

Stock Holding Corporation Of India Limited

(StockHolding)



RFP Reference Number: IT-11/2021-22

Date: 25-Oct-2021



DISCLAIMER

The information contained in this Request for Proposal (RFP) document or information provided subsequently to

System Integrator(s) or applicants whether verbally or in documentary form by or on behalf of Stock Holding Corporation of India Limited (StockHolding), is provided to the System Integrator(s) on the terms and conditions set out in this RFP document and all other terms and conditions subject to which such information is provided.

This RFP document is not an agreement and is not an offer or invitation by StockHolding to any parties other than the applicants who are qualified to submit the bids ("System Integrators"). The purpose of this RFP is to provide the System Integrator(s) with information to assist the formulation of their proposals. This RFP does not claim to contain all the information each System Integrator may require. Each System Integrator should conduct its own investigations and analysis and should check the accuracy, reliability, and completeness of the information in this RFP and where necessary obtain independent advice. StockHolding makes no representation or warranty and shall incur no liability under any law, statute, rules, or regulations as to the accuracy, reliability, or completeness of this RFP. StockHolding may in its absolute discretion, but without being under any obligation to do so, update, amend, or supplement the information in this RFP.



RFP Document Details

Name of Organisation	Stock Holding Corporation of India Limited
RFP Reference Number	IT-11/2021-22
Requirement	Supply, Installation, and Maintenance of Data Centre, Campus and Access Network Switches
Interest-free Earnest Money Deposit (EMD)	Rs.2,00,000/- (Indian Rupees Two Lakh Only) by way of RTGS/NEFT to be paid to Stock Holding Corporation of India Limited as Earnest Money Deposit should be submitted separately before submission of online bids by way of RTGS/NEFT on/or before 18-Nov-2021 to StockHolding's Bank Account No.: 004103000033442 Bank: IDBI Bank (Nariman Point Branch) IFSC: IBKL0000004 System Integrators with MSME certificate are exempted from providing EMD. Please share the UTR details with us at mentioned email address.
Date of issue of RFP document	25-Oct-2021
Last date of submission of bidder queries by email	01-Nov-2021
Pre-bid meeting	Pre-bid meeting (Online) at 03-Nov-2021@11:00 Hrs. To participate, please send your request to prit@stockholding.com on or before 02-Nov-2021, 13:00 Hrs
Email Address	PRIT@stockholding.com
Date of submission of online technical and commercial(indicative price) bids	19-Nov-2021@ 11:30Hrs.
E-bidding to be facilitated by	M/s e-Procurement Technologies Ltd.(ETL), Ahmadabad, on behalf of Stock Holding Corporation of India Limited
Date of online technical bid opening	20-Nov-2021
Address for online submission of bids	A bid must be submitted online on https://stockholding.auctiontiger.net
Date for commercial(indicative price) bids opening	29-Nov-2021
Date and time of the online reverse auction for commercial finalization	30-Nov-2021
Contact Details of M/s e-Procurement Technologies Ltd.(ETL), Ahmedabad	Call: +91 9904406300 +91 9510812960 +91 9265562821 +91 6354919566
	e-mail: support@auctiontiger.net
This bid document is not transferable	



Objective of the RFP

StockHolding Corporation Of India Ltd (hereinafter called StockHolding) invites proposals from eligible entities

(hereinafter referred to as "System Integrator"), for the "Supply, Installation and Maintenance" of Data Centre, Campus and Access switches at its Mahape and Bangalore premises

StockHolding IT-Networking needs to replace its (A) Data Centre Switches (B) Campus and Access Switches majority of which are declared as the end of life (EOL) and end of support (EOS) by the original equipment manufacturer (OEM) for which no further Security/functionality enhancements patches will be made available by the OEM. Considering this StockHolding is expecting a competent System Integrator (SI) should able to understand StockHolding's network architecture as specified in this RFP and migrate to the proposed network architecture. System Integrator should consider the switches of OEMs from Gartner leader quadrant for (a) Data centre networking and (b) Wired and wireless infrastructure while providing a concrete solution to StockHolding.

Submission of Proposal:

The response to this RFP will be submitted by way of a two-stage bidding process. The technical proposal with the relevant information/documents/acceptance of all terms and conditions as described in this RFP document will be submitted online through M/s e-Procurement Technologies Ltd.(ETL), Ahmedabad, the outsourcing agency approved by StockHolding for e-bidding on the website (https://stockholding.auctiontiger.net). The System Integrator will be trained by e-Procurement Technologies Ltd. for this purpose, and they will have to abide by the ebusiness rules in consultation with e-Procurement Technologies Ltd.

