		As per RFP
346	8. Bill of Materials	131	VMS Solution	Pls consider adding a suitable workstation for the VMS professional display.		Please refer corrigendum below

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
347	8. Bill of Materials	131	Server & Storage for VMS	Pls consider 2 servers for VMS master in HA and minimum 4 recording servers from day 1 for targeted 176 nos of cameras.		Master server added in Bill of Material.
348	8. Bill of Materials	131	External Storage of 25 TB capacity in RAID 6 configuration	Pls consider 70TB as 25TB will not cater to desired retention period of 15 days for 176 nos of cameras.		Please refer corrigendum below
349	8. Bill of Materials	131	Internal Storage of 4 TB capacity in RAID 6 configuration for server expansion slot	Pls remove this as this will not be used anyway in the solution.		As per RFP
350	8. Bill of Materials	132	Outdoor MIMO Antenna	Pls consider adding a note that the qty will be 8 if the offered antenna assembly does not include antennas for both 2.4GHz and 5GHz.		As per RFP
351	8. Bill of Materials	132	Antenna Lightning Arrester	Pls note that the qty of lightening arrester shall depend upon the outdoor AP and outdoor MIMO antenna offered by SI. SI should be asked to provide lightening arresters in all antenna posts in the offered AP.		As per RFP
352	Item number 14	113	OEM of Radios should have own local RMA repair centre in India for more than 5 Years. OEM should provide to Bidder documentary evidence regarding Service Tax registration and Service Tax Number	Having RMA centre is logical but more than 5 year is irrelevant. Requested to change "RMA centre India or Advance Replacement facilities"		Please refer corrigendum
353	Item Number 9	113	Operating temperature for ODUs: Minimum 60 deg. Celsius or better	International Standard is -40 to +55 degree Celsius. Please consider standard value		Please refer corrigendum
354	Item number 4	114	Collocated Radios should support TDD intra site synchronization to eliminate mutual Interference at sites with multiple radios of same vendor with Synchronization using Ethernet port of GbE Ethernet Switch.	GPS synchronization should to be used for avoiding the intra site interference instead of third party switch		Please refer corrigendum
355	Item number 7	114	Channel Bandwidth: 05/10/20/40 MHz with 5 MHz steps.	Since in India only 50 Mhz channel is available for unlicensed band. Hence Lower the channel step will allow optimum usage of available band. Hence instead of 5 MHz it should be 2.5 MHz		Please refer corrigendum

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
356	Item number 8	114	Through put at BTS location: Should be min. 200 Mbps (aggregated).	Base station throughput should be 360 Mbps by using 120 Degree sector 20MHz Channel bandwidth each to cover 360 degree. OR 480 Mbps by using four 90degree sector in 20 MHz channel bandwidth each.		Please refer corrigendum
357	Item number 11	114	No of CPE per base station: Min 30 CPE per base station.	Why restrict to 30 only, It should be minimum 100		Please refer corrigendum
358	Item number 3 under CPE	114	Channel Bandwidth: 05/10/20/40 MHz with 5 MHz steps.	Since in India only 50 Mhz channel available for unlicensed band. Hence mower the channel step will allow higher spectral efficiency. Hence instead of 5 MHz channel it must be 2.5 MHz		Please refer corrigendum
359			Suggested to add " System should support 512 subcarrier" As CHhattisgarh having dense vegetation and hilly terrain hence it require nLOS deployment, 512 sub carrier will enable the nLOS deployment which is very important in your case			Please refer corrigendum
360	Item number 4	115	20 Mbps. Should be scalable up to 100 Mbps without any hardware or software up-gradation	"100 Mbps at 20 MHz channel bandwidth"	Important to mention 100 Mbps @ 20 Mhz. People can quote 100 Mbps @40MHz which does not make any sence as free band is only 50 MHz which does not allow any other radio if one is working in 40 MHz	Please refer corrigendum
361	Item number 8	115	Output power adjustable 0 to 27 dBM	It should be 30 dBM in order to get better performance	Higher the power enable to reach higher distance	Please refer corrigendum
362	Item number 11	115	Router - Required	In Point to Point Radios - Routing features is irrelevant. In item number 16 you have requested bridge functionality which is self contradictory. Requested to delete it.	Routing is PtMP feature.	Please refer corrigendum
363	Item number 14	115	Ethernet interface should be 10/100/1000	Requested speed is 100 Mbps then GbE port requirement is irrelevant here. Please delete this point or increase the required bandwidth under item number 4.		Please refer corrigendum
364	Item number 28	116	Operating temperature for ODUs: Minimum 60 deg. Celsius or better	International Standard is -40 to +55 degree celcius.		Please refer corrigendum

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
				Please consider standard value		
365	Section-4	15	Eligibility Criteria, S.No. 5	It is mentioned that the Prime bidder shall have the required experience in WLAN. However, in S.No. 3(a) of Technical Evaluation Matrix (Page-27), the eligibility criteria for same experience is required from Prime Bidder and/Or Consortium partner. Kindly clarify.		As per RFP
366	Section-4	14	Eligibility Criteria, S.No. 3	It is mentioned that the bidder shall have experience in projects of similar nature with Central Government / any of the state / UT governments / PSU in India. In order to allow wider and global participation by Original Equipment Manufacturers (OEMs) /SIs, it is requested that criteria may be amended by allowing experience in similar project experience "in Govt. Sector in India / Abroad" Or "in Govt. Sector / Non-Govt. Sector in India".		As per RFP
367	Section-4	16	Clause 4.1, Terms and condition for Consortium partner	It is mentioned that Consortium of maximum one firm is allowed. As the tender requires, supply, installation, testing and commissioning of two (2) different systems i.e. Wi-Fi system and Surveillance system and the OEMs for both are generally different, hence it is proposed that the Consortium with two (2) partners maximum may be allowed.		As per RFP
368	Clause 6.3	69	Timeline, Delivery Schedule, S.No. 10	The timelines mentioned for overall project implementation including Supply, Installation and Commissioning is 15 weeks. Since the project involves state wide implementation of two (2) different systems across the state, it is proposed that the above timelines may be changed to minimum 24 weeks.		As per RFP
369	Clause 6.3	66	Testing and commissioning, S.No. 7.b.iii	It is mentioned that the wireless network should support IEEE 802.11a/b/g/n standards. However, in the wireless controller specifications given in S.No. 4, Clause 7 and at several other places		Please consider IEEE 802.11 a/b/g/n/ac

