

Response to Pre-Bid Queries for RFP REF NO:IT-11/2021-22

Sr. No.	RFP Page No	RFP Heading and Section	Specification	RFP Clause	Requested Change / Clarification	Response to Technical Query
1	17	Section 2 - Technical Specification		Current architecture is Core + Access Layer and same needs to be revamp with Core + Distribution + Access Layer along with segregation of secure switching and routing topology with internal firewall architecture.	With respect to the traffic segregation between the DC and the campus network, do we need to consider a new Firewall as part of the proposal or the existing Internal Firewall will be used. Requesting your clarification. In case a new Firewall is to be proposed requesting you to share the technical specifications for the Firewall.	existing Internal firewall will be used.
2	17	Section 2 - Technical Specification		Current architecture is Core + Access Layer and same needs to be revamp with Core + Distribution + Access Layer along with segregation of secure switching and routing topology with internal firewall architecture.	As per the architecture depicted in the proposed network diagram (1 & 2) on page-20, "Collapsed Core" design has been considered i.e. (Distribution cum Core). Is the understanding correct please elaborate.	Yes.
3	N/A	NA - Technical Specification		NA	The Network Management Tool provides single dashboard for the manageability and monitoring of the DC/DR setup. Do we need to consider the NMS tool for the DC/DR infrastructure. If Yes, requesting you to share the Technical Specifications for the NMS tool.	No
4	18	SECTION 3 - Requirements for DC-Mahape		The System Integrator should include all components (like cables, rack mount kits, Transceivers, SFP modules, Dac Cables, converters, kits, licenses, configuration etc.) If any component is left out, it will be the responsibility of the System Integrator to supply original component and install at no additional cost to StockHolding.	Since the count of the Transceivers, SFP modules, Dac Cables, converters, kits, license etc. has been given in the RFP. The calculation for the same locationwise/rackwise/switch wise has not been provided in the RFP. As such requesting for the bifurcation, so that the count of those componenets along with switches can be verified.	Bidder may please send their engineer at Stockholding office. We will provide them the required clarity so same can be verified from them and include in the count.
5	44	SECTION 4 - Scope of Work and Deliverables		Engineer from System Integrator will be required to be available onsite at Mahape and Bangalore location during any DR DRILL or any power outages, preventative maintenance related activities initiated by StockHolding during the entire WARRANTY period.	Since the architecture of the DR network architecture has not been mentioned in the RFP. Can you please share the existing and proposed architectural details (rackwise/switchwise).	Will be provided to Successful bidder.
6	Page No.21, Point No. 4	Spine (40/100G Fiber) Switch Specification		Switch shall support our existing switch feature VSS or equivalent features allows links that are physically connected to two different switch to appear as a single port channel. (Two physicalchassis should be work as a logical switch. There data plane should be work as a single.)	For Datacenter design, Dual control plane is recommended for Spine and Leaf Design.	System Integrator may include this while bidding as Stockholding may consider this point.
7	Page No.23, Point No. 2.1 (a)	Data-Centre Access Switch Specification		Minimum 48 ports support 100MB/1/10 G Base-T ports. The switch should be populated with minimum 48* 10G Base-T for downlink connectivity and minimum 4*40/100G ports with multimode 40/100G Transceivers, for uplink connectivity	Please explain the usecase of 100MB interface support in new DC build. As Server/End point have moved from 1G to 10G interface speed support so we think 100MB is "Good to have" requirement	System Integrator may include this while bidding as Stockholding may consider this point.
8	Page No.23, Point No. 2.6	Data-Centre Access Switch Specification		Switch shall support our existing switch feature VSS or equivalent features allows links that are physically connected to two different switch to appear as a single port channel. (Two physical chassis should be work as a logical switch. There data plane should be work as a single.)	For Datacenter design, Dual control plane is recommended for Spine and Leaf Design.	System Integrator may include this while bidding as Stockholding may consider this point.
9	Page No.26, Point No. 1.9	Campus Core Fibre Switch Specification		Switch shall support our existing switch feature VSS or equivalent features allows links that are physically connected to two different switch to appear as a single port channel. (Two physical chassis should be work as a logical switch. There data plane should be work as a single.)	For Datacenter design, Dual control plane is recommended for Spine and Leaf Design.	System Integrator may include this while bidding as Stockholding may consider this point.