Technically qualified System Integrators will have to participate in an online reverse auction which will be conducted by M/s. e-Procurement Technologies Ltd.(Company selected by Stockholding for conducting E-procurement revers Auction process).

The System Integrators are requested to note that they cannot make their online submission after the time stipulated above and no extension of time will normally be permitted for submission of a bid.

The System Integrators are requested to note that it is mandatory to have a valid digital certificate issued by any of the valid certifying authority approved by Govt. of India to participate in the online bidding. The System Integrators are requested to ensure that they have the same, well in advance or if any assistance is required for the purpose, System Integrators can contact the service provider (M/s. e-Procurement Technologies Ltd.).

Minimum requirement for e-Bidding:

- 1. Computer / Laptop (Notebook) with internet connection
- 2. Operating system Windows XP Service pack -3 / VISTA/ Windows 7 or above
- 3. Digital certificate Class II or III, Signing + Encryption.

Due Diligence:

The System Integrator is expected to examine all instructions, Forms, Terms, Conditions, and Specifications in this RFP. Bids shall be deemed to have been made after careful study and examination of this RFP with a full understanding of its Implications. The Bid should be precise, complete with all details required as per this RFP document. Failure to furnish all information required by this RFP or submission of Bid, not as per



RFP requirements will be at the System Integrator's risk and may result in rejection of the bid and the decision of StockHolding in this regard will be final and conclusive and binding.

Cost of Bidding:

The System Integrator shall bear all costs associated with the preparation & submission of its bid and StockHolding will in no case be held responsible or liable for these costs, regardless of the conduct or outcome of the bidding process

Clarifications regarding RFP Document:

- Before bidding, the bidders are requested to carefully examine the RFP Document and the Terms and Conditions specified therein, and if there appears to be any ambiguity, contradictions, gap(s), and/or discrepancy in the RFP Document, they should forthwith refer the matter to StockHolding for necessary clarifications.
- A bidder may obtain clarification for their queries on this RFP as per given format only (Annexure-11) via email to PRIT@stockholding.com
- StockHolding shall not be responsible for any external agency delays.
- StockHolding reserves the sole right for carrying out any amendments/modifications/changes in the bidding process including any addendum to this entire RFP
- At any time before the deadline for submission of bids/offers, *StockHolding* may, for any reason whatsoever, whether at its own initiative or in response to a clarification requested by bidders, modify this RFP Document.
- Sub-Contracting-The services offered to be undertaken in response to this RFP shall be undertaken to be provided by the Bidder directly employing their employees, and there shall not be any sub-contracting done by the Bidder.
- It may be noted that notice regarding corrigendum/addendums/amendments/response to bidders' queries, etc., will be published on StockHolding's website only. Prospective bidders shall regularly visit StockHolding's same website for any changes/development in relation to this RFP.
- StockHolding reserves the right to extend the deadline for the submission of bids if required. However, no
 request from the bidders for extending the deadline for submission of bids shall be binding on StockHolding.
- StockHolding reserves the right to reject any or all the responses to RFPs / Bids received in response to this RFP at any stage without assigning any reason whatsoever and without being liable for any loss/injury that Bidder might suffer due to such reason. The decision of StockHolding shall be final, conclusive, and binding an all the parties directly or indirectly connected with the bidding process.

Bids Preparation and Submission Details

Technical Bid

- a. The System Integrator will submit the Technical Bid online on https://stockholding.auctiontiger.net and should be as per the format given refer to Annexure-3
- b. There should not be any hidden / conditional costs in the bids and in the event of their presence in the bid, the bid is liable to be rejected at the sole discretion of StockHolding
- c. No indications pertaining to price or commercial terms should be made in the Technical Bid submission. Any violation of condition may lead to rejection of the bid at the sole discretion of StockHolding
- d. No open-ended/conditional bid shall be entertained.
- e. System Integrator needs to submit a scanned copy of a cancelled cheque with required bank information which will be used while returning the EMD.



Indicative Price (Commercial) Bid

- a. The System Integrator will submit Indicative price (Commercial) bid online on https://stockholding.auctiontiger.net as per the format given - refer to Annexure-4
- b. The final price (L1) will be decided only on the successful conclusion of the Online Reverse Auction.
- c. The date and time of the Online Reverse Auction (RA) will be intimated to the eligible System Integrators whose technical bids proposals have been found acceptable by StockHolding.