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
				requirement of IEEE 802.11 a/b/g/n/ac standard is mentioned. Kindly clarify which standard to be followed.		
370	Section 8	130	Bill of Material, S.No. B1: IP Camera	It is mentioned that 4 no. of IP cameras are required. However, as mentioned in Clause 6.2, IP cameras at 40 (20+20) locations are required to be supplied. Kindly clarify the quantity of IP cameras required.		As per RFP
371	Section 2	9	Tender Schedule, S.No. 6: Last date of submission of bids	The tender requires, supply, installation, testing and commissioning of different systems i.e. Wi-Fi system and Surveillance system for which most of the OEMs are based globally abroad. To make a fully compliant and cost effective solution, a lot of interaction is required in finalizing a tie-up with these companies for which we require additional time. In view of above-mentioned constraints, we request you to extend the last date of the tender by 3 weeks.		As per RFP
372	Eligibility Creteria Section 4, SNo 11	16	OEM whose products have been offered in the bid shall have 24X7 Technical Assistance Centre (TAC) through toll free No and TAC is based in India	As the penalty clause has been defined in the RFP on equipment availability and bidder has to appoint a dedicated manpower for 24x7 support. There in no need for TAC center. In addition, only few OEMs have their TAC center in India. In addition, this clause would favor those OEMs eliminating fair competition in the tender.	It is requested to remove this clause.	Please read as below " OEM (Network equipments, surveillance equipment, servers) whose products have been offered in the bid shall have 24X7 Technical Assistance Centre (TAC) through toll free No and TAC is based in India"
373	Section 7,Outdoor Wireless AP,Sno 14	84	should support either of wireless operation modes: Client Access, Local Mesh or packet capture	Capture mode is of no use as the equipment is equipped with site survey and Auto channel.	It is requested to change it to shall support AP, Client and mesh Nodes	As per RFP
374	Section 7,Outdoor Wireless	84	Should support direct source-to-destination traffic forwarding(distributed traffic forwarding) to	This feature is provided by one or two OEM only . It can be cross checked. It will restrict others OEMs to offer their product.	It is requested to remove this clause.	As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	AP,Sno 16		maximize application delivery			
375	Section7,Outdoor Wireless AP, SNo17	84	Should support both centrally controlled mode(Configured and updated Via wireless controller) and autonomous mode (Without controller) which is software selectable	it is recommended to keep outdoor wireless deployment independent of controller and shall be managed by NMS as all the devices can be managed and monitored remotely. There is no advantage of controller for outdoor deployment. It will only increase the cost and restrict other solution based on NMS and AAA server.	It is requested to change the clause: should be able to centrally managed and controlled by wireless NMS	Please read as below " should be able to centrally managed and controlled via wireless controller or wireless NMS"
376	Section 7, Wireless NMS	85	Should allow monitoring and management of 3rd party devices	Wireless NMS is used to manage wireless equipments . In case the devices of X OEM is installed then their wireless NMS is going to handle their equipment only.	Request you to remove this clause	As per RFP
377	Section 7,RF Connectivity Point to Multipoint	114	The BTS coverage is not mentioned in the specs.	The coverage of the BTS should be 360 degrees.	Request you to mention that the coverage of the BTs should be 360 degrees using three or four sector BTS with either 90 degree or 120 degree antenna without any splitter.	Please refer corrigendum
378	4. Elligibility criteria	14	The Prime Bidder and/or consortium partners should have experience of at least one order for Supply, Installation, Commissioning and Maintenance of 80 IP Cameras for Government of India/ any of the state/UT governments/ PSU.	While we are checking internally, we may not have experience of IP Cameras deployment at any Government Sector. As the project is mainly for setting up WiFI infrastructure, we request to remove this clause from eligibility criteria.	Request to remove this clause.	As per RFP
379	4. Elligibility criteria	14	New proposed clause	Request to include following clause: The eligibility criteria should be met by wholly owned subsidiary or parent company.	Request to include this clause.	As per RFP
380	Eligibility Creteria Section 4, SNo 11	16	OEM whose products have been offered in the bid shall have 24X7 Technical Assistance Centre (TAC) through toll free No and TAC is based in India	All The OEM s doesn't have their TAC in India. This clause would favor 1-2 OEMs eliminating fair competition in the tender.	It is requested to remove this clause.	Please read as below " OEM (Network equipments, surveillance equipment, servers) whose products have been offered in the bid shall have 24X7 Technical Assistance Centre (TAC) through toll free No and TAC is

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
						based in India"
381	Section7,Outdoor Wireless AP, SNo17	84	Should support both centrally controlled mode(Configured and updated Via wireless controller) and autonomous mode (Without controller) which is software selectable	The same solution can be provided using Network Management System (NMS) with AAA server as it doesn't have any advantage to use controller for outdoor Wifi deployment. All the devices can be managed remotely.	It is requested to change the clause: The outdoor Wifi deployment shall be managed using NMS . Request is to allow NMS based outdoor deployment.	Please read as below " should be able to centrally managed and controlled via wireless controller or wireless NMS"
382	Section 7,RF Connectivity Point to Multipoint, Sno 13	113	Offered Radio should be of proven track record and should have deployed 200 or more CPEs in one Single Project with Govt/Public Sector for more than two years. Undertaking. OEM should provide to Bidder PO and documentary evidence regarding deployment and satisfactory performance	As the requirement is not data only. The equipment shall have been used for surveillance also. In addition it is restricting other OEMs who has already deployed their equipments for surveillance projects and other projects but the Qty and duration might differ.	It is requested to change this clause. The OEM shall have deployed their equipments for any surveillance projects and shall have deployed one or more projects with minimum 200 nodes.	Please refer corrigendum
383	Section 7,RF Connectivity Point to Multipoint	114	The coverage of the BTS is not mentioned in the specs.	As the location can come in any direction ,it is required to mention the coverage of the BTS. The coverage of the BTS should be 360 degrees.	Request you to mention that the coverage of the BTS. should be 360 degrees using three or four sector BTS with either 90 degree or 120 degree antenna. NO splitter or Omni Antenna is allowed.	Please refer corrigendum
384	Section7,RF connectivity		In the general specs of IP radios it is mentioned that the located radios shall have efficient mechanism to handle the self interference. In the main specs of point to Multipoint radios it is mentioned that the collocated radio should support TDD intersite synchronization to eliminate mutual interference	There are many efficient mechanisms available to eliminate self interference. OEM can provide more than one mechanism also. This is restricting to a particular one or two OEM's only.	Request to mention that same , equivalent or superior mechanism shall be provided to eliminate mutual interference	please refer corrigendum
385	6.2 Broad Scope	58	Proposed wireless network will provide access to different categories of users – government officials & citizens	How are you going to differentiate between Govt officials & citizens.	Kindly share parameters for differentiation.	Policy will be provided by CHiPS
386	6.2 Broad Scope Point 7	60	The Internet Bandwidth of minimum 10Mbps per site shall be made available at NOC by CHiPS. The SI shall be responsible to	There may be places in state where getting local drop from upstream provider would be easy rather than bringing entire internet traffic to a central NOC would not be	We suggest to have an option with SI to decide to create central or distributed network & only AAA traffic should reach to management server. This would help	As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			establish connectivity from NOC to each Site through leased/MPLS/RF connection for traffic requirements relating to wireless access for citizens, NMS, EMS and IP Camera. The proposed solution should be capable to provision a bandwidth of minimum 10Mbps from NOC to each SITE and upgradable to 20 MbPS.	possible.	to replicate same model if required at 100s & 1000s of hotspot locations in no time.	
387	6.2 Broad Scope Point 9 (b)	60	The Portal shall be capable to manage any no. of sites and users considering future up-gradation/ scalability requirement.	What are the numbers of users expected today & in future. It is very much required in hardware sizing for AAA.		As per RFP
388	7, Wireless NMS/Controller	85		Wireless NMS is used to manage wireless equipments. In case the devices of X OEM is installed then their wireless NMS/controller is going to handle their equipment only.	Environment should be heterogeneous rather homogeneous so that future upgrades in network are possible. Request you to remove this clause	As per RFP
389	6.2 Broad Scope	58		Document did not indicate kind of service it is going to be: 1) Always on & free 2) Free for x mins & then payable. 3) Conditions for discontinued services	Kindly suggest.	Policy will be provided by CHiPS
390	7. Minimum Specification for Wi-Fi components) 36. Indoor router	107	The router shall have SLA monitoring tools to measure state of the network in real time. The SLA operations shall provide information on TCP/UDP delay, jitter, application response time, VoIP MOS score, Packet Loss etc.	Pls consider revising the specification as this is much inclined to certain vendors.		Please read as below "The router shall have SLA monitoring tools to measure state of the network in real time. The SLA operations shall provide information on TCP/UDP delay, jitter, application response time, Packet Loss etc."
391	VMS specification: Point no. 13 under	119	The Server and Client may be installed on the following operating systems: Windows XP, Windows Server 20XX, Windows 7 / 8, and			Please read as below " The Server and Client may be installed on the