10	Page No.26, Point No. 3.2	Campus Core Fibre Switch Specification		Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.1ae (256-bit and 128-bit AES), 802.3x, 802.1p, 802.1Q, 1588v2	1588v2 is PTP timing protocol specially use in Service provider network. IEEE 802.1ae is MACSEC (hardware level encryption) required on link this is specially used for Intra-DC or any external link connectivity termination. So this point can be removed as its ask only for this layer of switch model Please clarify/elaborate more on First Hop Security usecase	MACSEC is Require.

11	Page No.28, Point No. 1.3.1	Campus Core Copper Switch Specification		Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2	1588v2 is PTP timing protocol specially use in Service provider network. So this point can be removed	System Integrator may include this while bidding as Stockholding may consider this point.
12	Page No.7	Section -1 Requirement with Terms & Conditions		VLAN, routing in internal LAN, WAN, 3 site storage replication within the infrastructure.	Please confirm 3 site referring to are DC, DR and NDR?	Yes
13	Page No.7	Section -1 Requirement with Terms & Conditions		Formulating and implementing the backup policy in consultation with StockHolding.	Please clarify on backup policy of which components, is this related to storage backup policy? If yes then we need details of current infra , links & tools used for backup of storage	No, All the proposed switches should have backup as per Stockholding backup policy.
14	Page No.16	Section - 2.1 Introduction to Technical specifications		<p>Primary Data Centre Connectivity.</p> <ul style="list-style-type: none"> • Network Security connectivity. • Broking setup connectivity. • E-mail setup connectivity. • Connectivity to extranet Security Infrastructure • User Access (Back office, Extranet, E-stamping) • Extranets Consolidation (NSDL, CDSL, NSE, BSE, RBI) • E-stamping setup • Disaster Recovery Site connectivity. • Bangalore connectivity. 	<p>As per RFP Requirement is for Network Switches. Mentioned components are already connected in your infrastuture, hence we assume this mentioned compoents are part of your exsting setup connected to the network switches & only need to be phisically connected on new switches via uplink/ downloink as per exsting and avaiable connectivity. Kindly note any dependency at this components level like troubleshooting & configuration especially for security firewall, Broking setup, email setup, extranets, e-stamping, & WAN MPLS needs to be taken care by Stockholding team</p> <p>Please add " any dependency at this components level like configuration, troubleshooting , physical connectivity, migrations especially for security firewall, Broking setup, email setup, extranets, e-stamping, WAN MPLS & any other pereferials other than switches needed in RFP to be taken care by Stockholding team"</p>	Stockholding's expectation is the System Integrator should understand the existing Infra and then prepared a plan of action (POA) for deployment of New Switches as we are changing the network architecture. Entire migration has to be taken care by System Integrator.
15	Page No.18 & 19	Section - 2.2.2 Proposed Network Diagram – 1 & 2.2.3 Proposed Network Diagram: 2		Network Diagram	There are 2 proposed diagrams, however location is not mentioned; please confirm which is for DC & which is for DR; Also please share seprated existing diagram for DC & DR	SI needs better understanding of RFP.
16	Page No.44	Section 4 - Scope of Work and Deliverables		Integrating the supplied networking equipment with other equipment in the Data Centre, Bangalore, Bangalore like servers, Nexus switches, Campus and access switches, load balancers, all Firewalls, IPS, VPN and WAF appliances etc. to complete the functionality.	Pls confirm, We assume that any dependency such as physical migration, configuration & trouble shooting of this existing devices will taken care by Stockholding team	SI needs better understanding of RFP. Entire migration has to be taken care by System Integrator.
17	Page No.44	Section 4 - Scope of Work and Deliverables		As StockHolding currently using Cisco 6509 in VSS mode as a core switch and all the uplinks of hub rooms are directly connected to these switches, StockHolding is expecting extreme due care to be taken by successful System Integrator while migration of the technologies from existing to new one as in newer technology we are expecting that Server VLAN should be on Campus Core Copper and User VLAN should be on Campus Core fiber. System Integrator has to plan in such a way that business activities should not suffer and parallel migration of these switches should take place in a seamless manner without downtime in a production business environment.	For migration we need minimal down time. Please consider minimal downtime required for setup	Noted. Downtime will be provided as per proper plan of action to SI.