Submission of Bids

- a. The required documents for Eligibility Criteria and Technical Bid, Indicative price (Commercial) Bid must be submitted (uploaded) online on https://stockholding.auctiontiger.net. Technical Bid and Indicative price (Commercial) Bid should be complete in all respects and contain all information asked for in this RFP document.
- b. If Interest-Free Earnest Money Deposit (EMD) is not submitted by System Integrator / received by StockHolding in the form NEFT/RTGS before the last date of submission of bids as mentioned in this RFP, System Integrator will not be eligible to participate in this RFP.
- c. The Technical Bid and Indicative price (Commercial) Bid should be valid for a minimum period of 90 days from the date of submission of the bid
- d. No request for any further extension of the deadlines shall be binding on StockHolding and StockHolding reserves the right to respond in any manner it deems

System Integrators are advised to submit their online Technical and Indicative Price bids well before the last date of submission.

Evaluation of Bids

StockHolding will evaluate the bid proposal submitted by the System Integrators under this RFP. The bid submitted by the System Integrator will be evaluated against the eligibility criteria outlined in the RFP. System integrators need to comply with all the eligibility criteria mentioned in the RFP to be evaluated for evaluation. Non-compliance to any of the mentioned criteria would result in outright rejection of the System Integrator's proposal. The decision of StockHolding would be final and binding on all the System Integrators to this document. StockHolding may accept or reject an offer without assigning any reason. The System Integrator is required to comply with the requirement mentioned in the RFP. Non-compliance to this may lead to disqualification of a System Integrator, which would be at the discretion of StockHolding.

- a. Please note that all the information desired needs to be provided. Incomplete information may lead to non-consideration of the proposal.
- b. A bid must be accompanied by Earnest Money Deposit details as specified in the bid document as per **Annexure-5**. No interest will be payable on the EMD amount.
- c. The information provided by the System Integrators in response to this RFP document will become the property of StockHolding.

Online Reverse Auction

- a. In case, only one System Integrator is technically qualified, no reverse auction will take place.
- b. StockHolding reserves the right to cancel the RFP even after Reverse Auction without assigning any reason.
- c. StockHolding reserves the right to disqualify any System Integrator without assigning any reason.
- d. StockHolding reserves the right to negotiate a price
 - with the lone System Integrator or
 - with the L1 System Integrator in exceptional circumstances like a quote of unrealistic or unjustified prices in Reverse Auction



Section -1 Requirement with Terms & Conditions

The System Integrator shall be required to supply, install, implement and support, inter-operable, integrated solution. The System Integrator shall be required to undertake and perform tasks, render requisite services and make available appropriate resources as may be required for the successful completion of the entire assignment at no additional cost to StockHolding.

The detailed specifications and requirements on each of the areas mentioned are available in this document and are indicative. However, StockHolding reserves the right to change the scope of the tender considering the size and variety of the requirements and the changing conditions.

The System Integrator shall ensure and be responsible for the successful designing, provisioning, implementation, and completion of the "Data Centre, Campus and access switching and routing Network Solution." as per the requirements for setting up of the enterprise switching and routing solution for StockHolding on a Turnkey basis. The System Integrator will be responsible for:

- · Overall Project Management.
- · Systems integration of the various components.
- Supply and installation of Layer 2 and Layer 3 switches and segregation of user VLAN and Server
- VLAN, routing in internal LAN, WAN, 3 site storage replication within the infrastructure.
- Formulating and implementing the backup policy in consultation with StockHolding.
- Formulating and implementing switching and routing across disaster recovery solutions based on StockHolding's requirement as mentioned in the Tender and consultation with StockHolding.
- The detailed scope of work for each area is mentioned in the respective sections.
- Complete implementation of the secure "Data Centre, Campus and access switching and routing Network Solution."

The System Integrator shall provide comprehensive training to the in-house StockHolding team and users as per StockHolding's recommendation on usage/processes/ procedures/tools etc. for managing the Data Centre, Campus, and access switching and routing operations including all the systems supplied and installed therein.

The System Integrator shall provide on-site support and services at StockHolding's Mahape and Bangalore on a 24 x 7 x 365 basis as mentioned in Section 5 – Service Level Agreement during the implementation and post implementation phase of the project. The System Integrator shall explicitly indicate, in the technical bids, the details of persons factored in the bid with skill /certification levels.

The System Integrator shall start the Project from the date of issuance of a purchase order by StockHolding. Detailed Scope of Work is given in Section 4 along with Technical Specifications and Deliverables, in Section 2.

1.1 Eligibility Criteria:

Interested System Integrators, qualifying for the "Data-centre switches refresh" RFP should have expertise and experience in design, implementation of IT- Infrastructure and security for enterprise networks satisfying the eligibility criteria as stated in this document. Hence, only eligible System Integrators are requested to attend the pre-bid meeting as per the schedule provided in RFP.