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	Category C		others. 32-bit and 64-bit versions should be supported.			following operating systems: Windows/Linux. 32-bit and 64-bit versions should be supported".
392	5.22. Category of SLAs (RFP page number # 42)	42	b. Delay in Site Design: In case the Bidder fails to visit the site and complete the site design within the period allowed in Scope of Work, the Purchaser will be entitled to forfeit the 5% for each site from Security Deposit provided by the Bidder.	would want to know if this is 5% of value of the site or is it 5% of the security deposit? Suggest this be made 2% of the value of the site.		Please read as below " Delay in Site Design: In case the Bidder fails to visit the site and complete the site design within the period allowed in Scope of Work, the Purchaser will be entitled to forfeit the 5% for each site from order Value of site .
393	RFP various sections (RFP page number # 22, 40,46, 88, 94)		"not limite to" clause	Suggest that the "not limited to " clause be deleted so that proper estimates can be done .		As per RFP
394	5.22. Category of SLAs 9RFP page number # 42)	42	d. Onsite Warranty Support: The successful bidder will provide five Years on-site warranty support for all hardware parts supplied by the bidder. If any part/component is found defective during the contract period, the successful Bidder shall repair/ replace the defective device within 48 hours of complaint received from CHiPS. A penalty of Rs. 1000/- per call on Quarterly payment/ Performance Security Deposit will be levied and the contract will be liable for termination in part or whole at the	Request to remove termination clause from here		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			discretion of CHiPS and at the risk and cost of the successful bidder.			
395	point no. 7 (Page 60 of 179)		The proposed solution should be capable to provision a bandwidth of minimum 10Mbps from NOC to each SITE and upgradable to 20 MbPS.	Do we need to provide 10 Mbps at each of the 4 indoor and 40 outdoor locations burstable to 20 Mbps? Pls clarify. Hope this can be MPLS connectivity? Pls confirm.		Yes, CHiPS will provide the bandwidth
396	point no. 7 (Page 60 of 179)		The proposed solution should be capable to provision a bandwidth of minimum 10Mbps from NOC to each SITE and upgradable to 20 MbPS.	is this internet or MPLS?? Pls clarify		Yes, CHiPS will provide the bandwidth. Please refer Corrigendum
397	point no. 7 (Page 60 of 179)		The proposed solution should be capable to provision a bandwidth of minimum 10Mbps from NOC to each SITE and upgradable to 20 MbPS.	What is the bandwidth required at NOC, SDC building, Civil lines? Should it be 10 Mbps*(4+20+20). Pls clarify?		CHiPS will provide the bandwidth
398	point no. (Page 60 of 179)		The Internet Bandwidth of minimum 10Mbps per site shall be made available at NOC by CHiPS.	What is this bandwidth?? Since spoke location bandwidth is being provided by System integrator, suggest even this aggregation MPLS port at NOC also to be provided by System integrator. Pls suggest. Can we provide MPLS over internet as it is more reliable and secure.		CHiPS will provide the bandwidth. Please refer Corrigendum
399	point no. 7 (Page 60 of 179)		The Internet Bandwidth of minimum 10Mbps per site shall be made available at NOC by CHiPS.	This should be MPLS port and this should be aggregation port for all the 44 sites(4+20+20). Pls clarify. This should be summation of all the 44 sites bandwidth..		As per RFP
400	point no. 4 (Page 60 of 179)		As part of this RFP it is aimed to enable Wi-Fi infrastructure& IP Camera at following locations	Should 10 Mbps be provided at Wi-Fi infrastructure at Vidhan Sabha Campus, Raipur, Thakur Pyarelal Institute of Panchayat& Rural Development (TPIPRD) Campus, Nimora, Raipur (Indoor Location),Nagar Nigam Campus, Raipur, Mekahara Hospital Campus, Raipur, high public footprint across the Greater Raipur Region and also at public footprint across the State of Chhattisgarh? pls clarify??		As per RFP
401	point 9.d (Page 60 of		Offered solution should be configured and integrated with	Do we need to setup captive SMS application SERVER at NOC?OR can we use		CHiPS will provide SMS gateway