18	Page No.45	Section 4 - Scope of Work and Deliverables		<p>Specifically, the System Integrator should consider the following in their project plan for StockHolding's Data Centre at Mahape and DR Setup at Bangalore and dependency of the setup with NDR Setup at Airoli:</p> <ul style="list-style-type: none"> Existing Data Centre architecture. Switches configuration. Network Topology. IP Address Schema. Networks Security Broking Setup. Understanding Security Infrastructure design. Security Application connectivity with DC and Bangalore. Emailing Setup User Access (Back office, Extranet, E-stamping) Extranets Consolidation (NSDL, CDSL, NSE, BSE, RBI, MCX) E-stamping Setup Disaster Recovery Site. Bangalore. 	<p>As per RFP Requirement is for Network Switches. Mentioned components are already connected in your infrastutur, hence we assume this mentioned compoents are part of your exsting setup connected to the network switches & only need to be physically connected on new switches via uplink/ downloink as per existing and avaiable connectivity. Kindly note any dependency at this components level like troubleshooting & configuration especially for security firewall, Broking setup, email setup, extranets, e-stamping, & WAN MPLS needs to be taken care by Stockholding team</p> <p>Please add " any dependency at this components level like configuration, troubleshooting , physical connectivity, migrations especially for security firewall, Broking setup, email setup, extranets, e-stamping, WAN MPLS & any other pereferials other than switches needed in RFP to be taken care by Stockholding team"</p>	<p>Stockholding's expectation is the System Integrator should understand the existing Infra and then prepared a plan of action (POA) for deployment of New Switches as we are changing the network architecture. Entire migration has to be taken care by System Integrator.</p>
19	Page No.47	Section 4 - Scope of Work and Deliverables		<p>During Implementation Period System Integrator should depute resident engineer posted at StockHolding site during Mon-Sat from 9:00 am to 6:00 pm. The resident Engineer will take all possible care and steps (including configurations and re-configurations) to assure systems availability and performance as expected by StockHolding. All the calls logged outside this period will be attended on call basis. However, during commissioning of the system and porting of data from existing system, the Resident Engineer should be present on all days of the weeks including any holidays or work long hours to meet the schedule as defined by StockHolding</p>	<p>Please clarify if resident engineer required is over & above the project engineer deployed at site as per milestone basis or deployed project engineer is epected to stay at site during said working hours for entire project period. Also please confirm if same is applicable for all sites or signle site</p>	<p>NO, Expert engineer's presence will be required from Initiation of this project till completion.</p>
20	Page No.47	Section 4 - Scope of Work and Deliverables		<p>The System Integrator should commission and maintain and assure storage replication solution between DC at Mahape and DR at Bangalore.</p>	<p>As per RFP Requirement is for Network Switches. Storage replication must be already in place in existing environment, hence we assume that any scope related to replication configuration, troubleshooting, and physical connectivity with migration will be taken care by stockholding. Bidder will only be responsible for components supplied in RFP & its connectivity; if our undstanding is not correct then please snare clear scope & requirement of replication solution</p>	<p>Stockholding's expectation is the System Integrator should understand the existing Infra and then prepared a plan of action (POA) for deployment of New Switches as we are changing the network architecture.</p>
21	Page No.47	Section 4 - Scope of Work and Deliverables		<p>Replacement of failed hardware within 4 hours of reporting. However, to ensure network connectivity, the System Integrator has to provide standby switch till the replacement is provided.</p>	<p>In this case SI will have to consider spare devices in BOQ, which will adding cost. Pls confirm if same is need as switches will be in redundancy</p>	<p>Stockholding has already consider spare switches and same has been included in RFP.</p>
22	Page No.47	Section 4 - Scope of Work and Deliverables		<p>Exclusions:</p> <ul style="list-style-type: none"> Any electrical fittings like plug points, power cords etc. Any electrical work external to the system Cables and Connectors that are not supplied by the System Integrator Planned and unplanned power outages Leased Line, VSAT, WAN Link outages 	<p>We assume Rack & Rack space will also be provided by Stockholding, please confirm same</p>	<p>Yes</p>