Page **7** of **66**



The System Integrator and OEM will be solely responsible for the complete end-to-end life cycle of the project including deployment, vendor management (consolidation and migration, integration, and on going support as a part of the "Data Centre, Campus and access switching and routing network Solution."

Only those System Integrators who fulfill the following criteria are eligible to respond to the RFP. Document/s in support of all eligibility criteria are required to be submitted along with the Technical Bid. Offers received from the System Integrators who do not fulfill any of the following eligibility criteria are liable to be rejected. As sole discretion of StockHolding.

Eligibility Criteria (Documents to be submitted online along with Technical Bid)

The following are the key qualification criteria:

S/N	Criteria	Documents to be Submitted by System Integrator/OEM
1.	The System Integrator is a company/firm incorporated in India having an Annual Turnover of Rs.100.00 crores in the previous three financial years i.e. 2017-18, 2018-19, and 2019-20. This must be individual company turnover and not a group of companies.	Relevant documents of registration
2.	The System Integrator should be in operating profit in two years in the last three audited financial years i.e. 2017-18, 2018-19, and 2019-20.	Copy of audited balance sheet of the company showing the same should be submitted
3	The System Integrator should be Original Equipment Manufacturer [OEM] or authorized Gold or Premium of OEM, and must bid for a complete solution	MAF as per the format specified in Annexure -10
4.	The System Integrator should bid for any OEMs who are part of the respective Gartner Leader Quadrant for Data Centre Networking infrastructure for the last one year and Wired and wireless infrastructure for the last 1 year.	Gartner report to be submitted. System Integrator Must bid for both a) the DC switches as well as b) Access/Campus Switches.
5.	The System Integrator should be in the business of supply, installation, configuration, maintenance, and support of network hardware for at least five [5] years as of the date of this RFP.	Proof of same to be attached by way of purchase order OR Project Completion Certificate from the customer by mentioning the time frame clearly etc.
6.	The System Integrator should not be blacklisted by any Government Body. PSU, Bank, NGO, Autonomous body due to any reason	Self-declaration by the System Integrator on its Letter Head duly signed by the Authorized Signatory
7.	The System Integrator should have at least five enterprises/corporate customers in India in the last three financial years where System Integrator has undertaken System Integration and deployment projects related to Switching and routing technology with the integration of more than 200+ network devices.	Details of service/support network (addresses, names of contact persons, phone numbers, e-mail, etc.) must be furnished as part of the bid.



8.	The System Integrator quoting the solution should have at least 5 Expert level certified Engineers, 10 Professional levels certified engineering, and 20+ Associate level engineers. Certified by OEM	Resources expected to be deployed from the selected System Integrator side with their profile should be submitted along with the response to the RFP.
9.	System Integrator must abide by applicable labor laws, human rights, and regulations in their regions of business. System Integrator need to adhere to laws addressing child forced or trafficked labor	Self-declaration from a vendor on their letterhead duly signed by authorized signatory

Terms and Conditions

- The financial bid submitted by the System Integrator shall be in conformity with the payment terms proposed by StockHolding. It shall have the right to withhold any payment due to the System Integrator, in case of delays or defaults on the part of the System Integrator. Such withholding of payment shall not amount to default on the part of StockHolding.
- > The successful System Integrator shall be responsible for managing the activities of its personnel and/or the personnel and will be accountable for the same. The System Integrator shall be vicariously liable for any acts, deeds, or things done by their employees, agents, contractors, subcontractors, etc. which is outside the scope of power vested or instructions issued by StockHolding.
- > The System Integrator shall provide full co-operation to other agencies working in the premises and shall follow the instruction of the site in charge. No extra claims shall be entertained on account of any hindrance in work, the System Integrator needs to provide prerequisites at the time of bid submission.
- On receipt of intimation from StockHolding of the acceptance of its bid, the successful System Integrators shall be bound to implement the contract and in indication, thereof shall sign an agreement with StockHolding

1.2 Site Particulars

Non-familiarity with the site conditions will not be considered a reason either for extra claims or for not carrying out the work in strict conformity with the timelines and specifications. Successful System Integrator is expected to familiarize themselves with the site conditions.

1.3 Time Schedule

StockHolding expects to complete the entire project in 3 months as per the broad project schedule and phases are given in Scope of Work, <u>Project Schedule, Phases, and Milestones</u>. The start date for the project will commence from the date the purchase order was issued on the successful System Integrator by StockHolding.