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	179)		SMS gateway for intimating username and password / One Time Password (OTP) through SMS on user's mobile phone number post his registration is successful.	service provider hosted SMS gateway platform. Pls clarify? What is the number of SMS to be considered per month.? Should the sms cost be built into the solution? Pls clarify		platform and bidder should integrate the solution with the same
402	point no. 16 (Page 61 of 179)		Proposed wireless solution is basically intended to provide 24x7 wireless Internet access service in the Indoor SITE(s)	is the ultimate aim to provide internet at these locations? Or can internet be distributed over MPLS, which means, MPLS at spoke sites and internet only at NOC. Pls clarify		CHIPS
403	Point 42,S.No 5 (Page 115,116)		BPSK, QPSK, CCK, QAM4, QAM64 and OFDM	QAM16 is not part of specification and should be included as standard requirement as QAM16 will give significantly higher throughput than CCK and QAM4		Please refer Corrigendum
404	Point 42,S.No 8 (Page 115,116)		adjustable 0 to 27dBm	Output power range should be between -5 to 25 dBm enabling use of higher gain antenna for better directivity and minimize interference with narrow beamwidth of antenna with minimal exposure to wide angles		Please refer Corrigendum
405	Point 42,S.No11 (Page 115,116)		Required	Routing feature is not required as built-in feature in PTP Link. Routing is done by the Core/Edge routers in any customers network. This requirement in the radios should be waived off.		Please refer Corrigendum
406	Point 42,S.No15 (Page 115,116)		Shall Support 802.1X	802.1x is usually required in case of Wi-Fi setup. In case of PTP connectivity, over the air encryption is very much important. AES 128 can be included in the specification which is certified to carry information over the air up to classification of "SECRET" by NSA and should be duly certified by International Accredited Government agency (FIPS-197 certified).		Please refer Corrigendum
407	Point 42,S.No 19 (Page 115,116)		Built-in Mode	Please clarify should built-in repeater mode operate in same frequency band - Can a repeater be created using a second PTP link		Please refer Corrigendum
408	Point 42,S.No 20		Combined TDD / OFDM and FEC	Kindly elaborate the requirement. In fact a hub site sync mechanism is needed to		Please refer Corrigendum

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	(Page 115,116)			mitigate interference between collocated radios by TDD timing synchronization which is not part of required feature/specification.		
409	Point 42,S.No 21 (Page 115,116)		http web,ssh,telnet	SNMPv3 should be included which is highly secure and NMS should also support SNMPv3 SSH and telnet are based on manual commands which is difficult to remember and less user friendly		Please refer Corrigendum
410	Point 42,S.No 23 (Page 115,116)		V2	This specification should be based on latest SNMP version available. The latest available SNMP version is SNMPv3 which is highly secure		Please refer Corrigendum
411	Point 42,S.No 27 (Page 115,116)		230 VAC and +/- 48AC	Need clarification if 230VAC and ±48VDC both are required simultaneously or anyone of them needs to be proposed		Please refer Corrigendum
412	Point 42,S.No 27 (Page 115,116)		7V - 18V DC, +/- 48v DC			Please refer Corrigendum
413	5.20.1. Termination Clause i. Right to Terminate the Process (Page 35)		CHiPS reserves the right to cancel the contract placed on the selected bidder and recover expenditure incurred by CHiPS under the following circumstances:- d. If deductions of account of liquidated damages /Penalty exceeds more than 20% of the total contract price. e. In case the selected bidder fails to deliver the quantity as stipulated in the delivery schedule, CHiPS reserves the right to procure the same or similar product from alternate sources at the risk, cost and responsibility of the selected bidder.	CHiPS reserves the right to cancel the contract placed on the selected bidder by providing a 30 day written notice and recover expenditure incurred by CHiPS under the following circumstances:- d. If deductions of account of liquidated damages /Penalty exceeds more than 10% 20% of the total contract price. e. In case the selected bidder fails to deliver the quantity as stipulated in the delivery schedule, CHiPS reserves the right to procure the same or similar product from alternate sources at the risk, cost and responsibility of the selected bidder subject to a maximum of 5% of the differential vlaue of the goods supplied or		Please read as below" CHiPS reserves the right to cancel the contract placed on the selected bidder by providing a 30 day written notice and recover expenditure incurred by CHiPS under the following circumstances:- d. If deductions of account of liquidated damages /Penalty exceeds more than 20% of the total contract