23	21	Spine (40/100G Fiber) Switch Specification	Hardware and Interface Requirement	<p>Minimum 32 ports support 40/100 Gbps optical ports. The switch should be populated SFP+ Bidi Multimode fiber transceivers For Downlink need to consider QSFP (40G) or SFP+ (10G) bidi interfaces as per the requirement</p>	<p>Please modify this clause to " Minimum 32 ports support 40/100 Gbps optical ports. The switch should be populated QSFP+ Multimode fiber transceivers For Downlink need to consider QSFP (40G).</p>	<p>QSFP+ is require for 40/100G</p>
24	21	Spine (40/100G Fiber) Switch Specification	Hardware and Interface Requirement	<p>Switch shall support our existing switch feature VSS or equivalent features allows links that are physically connected to two different switch to appear as a single port channel. (Two physical chassis should be work as a logical switch. There data plane should be work as a single.)</p>	<p>For Datacenter design, Dual control plane is recommended for Spine and Leaf Design.</p>	<p>System Integrator may include this while bidding as Stockholding may consider this point.</p>
25	22	Spine (40/100G Fiber) Switch Specification	Layer3 Features	<p>b. PIM-SSM (RFC 3569)</p>	<p>Please change to " PIM-SSM (RFC 3569)/PIM SM/PIM DM</p>	<p>System Integrator may include this while bidding as Stockholding may consider this point.</p>

26	23	Copper (100MB/1G/10G Copper) Switch Specification	Solution Requirement	Switch shall support our existing switch feature VSS or equivalent features allows links that are physically connected to two different switch to appear as a single port channel. (Two physical chassis should be work as a logical switch. There data plane should be work as a single.)	For Datacenter design, Dual control plane is recommended for Spine and Leaf Design.	System Integrator may include this while bidding as Stockholding may consider this point.
28	25	Copper (100MB/1G/10G Copper) Switch Specification	Manageability	a. SNMP v1 and v2, SNMP v3 with Encryption, Netconf/YANG, Streaming telemetry should be supported on the proposed switch.	Please Modify this clause to SNMP v1 and v2, SNMP v3 with Encryption, Netconf/YANG/REST API, Streaming telemetry/ Sflow should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point ."	System Integrator may include this while bidding as Stockholding may consider this point.
29	26	Fiber (1G/10G/25G) Switch Specification	Performance	Switch shall support application visibility and traffic monitoring with minimum 10K sflow/jflow/netFlow entries.	Please modify this clause to " Switch shall support application visibility and traffic monitoring with minimum 10 K jflow/netFlow entries or support sflow"	System Integrator may include this while bidding as Stockholding may consider this point.
30	26	Fiber (1G/10G/25G) Switch Specification	Functionality	Must support BGP, IS-IS, VRF, VXLAN, OSPF Routed Access, Policy-Based Routing (PBR), PIM SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1	Please modify this clause to "Must support BGP,VRF, VXLAN, IS-IS/OSPF,Policy-Based Routing (PBR), PIM SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1"	System Integrator may include this while bidding as Stockholding may consider this point.
31	26	Fiber (1G/10G/25G) Switch Specification	Functionality	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, IGMP, Netconf/YANG, Streaming telemetry should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point.	Please Modify this clause to " Switch should support management features like SSHv2, SNMPv2c, SNMPv3, IGMP, Netconf/YANG / REST API Streaming telemetry/ Sflow should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point ."	System Integrator may include this while bidding as Stockholding may consider this point.
32	26	Fiber (1G/10G/25G) Switch Specification	Functionality	Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security .	Please remove port security, DHCP snooping, Spanning tree root guard, First Hop Security .	System Integrator may include this while bidding as Stockholding may consider this point.
33	27	Campus Core Copper Switch	General Features	Switch should have minimum 8 GB RAM and 8 GB Flash. (Device flash and memory can be sufficient to take update of software till EOL. & device memory should be sufficient according to port density.)	Please change to "Switch should have minimum 1 GB RAM and 1 GB Flash"	Already mentioned that memory should be suffice to support upgradation of OS till EOL.
34	27	Campus Core Copper Switch	Performance	Switch should support at least 64K flow entries	Please change to 64K flow entries or sflow.	System Integrator may include this while bidding as Stockholding may consider this point.
35	28	Campus Core Copper Switch	Functionality	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2 .	Please change to "switch should support IEEE 1588 or Network Time Protocol (NTP) " Please change to "Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588 or Network Time Protocol (NTP) "	System Integrator may include this while bidding as Stockholding may consider this point.