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
				services rendered.		price. e. In case the selected bidder fails to deliver the quantity as stipulated in the delivery schedule, CHiPS reserves the right to procure the same or similar product from alternate sources at the risk, cost and responsibility of the selected bidder Maximum of 20% of the differential value of the goods supplied or services rendered."
414	ii. Consequences of Termination (Page 36)		a. In the event of termination of the Contract due to any cause whatsoever, whether consequent to the stipulated term of the Contract or otherwise, CHiPS shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s)	a. In the event of termination of the Contract due to any cause whatsoever, whether consequent to the stipulated term of the Contract or otherwise, CHiPS along with the Vendor shall formulate a Exit Plan Strategy shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s)		As per RFP
415	5.20.4. Audit by Third Party (Page 37)		CHiPS at its discretion may appoint third party for auditing the activities of onsite services and operations of entire services provided to the CHiPS	Request addition of a timeline as suggested below: CHiPS, at its discretion may appoint third party for auditing the activities of onsite services not more than once a year and operations of entire services provided to the CHiPS upon providing a 7 day notice period to the Vendor.		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
416	5.20.9. Failure to agree with Terms and Conditions of the RFP (Page 37)		Terms and Conditions of the RFP Failure of the successful bidder to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event CHiPS may award the contract to the next best value bidder or call for new proposals from the interested bidders or invoke the PBG of the most responsive bidder.	Failure of the successful bidder to agree with the Terms & Conditions of the RFP despite the deviations and suggestions being discussed by CHiPS shall constitute sufficient grounds for the annulment of the award, in which event CHiPS may award the contract to the next best value bidder or call for new proposals from the interested bidders or invoke the PBG of the most responsive bidder.		As per RFP
417	5.26. Statutory Requirements (Page 41)		During the tenure of this contract, nothing shall be done by the Selected Bidder in contravention of any law, act and / or rules / regulations, there-under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep CHiPS indemnified in this regard.	During the tenure of this contract, nothing shall be done by the Selected Bidder in contravention of any applicable law, act and / or rules / regulations, there-under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep CHiPS indemnified in this regard.		Please read as below " During the tenure of this contract, nothing shall be done by the Selected Bidder in contravention of any applicable law, act and / or rules / regulations, there-under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep CHiPS indemnified in this regard.
418	5.31. Indemnity (Page 46)		The Selected Bidder shall execute and furnish to the CHiPS, a Deed of Indemnity in favour of the CHiPS, in a form and manner acceptable to the CHiPS, indemnifying CHiPS from and against any costs, loss, damages, expense, claims including those from third parties or liabilities of any kind how-so-ever suffered including patent,	The Selected Bidder shall execute and furnish to the CHiPS, a Deed of Indemnity in favor of the CHiPS, in a form and manner acceptable to the CHiPS, indemnifying CHiPS from and against any costs, loss, damages, expense, claims including those from third parties or liabilities of any kind how-so-ever suffered including patent, copyright, trademark and trade secret, arising or incurred inter-alia during and after the		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			copyright, trademark and trade secret, arising or incurred inter-alia during and after the Contract period out of: a. negligence or wrongful act or omission by the Selected Bidder or it's team or any Agency/ Third Party in connection with or incidental to this Contract; or b. Any breach of any of the terms the Selected Bidder's Proposal as agreed, the Tender and this Contract by the Selected Bidder, its Team or any Agency/ Third Party. c. The indemnity shall be to the extent of 100% of project cost in favor of the CHiPS.	Contract period out of: a. gross - negligence or wrongful act or omission by the Selected Bidder or it's team or any Agency/ Third Party in connection with or incidental to this Contract; or b. Any breach of any of the terms the Selected Bidder's Proposal as agreed, the Tender and this Contract by the Selected Bidder, its Team or any Agency/ Third Party. c. The indemnity shall be to the extent of 100% of project cost in favor of the CHiPS.		
419	5.32. Prices (Page 46)		The Selected Bidder shall provide "Most Preferred Customer" status to CHiPS.	~~The Selected Bidder shall provide "Most Preferred Customer" status to CHiPS.~~		Clause Stands deleted
420	5.35. Events of Default by the Selected Bidder (Page 48)		a. The Selected Bidder has failed to perform any instructions or directives issued by the CHiPS which it deems proper and necessary to execute the scope of work under the Contract, or b. The Selected Bidder has failed to adhere to anything as laid down in the Contract, or if the Selected Bidder has fallen short of matching such standards/targets as the CHiPS may have designated with respect to any task necessary for the execution of the scope of work under this Contract. The above mentioned failure on the part of the Selected Bidder may be in	a. The Selected Bidder has failed to perform any instructions or directives issued by the CHiPS which it deems proper and necessary to execute the scope of work under the Contract, or b. The Selected Bidder has failed to adhere to anything as laid down in the Contract, or if the Selected Bidder has fallen short of matching such standards/targets as the CHiPS may have designated with respect to any task necessary for the execution of the scope of work under this Contract. The above mentioned failure on the part of the Selected Bidder may be in terms of failure to adhere to timelines, specifications, requirements or any other criteria as defined by the CHiPS;		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
			terms of failure to adhere to timelines, specifications, requirements or any other criteria as defined by the CHiPS;			
421	5.46. Arbitration (Page 57)			Arbitration to be in accordance to Clause 5.20.6. Dispute Resolution Mechanism Page 38 of this tender document.		**Please add following lines under Arbitration:** Arbitration to be in accordance to Clause 5.20.6. Dispute Resolution Mechanism Page 38 of this tender document.
422	6.5. Quality of goods and services (Page 70)		c) The Goods must conform to the highest quality and standard	c) The Goods must conform to the commercially reasonable ~~highest~~ quality and standard		As per RFP
423	Request you to include this in RFP		Taxes	Any increase or decrease in the rates of the applicable taxes or any new levy on account of changes in law shall be to the account of Customer.		Any increase or decrease in the rates of the applicable taxes or new levy on account of changes in the law shall be paid on actual basis.
424	Request you to include this in RFP		Savings Clause	Bidder's failure to perform its contractual responsibilities, to perform the services, or to meet agreed service levels shall be excused if and to the extent Bidder's performance is effected , delayed or causes non-performance due to Customer's omissions or actions whatsoever.		As per RFP
425	Request you to include this in RFP		Deemed Acceptance	Services and/or deliverables shall be deemed to be fully and finally accepted by Customer in the event when Customer has not submitted its acceptance or rejection response in writing to Bidder within 15 days from the date of installation/commissioning or when Customer uses the Deliverable in its		As per RFP

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
				business, whichever occurs earlier. Parties agree that Bidder shall have 15 days time to correct in case of any rejection by Client.		
426	Request you to include this in RFP		Transfer of risk and title	Bidder assumes that the title of ownership and risk of the goods supplied under this Contract is passed onto Customer on delivery of the material at the Customer location.		The SI should be responsible for all the product up to end of operation and maintenance period with insurance
427	Request you to include this in RFP		Limitation of Liability	Notwithstanding anything to the contrary elsewhere contained in this or any other contract between the parties, neither party shall, in any event, be liable for (1) any indirect, special, punitive, exemplary, speculative or consequential damages, including, but not limited to, any loss of use, loss of data, business interruption, and loss of income or profits, irrespective of whether it had an advance notice of the possibility of any such damages; or (2) damages relating to any claim that arose more than one year before institution of adversarial proceedings thereon. Subject to the above and notwithstanding anything to the contrary elsewhere contained herein, the maximum aggregate liability of Wipro for all claims under or in relation to this Agreement, shall be, regardless of the form of claim(s), shall be limited to 25% of contract value.		As per RFP
428	Section 7 Wireless Controller	81	Should support minimum 25000 concurrent users	Please make it as " Should support minimum 12000 concurrent users"		Please read as " Should support minimum 10000 concurrent users"
429	Section 7 Wireless	83	Should have a suitable serial console port.	Please make it as " Should have a suitable console port"		Please read as " Should have a