36	28	Campus Core Copper Switch	Functionality	Should support advance Layer 3 protocol like BGPv4, BGPv6 , VRF, VXLAN, IS-ISv4, OSPFv3 from Day-1	Please modify this clause to "Must support BGP, IS-IS/OSPF,Policy-Based Routing (PBR), PIM SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1" Please remove VRF, VXLAN.	VxLAN is Stockholding's future requirement.

37	28	Campus Core Copper Switch	Functionality	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+. Streaming telemetry should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point .	Please Modify this clause to "Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+. Streaming telemetry/ Sflow should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point ."	System Integrator may include this while bidding as Stockholding may consider this point.
38	28	Campus Core Copper Switch	Functionality	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	Please change to " Switch should support IPv6 Binding Integrity Guard/IPv6 lockdown, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery or Inspection and IPv6 Source Guard /Source-port filtering	System Integrator may include this while bidding as Stockholding may consider this point.
39	29	Access (1G Copper) Switch Specification	General Features	Switch should have minimum 2 GB RAM and 2 GB Flash.(Device flash and memory can be sufficient to take update of software till EOL. & device memory should be sufficient according to port density.)	Please change to "Switch should have minimum 1 GB RAM and 1 GB Flash"	Already mentioned that memory should be suffice to support upgradation of OS till EOL.
40	29	Access (1G Copper) Switch Specification	Performance	Switch should support at least 16K flow entries	Please change to 16K flow entries or sflow.	System Integrator may include this while bidding as Stockholding may consider this point.
41	29	Access (1G Copper) Switch Specification	Functionality	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+. Streaming telemetry should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point.	Please Modify this clause to "Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+. Streaming telemetry/ Sflow should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point ."	System Integrator may include this while bidding as Stockholding may consider this point.
42	29	Access (1G Copper) Switch Specification	Functionality	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	Please change to " Switch should support IPv6 Binding Integrity Guard/IPv6 lockdown, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery or Inspection and IPv6 Source Guard /Source-port filtering.	System Integrator may include this while bidding as Stockholding may consider this point.
43	30	Other Connectivity – 24 Port Switch Specification	General Features	Switch should have minimum 2 GB RAM and 2 GB Flash. (Device flash and memory can be sufficient to take update of software till EOL. & device memory should be sufficient according to port density.)	Please change to "Switch should have minimum 1 GB RAM and 1 GB Flash"	Already mentioned that memory should be suffice to support upgradation of OS till EOL.
44	31	Other Connectivity – 24 Port Switch Specification	Performance	Switch should support at least 16K flow entries	Please change to 16K flow entries or sflow.	System Integrator may include this while bidding as Stockholding may consider this point.
45	31	Other Connectivity – 24 Port Switch Specification	Functionality	Switch should have provision to support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs with add on license in future.	Please modify this clause to "Switch should have provision to support network segmentation using VLANs."	VxLAN is Stockholding's future requirement.
46	31	Other Connectivity – 24 Port Switch Specification	Functionality	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+. Streaming telemetry should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point.	Please Modify this clause to "Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+. Streaming telemetry/ Sflow should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point ."	System Integrator may include this while bidding as Stockholding may consider this point.
47	31	Other Connectivity – 24 Port Switch Specification	Functionality	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	Please change to " Switch should support IPv6 Binding Integrity Guard/IPv6 lockdown, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery or Inspection and IPv6 Source.	System Integrator may include this while bidding as Stockholding may consider this point.
48	32	Other Connectivity Switches – 48 port	General Features	Switch should have minimum 2 GB RAM and 2 GB Flash.	Please change to "Switch should have minimum 1 GB RAM and 1 GB Flash"	Already mentioned that memory should be suffice to support upgradation of OS till EOL.
49	32	Other Connectivity Switches – 48 port	General Features	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 144 Gbps of stacking throughput with 8 switch in single stack.	Please change to "Switch should have dedicated slot or standard 10G ports for modular stacking from day-1. Should support for minimum 40 Gbps of stacking throughput with 8 switch in single stack"	

50	33	Other Connectivity Switches – 48 port	Performance	Should support minimum 2K IPv4 routes or more if configured in VXLAN.	Please remove VxLAN	System Integrator may include this while bidding as Stockholding may consider this point.
51	33	Other Connectivity Switches – 48 port	Performance	Switch should support at least 16K flow entries	Please change to 16K flow entries or sflow.	System Integrator may include this while bidding as Stockholding may consider this point.
52	33	Other Connectivity Switches – 48 port	Functionality	Switch should have provision to support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs with add on license in future.	Please modify this clause to "Switch should have provision to support network segmentation using VLANs."	VxLAN is Stockholding's future requirement.
53	33	Other Connectivity Switches – 48 port	Functionality	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+, Streaming telemetry should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point.	Please Modify this clause to " Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+, Streaming telemetry/ Sflow should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point ."	System Integrator may include this while bidding as Stockholding may consider this point.
54	33	Other Connectivity Switches – 48 port	Functionality	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	Please change to " Switch should support IPv6 Binding Integrity Guard/IPv6 lockdown, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery or Inspection and IPv6 Source Guard /Source-port filtering	System Integrator may include this while bidding as Stockholding may consider this point.
55	34	Out-of-Band Management Core Switch Specification	General Features	Switch should have minimum 4 GB RAM and 8 GB Flash. (Device flash and memory can be sufficient to take update of software till EOL. & device memory should be sufficient according to port density.)	Please change to "Switch should have minimum 1 GB RAM and 1 GB Flash"	Already mentioned that memory should be suffice to support upgradation of OS till EOL.
56	34	Out-of-Band Management Core Switch Specification	Performance	Switch should support at least 64K flow entries	Please change to 64K flow entries or sflow.	System Integrator may include this while bidding as Stockholding may consider this point.
57	35	Out-of-Band Management Core Switch Specification	Functionality	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.	Please change to "switch should support IEEE 1588 or Network Time Protocol (NTP) " Please change to "Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588 or Network Time Protocol (NTP) "	System Integrator may include this while bidding as Stockholding may consider this point.
58	35	Out-of-Band Management Core Switch Specification	Functionality	Should support advance Layer 3 protocol like BGPv4, BGPv6 , VRF, VXLAN, IS-ISv4, OSPFv3, MP-BGP with a license upgrade in future.	Please modify this clause to "Must support BGP,IS-IS/OSPF, from Day 1" Please remove VRF, VXLAN, IS-ISv4, MP-BGP.	VxLAN is Stockholding's future requirement.
59	35	Out-of-Band Management Core Switch Specification	Functionality	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+, Streaming telemetry should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point.	Please Modify this clause to "Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+, Streaming telemetry/ Sflow should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point ."	System Integrator may include this while bidding as Stockholding may consider this point.
60	35	Out-of-Band Management Core Switch Specification	Functionality	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	Please change to " Switch should support IPv6 Binding Integrity Guard/IPv6 lockdown, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery or Inspection and IPv6 Source Guard /Source-port filtering.	System Integrator may include this while bidding as Stockholding may consider this point.

61	35	Out-of-Band Management Access 48 port Switch Specification	General Features :	Switch should have minimum 2 GB RAM and 2 GB Flash. Device flash and memory can be sufficient to take update of software till EOL. & device memory should be sufficient according to port density.)	Please change to "Switch should have minimum 1 GB RAM and 1 GB Flash"	Already mentioned that memory should be suffice to support upgradation of OS till EOL.
62	36	Out-of-Band Management Access 48 port Switch Specification	Performance	Switch should support at least 16K flow entries	Please change to 16K flow entries or sflow.	System Integrator may include this while bidding as Stockholding may consider this point.
63	36	Out-of-Band Management Access 48 port Switch Specification	Performance	Switch should support 128 or more STP Instances.	Please change to "Switch should support 16 MSTP instances or 128 or more STP Instances."	System Integrator may include this while bidding as Stockholding may consider this point.
64	36	Out-of-Band Management Access 48 port Switch Specification	Functionality	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.	Please change this Clause to "Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight Ingress or egress queues."	System Integrator may include this while bidding as Stockholding may consider this point.
65	36	Out-of-Band Management Access 48 port Switch Specification	Functionality	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+, Streaming telemetry should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point.	Please Modify this clause to "Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+, Streaming telemetry/ Sflow should be supported on the proposed switch, any license / central appliance required to enable will be procured at later point ."	System Integrator may include this while bidding as Stockholding may consider this point.
66	36	Out-of-Band Management Access 48 port Switch Specification	Functionality	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	Please change to " Switch should support IPv6 Binding Integrity Guard/IPv6 lockdown, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery or Inspection and IPv6 Source Guard /Source-port filtering.	System Integrator may include this while bidding as Stockholding may consider this point.