S. No.	Section No.	Page No.	RFP Clause	Query	Remarks	Response
	Controller					suitable console port"

Please read the corrigendum as below -

S. No.	Section No.	Page No.	RFP Clause	Response
1	WIRELESS NMS	86	Should include suitable service operation management flexibility for the network administrator to assign task to an Individual network engineer and assign ownership / track the status of the issue resolution in adherence to ITILv3.0. Should have service flow management from ticket creation, status checks, and execution to resolution, close, and after-audit operations	Clause Deleted
2	WIRELESS NMS	86	Should support extending the NMS deployment to HA mode in 1+N redundancy configuration through optional add-on license/software in future. Should support centralized as well as distributed deployment.	Should support centralized as well as distributed deployment
3	WIRELESS NMS	87	Offered software should have compatibility with Microsoft Windows and Linux operating systems	Offered software should have compatibility with Microsoft Windows or Linux operating systems
4	WIRELESS CONTROLLER (C7)	83	Should support a user role based or SSID based firewall embedded in WLAN Controller	Clause Deleted
5	7.Minimum Specification for Wi-Fi Components	79	All Active Devices like Indoor Router, Indoor Switches, Wireless Indoor APs, Wireless Controller, Core Switch and NMS, should be from the same manufacturer so that manageability can be increased.	All Active Devices like Indoor Router, Indoor Switches, Core Switch and NMS, should be from the same manufacturer so that manageability can be increased.
6		80	Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps -1000 mpps from day 1.	Should have minimum switching capacity of 480 Gbps per slot, and minimum packet forwarding rate of 357 Mpps from day 1.
7	35)Indoor Router	106	The Router should have complete security suite by supporting IPSec & SSL VPN, Firewall (Zone based & Stateful firewall), IPS, Content Filtering functionalities into a single box along with full support for dynamic routing protocols. If any of the mentioned features can't be provided into a single box solution by any vendor, multiple boxes must be quoted to achieve these features from day one.	The Router should have complete security suite by supporting IPSec, Stateful firewall, IPS, Content Filtering functionalities into a single box along with full support for dynamic routing protocols. If any of the mentioned features can't be provided into a single box solution by any vendor, multiple boxes must be quoted to achieve these features from day one.
8	35)Indoor Router	106	Router should have minimum 4 slots to accommodate large variety of interface & should support FE, GE (both Ethernet based & fiber based), Serial V.35, ports, G.703 ports, E1, Chn E1, PRI etc.	Router should have minimum 4 slots to accommodate large variety of interface & should support FE, GE (both Ethernet based & fiber based), Serial V.35, ports, G.703 ports, E1, Chn E1 etc.
9	37)L2 Switch POE 8-port (Indoor)	108	Switch should support IGMP, MLD, MSDP, PIM, static routing, RIP from day one	Switch should support L2 multicasting features for IPv4 and IPv6.
10	Section 7	79	All routers and switches should have EAL-2 or NDPP (Network Device Protection Profile) certification.	All routers and switches (except outdoor router and outdoor switches) should have EAL-2 or NDPP (Network Device Protection Profile) certification.

S. No.	Section No.	Page No.	RFP Clause	Response
11	Section 7.4, WIRELESS CONTROLLER, Pt A11	82	Should support Static IP routing for both IPv4 and IPv6 networks	Clause Deleted
12	Section 7.5, OUTDOOR WIRELESS AP, Pt 2	83	Should be a three spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.	Should be a two spatial-stream 802.11n access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 2X2 MIMO configuration.
13	Section 7.7, WIRELESS NMS, Pt 17	86	Should support virtualization management	Should support virtualization management; management and monitoring of both physical and virtual networks. It should provide insight into and management of virtual networks and reduce migration complexity by aligning and automatic network policies with virtual images.
14	31 (3) & (10)	103	RAID Controller - Embedded RAID 1/5 4 ports SAS/SATA AND Internal/external storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage	RAID 0/1/5/6 SAS/SATA and Internal storage option storage SAS hard-disk drive and storage should support minimum RAID 6 - 9 x 4 TB with RAID 6 ~ 27 TB storage.
15	33 (19)	105	Casing: IP67/NEMA 4x Rated Outdoor Housing	IP66/NEMA 4x Rated Outdoor Housing.
16	33 (20)	105	Connectors: RJ 45 for 10BASE-T/100BASE-TX, IP67-rated RJ-45 connector kit	Connectors: RJ 45 for 10BASE-T/100BASE-TX, IP66-rated RJ-45 connector kit.
17	33 (23)	105	Support materials: …. windows decoder 1-user license	Clause Deleted
18	34 (13)	106	External Control: RS232C (in /out), RJ45	RS232C deleted from specification
19	43 (G) a	129	Live Streaming on Web Portal: ….. the live streaming and through Web based Portal to the citizen without any licensing requirement.	Clause Deleted
20	6.2 Broad Scope, 17)	61	Outdoor access points shall be installed at Outdoor sites to provide seamless wireless Internet connectivity within the Indoor site.	Outdoor access points shall be installed at Outdoor sites to provide seamless wireless Internet connectivity within the Outdoor site.
21	6.10. Technical documentation after installation	74	Warranty certificate indicating 5 year's warranty from the Principal Bidder for Active Components.	Warranty certificate indicating 5 year's warranty from the OEM for all Active Components and during Final Acceptance test (FAT) .
22	Section 7	84	Should be a two spatial-stream 802.11ac access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 3X3 MIMO configuration.	Should be a three spatial-stream 802.11ac access point with integrated/external dual band (2.4GHz & 5GHz) antennas in minimum 3X3 MIMO configuration.
23	Section 7	96	Enclosure shall have suitable cooling arrangement for visibility in low light conditions	Enclosure shall have suitable cooling arrangement and visibility in low light conditions.
24	Section 7	103	Motherboard - Dual Intel E5-2620 2.0 GHz Xeon 6-core CPU, dual 8 GB DDR3 RAM	Motherboard - Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM.
25	Section 7	103	Operating temperature - 32 to104°F (0to40°C)	Operating temperature: 10 to 35°C.
26	Section 7	103	Non-operating temperature - 40 to 158°F (-40 to 70°C)	Non-operating temperature: (-) 30 to 60°C.

S. No.	Section No.	Page No.	RFP Clause	Response
27	Section 7	103	On-board storage repositories – Server should have min 1 for RAID-5 configuration for video surveillance application	On-board storage repositories – Server should have min 1TB for RAID-5 configuration for video surveillance application.
28	Section 7	104	Operating temperature - 32 to104°F (0to40°C)	Operating temperature: 10 to 35°C
29	Section 7	104	Non-operating temperature -40 to 158°F (-40 to 70°C)	Non-operating temperature: (-)30 to 60°C
30	Section 7	108	Switch should support 4000 VLAN ID, Minimum 512 VLAN's	Switch should support Minimum 250 VLAN's.
31	Section 7	108	Switch should support UDLD, Auto-Smart ports, Resilient Ethernet Protocol from day one	Switch should support UDLD, Auto-Smart ports from day one
32	Section 7	111	Operating temperature: 0 - 50 °C	Minimum Operating temperature: 0 - 40 °C.
33	Section 7	110	Technology: SPWM, IGBT/MOSFET	Technology: PWM/SPWM, IGBT/MOSFET.
34			ADDITION in CORE Switch specification	8 hardware queues for core switches.
35	Section 7	110	Input voltage range -160 to 282V AC	Input voltage range -160 to 280V AC.
36	6.2 Broad Scope (7)	60	The SI shall be responsible to establish connectivity from NOC to each Site through leased/MPLS/RF connection for traffic requirements relating to wireless access for citizens, NMS, EMS and IP Camera.	The SI shall be responsible to establish connectivity from NOC to each Site through RF connection for traffic requirements relating to wireless access for citizens, NMS, EMS and IP Camera. However, if RF is not feasible than CHiPS shall provide connectivity through other modes like MPLS/ Leased Line etc. and SI shall coordinate with ISP to establish connectivity. CHiPS will bear all cost related to the bandwidth.
38	Broad Scope, Pt 27	62	Proposed wireless network shall utilize dual-band dual radio wireless access points based on the IEEE 802.11n standard with minimum 3x3:3 MIMO configuration for the outdoor to achieve an over-the-air data rate of 450Mbps per-radio and minimum 2x2:2 configuration in the indoor to achieve an over-the-air date rate of 300Mbps per-radio.	Proposed wireless network shall utilize dual-band dual radio wireless access points based on the IEEE 802.11n standard with minimum 3x3:3 MIMO configuration for the Indoor to achieve an over-the-air data rate of 450Mbps per-radio and minimum 2x2:2 configuration in the Outdoor to achieve an over-the-air date rate of 300Mbps per-radio.
39	Eligibility Criteria Section 4, S. No 11	16	OEM whose products have been offered in the bid shall have 24X7 Technical Assistance Centre (TAC) through toll free No and TAC is based in India	OEM (Network equipments, surveillance equipment, servers) whose products have been offered in the bid shall have 24X7 Technical Assistance Centre (TAC) through toll free No and TAC is based in India.
40	Section7,Outdoor Wireless AP, SNo17	84	Should support both centrally controlled mode(Configured and updated Via wireless controller) and autonomous mode (Without controller) which is software selectable	should be able to centrally managed and controlled via wireless controller or wireless NMS.
41	7. Minimum Specification for Wi-Fi components) 36. Indoor router	107	The router shall have SLA monitoring tools to measure state of the network in real time. The SLA operations shall provide information on TCP/UDP delay, jitter, application response time, VoIP MOS score, Packet Loss etc.	The router shall have SLA monitoring tools to measure state of the network in real time. The SLA operations shall provide information on TCP/UDP delay, jitter, application response time, Packet Loss etc.

S. No.	Section No.	Page No.	RFP Clause	Response
42	VMS specification: Point no. 13 under Category C	119	The Server and Client may be installed on the following operating systems: Windows XP, Windows Server 20XX, Windows 7 / 8, and others. 32-bit and 64-bit versions should be supported.	The Server and Client may be installed on the following operating systems: Windows/Linux. 32-bit and 64-bit versions should be supported.
43	Section 7 Wireless Controller	81	Should support minimum 25000 concurrent users	Should support minimum 10000 concurrent users.
44	Section 7 Wireless Controller	83	Should have a suitable serial console port.	Should have a suitable console port.
45	Section 7 Wireless Controller	82	Shall support WIPS, and spectral analysis from day 1.	Clause Deleted
46	5.22. Category of SLAs	42	b. Delay in Site Design: In case the Bidder fails to visit the site and complete the site design within the period allowed in Scope of Work, the Purchaser will be entitled to forfeit the 5% for each site from Security Deposit provided by the Bidder.	Delay in Site Design: In case the Bidder fails to visit the site and complete the site design within the period allowed in Scope of Work, the Purchaser will be entitled to forfeit the 5% for each site from order Value of site.
47	5.20.1. Termination Clause i. Right to Terminate the Process	35	CHiPS reserves the right to cancel the contract placed on the selected bidder and recover expenditure incurred by CHiPS under the following circumstances:- d. If deductions of account of liquidated damages /Penalty exceeds more than 20% of the total contract price. e. In case the selected bidder fails to deliver the quantity as stipulated in the delivery schedule, CHiPS reserves the right to procure the same or similar product from alternate sources at the risk, cost and responsibility of the selected bidder.	CHiPS reserves the right to cancel the contract placed on the selected bidder by providing a 30 day written notice and recover expenditure incurred by CHiPS under the following circumstances:- d. If deductions of account of liquidated damages /Penalty exceeds more than 20% of the total contract price. e. In case the selected bidder fails to deliver the quantity as stipulated in the delivery schedule, CHiPS reserves the right to procure the same or similar product from alternate sources at the risk, cost and responsibility of the selected bidder Maximum of 20% of the differential value of the goods supplied or services rendered.

S. No.	Section No.	Page No.	RFP Clause	Response
48	5.26. Statutory Requirements	41	During the tenure of this contract, nothing shall be done by the Selected Bidder in contravention of any law, act and / or rules / regulations, there-under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep CHiPS indemnified in this regard.	During the tenure of this contract, nothing shall be done by the Selected Bidder in contravention of any applicable law, act and / or rules / regulations, there-under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep CHiPS indemnified in this regard.
49	5.32. Prices (Page 46)	46	The Selected Bidder shall provide "Most Preferred Customer" status to CHiPS.	Clause Deleted
50	5.46. Arbitration (Page 57)	57	Addition	Arbitration to be in accordance to Clause 5.20.6. Dispute Resolution Mechanism Page 38 of this tender document.
51			Addition	The SI should be responsible for all the product up to end of operation and maintenance period with insurance.
52			Addition	Any increase or decrease in the rates of the applicable taxes or new levy on account of changes in the law shall be paid on actual basis.

Amendments in Technical specification and Bill of Material:

1. Technical Specification for RF Connectivity – Following specification will be considered for RF devices

Specification Point to Multi-Point	
Frequency Range: 2.4 GHz/5.8 GHz or in combination as per requirement, ISM unlicensed free band.	
The proposed network architecture shall have Base Station Sector at the central location and Subscriber Units at the site.	
The coverage of BTS should be 360° using three or four sector BTS with either 90° or 120° antenna without splitter.	
The offered radio systems should be of IPv4/IPv6 compliant and should have 64/128bit encryption.	
System standards: All the radio equipments shall comply fully with all customers defined mandatory requirement and conforming to the latest version of ETSI/FCC/IEEE & must have TAC (Type Approval Certificate) approval of WPC. All certificates to be submitted with Technical Bid.	
Network Management: Report generation, Performance Monitoring and Trend Reports, SNMP v1 & v3 shall be supported. QoS Shall be supported. The network management system to be deployed at central location to manage and configure base stations and remote station unit. The functionality includes automatic and manual device discovering of all network elements such as base stations, remote stations etc and system shall keep details of all network elements.	
Network Interface should support GbE Port to enable transporting more than 100Mbps	
Collocated BTS sector/radio should be capable of eliminating mutual interference at sites with multiple radios	
Point to Multi Point Base Stations and Point to Multi Point CPEs should be of same Make and Manufacturer to enabling configuration and fault management with single NMS	
OEM should have a proven track record and should have been deployed 150 or more nodes in atleast one project for more than Two Years with Government/Public Sector Undertaking. OEM should provide to Bidder PO and documentary evidence regarding deployment and satisfactory performance	
OEM of Radios should have own local RMA repair centre or Advance Replacement Centre in India for more than 2 Years. OEM should provide to Bidder documentary evidence regarding Service Tax registration and Service Tax Number.	
PMP System should support dual stack IPv4 & IPv6 IP Address	
Point to Multi Point Radios	
Modulation	2x2 MIMO/OFDM
Range	Upto 25 Kms
Duplex Technology	TDD
Interface	Gbe Port 10/100/1000BaseT (RJ45)
Channel Width	5/10/20/40 MHz
Throughput	Minimum 250 Mbps aggregate
Maximum Tx Power	23 dBm or better
GPS Synchronization	Yes via GPS, Ethernet or Serial synchronization
Protocol Used	IPv4, IPv6, SNMP v1, SNMP v3, HTTP, HTTPs, Telnet

Standard	IEEE 802.11n, IEEE 802.11a, IEEE 802.11 b/g
VLAN support	IEEE 802.1Q, 802.1P and QinQ
Power	230 Volt AC (+/- 48 VAC), 50-60 Hz orPoE
Operating Temperature	0 - 55° C or better
Environmental	IP66/IP67 or better
QoS	Should support QoS based on 4 queue according to 802.1p/Diffserve
No. of CPE per BTS	Minimum 30 CPEs
CPE Radios	
Modulation	2x2 MIMO/OFDM
Range	25 kms
Duplex Technology	TDD
Interface	10/100baseT
Channel Width	5/10/20/40 MHz
Throughput	Minimum 20 Mbps aggregate scalable up to 50 Mbps without any hardware or software upgradation
Maximum TX Power	23 dBm or better
Protocol Used	IPv4, IPv6, SNMP v1, SNMP v3, HTTP, HTTPs, Telnet
Standard	IEEE 802.11n, IEEE 802.11a, IEEE 802.11 b/g
VLAN support	IEEE 802.1Q, 802.1P and QinQ
Power	230 Volt AC (+/- 48 VAC), 50-60 Hz orPoE
Operating Temperature	0 - 55° C or better
Environmental	IP66/IP67 or better
Specification Point-to-Point Radios	
Modulation	2x2 MIMO/OFDM
Range	25 kms
Duplex Technology	TDD
Interface	10/100baseT
Channel Width	5/10/20/40 MHz
Throughput	Minimum 20 Mbps aggregate scalable upto 100 Mbps
Maximum Tx Power	23 dBm or better
GPS Synchronization	Yes via GPS, Ethernet or Serial synchronization
Protocol Used	IPv4, IPv6, SNMP v1, SNMP v3, HTTP, HTTPs, Telnet
Standard	IEEE 802.11n, IEEE 802.11a, IEEE 802.11 b/g

VLAN support	IEEE 802.1Q, 802.1P and QinQ
Power	230 Volt AC (+/- 48 VAC), 50-60 Hz orPoE
Operating Temperature	0 - 55° C or better
Environmental	IP66 / IP67 or better
QoS	Should support QoS based on 4 queue according to 802.1p/Diffserve

2. Please add this feature in the Camera specification - Built-in Adaptive IR with 25Mtrs Range.
3. Minimum Specification for Wi-Fi Components (Pg. 79) - All routers and switches (except outdoor router and outdoor switches) should have EAL-2 or NDPP (Network Device Protection Profile) certification.
4. Please add this feature in the Core Switch specification: 8 hardware queues for core switches.
5. The delivery timeline (RFP: Page 69) has been amended as below:

S.No.	Scope of work	Deliverables	Timeline
3	Supply, of hardware/software Site Wise	• Delivery challan/note • Invoice copy • Warranty certificate issued by respective OEMs for each hardware/software	6 Weeks from date of Signing of contract agreement
4	Installation and Commissioning of hardware/software Site Wise	• Device wise Configuration report stating IP Schema, Routing details • In case of Software, the report should consist of Software Installation Guide and checklist. • Complete set of Technical/Operation and Maintenance Manual.	12 Weeks from date of Signing of contract agreement

6. Technical specification of Master server for VMS (1 nos.) is as following -

S. No.	Specification
1	**Housing – should be** 2-RU from factor , 12 × SAS front-loading drive bays or better
2	**Motherboard -** Dual Intel E5-2620 V3 2.4 GHz Xeon 6-core CPU, dual 64 GB DDR4 RAM
3	**RAID Controller -** RAID 0/1/5/6 SAS/SATA
4	**LEDs -** Power, hard-drive activity, network activity, system overheat/fan fail

5	**Power supply -** Server should have min 2 power supply
6	**Operating temperature -** 10 to 35°C
7	**Non-operating temperature** - (-)30 to 60°C
8	**Operating humidity** 10 to 90% non condensing
9	**Non-operating humidity** 5 to 93% non condensing
10	**Internal/external storage option** storage SAS hard-disk drive and storage should support minimum RAID 6 - 2 x 4 TB with RAID 6 ~ 6 TB storage
11	**On-board storage repositories** – Server should have min 1 for RAID-5 configuration for video surveillance application

7. Line item in Technical and Financial Bill of Material "External Storage of 25 TB capacity in RAID 6 configuration" stands deleted from Bill of Material (RFP Page No. 131) and bidder should quote 1 Nos. of Master VMS Server as per specification above in point no. 6.
8. Database (if required for WiFi and/or camera solution) with required license, accessories, etc has to be provided by SI.
9. **Clarification on 150 nodes required in eligibility criteria** (Pg no. 15, Point No. 5):- The bidder should have experience of 150 Nodes (150 Wireless Access Point or total 150 Wireless Access ports in Switch (Consolidated 8/16/24 port switch) executed/executing).
10. Please add the following line items in the BoM -

S. No.	Description	Quantity	Unit
1	Indoor Router (under section "Indoor Location Components - Wi-Fi Network (Y)- Active Networking")	1	Nos.
2	Outdoor Router (under section "Outdoor Location Components - Wi-Fi + IP Camera (Z) - Active Networking")	1	Nos.
3	VMS Master server (under section "NOC/ Central Location components - Wi-Fi + IP Camera (X)"	1	Nos.

Important Note:-

1. Bidders are requested to submit a signed copy of this corrigendum with Bid Submission.
2. Any kind of propriety item /specification may ignore, equivalent and higher specification is also acceptable.
3. The last date for bid submission is extended up to **10th April 2015 at 3:00 PM**. Opening of Technical bid will be on same day at 3:30 PM.