The delivery of the Networking components/equipment's shall commence within 10-12 weeks of the issue of a purchase order



1.4 Acceptance Criteria

There will be acceptance tests by StockHolding and/or its nominated consultants after the installation of the switches and necessary cabling at the site. In case of discrepancy in hardware/network cabling supplied StockHolding reserves the right to cancel the entire contract agreement and the System Integrator should take back their equipment at their expenses and risks. The acceptance test will be arranged by the System Integrator at the respective site in the presence of the officials of StockHolding.

The Acceptance Test shall be as per the comprehensive "Acceptance Test Plan" document to be approved StockHolding, which shall contain various tests to be performed for acceptance of the switching functionalities, redundancy tests. The Acceptance Test shall be deemed to be complete only on successful completion of the acceptance tests as decided and issuance of the "Acceptance Certificate" by StockHolding to the System Integrator.

The System Integrator shall create the "Acceptance Test Plan" document and the same will be reviewed by StockHolding.

On the evaluation of the Acceptance Test results and if required performed of the entire switching/solution, as observed during the Acceptance Test, the System Integrator shall take remedial measures including up-gradation of the switching architecture or any component thereunder, including replacement thereof, at no additional cost to StockHolding, to ensure that the switching solution meets the requirements of StockHolding as envisaged in the Tender Document.

The System Integrator should ensure that the test will involve the trouble-free operation of the complete switching and routing/solution apart from physical verification and testing and that there shall not be any additional charges payable by StockHolding to carry out this acceptance test.

The System Integrator shall ensure to supply all the components (hardware/software) of the advanced/latest and stable versions available in the market as a part of the implementation of "DC Switching & Security Solution".

The System Integrator shall ensure that all the networking components and accessories, licenses, transceivers, connectors, etc. delivered at the Data Centre are of the advanced/latest technologically stable versions available in the market as a part of the implementation of the "Data centre, campus and access switching and routing solution".

In all cases, the System Integrator shall have the sole responsibility for bearing all additional charges, cost, or expenses incurred in correcting, reworking, or repairing the defective or non-confirming hardware/equipment/components/items required for the implementation of the "Data centre, campus and access switching and routing solution".



1.5 Security

The System Integrator shall be held entirely responsible for the security and the protection of their works at all times during their work within premises. They shall be deemed to have factored in for all costs associated therewith. System Integrator shall comply with all security and decorum requirements of StockHolding.

1.6 Defect Liability

Any defect which may appear either in materials or workmanship within a period of 12 (twelve) months or as stipulated at the time of finalization of the contract, from the date of completion of work shall be rectified and deficiencies made good by System Integrator at his own cost. No extra claims shall be payable on any account.

1.7 Partial Occupancy of Services

During the progress of the work, completed portions of various systems may be occupied and put to use by StockHolding. The System Integrator shall, however, remain fully responsible for the maintenance of installation till the entire work covered by the contract is satisfactorily completed and handed over to StockHolding.

Delay in performance of the obligations by the System Integrator

The System Integrator shall strictly adhere to the implementation schedule, specified in the contract agreement to be executed between StockHolding and the System Integrator for the performance of the obligations arising out of the contract agreement and any delay will enable StockHolding to resort to either or both of the following:

- The System Integrator shall be liable to pay StockHolding liquidated damages at the rate of 0.5% (i.e., one-half percent) of the Contract Amount for delayed performance per week of such delay, subject to a maximum of 5% of the Contract Amount.
- Termination of the contract agreement fully or partly and claim by StockHolding of liquidated damages.

All disputes or differences whatsoever arising between the parties out of or in relation to the installation and implementations of switches, meaning and operation or effect of these Tender Documents or breach thereof shall be settled amicably. If, however, the parties are not able to resolve them amicably, the same shall be settled by arbitration in accordance with the applicable Indian Laws, and the award made in pursuance thereof shall be binding on the parties.

1.8 Publicity

Any publicity by the System Integrator in which the name of StockHolding is to be used should be done only with the explicit written permission of StockHolding.

1.9 Sensitive Information

Any information considered sensitive must be protected by the System Integrator from unauthorized disclosure, modification, or access. Types of sensitive information that will be found on StockHolding systems the System Integrator may support or have access to include but are not limited to: Information subject to special statutory protection, legal actions, disciplinary actions, complaints, IT security, pending cases, civil and criminal investigations, etc. The System Integrator shall undertake to adhere to the precincts of the IS Policy of StockHolding.



1.10 Corrupt and Fraudulent Practices

As per Central Vigilance Commission (CVC) directives, it is required that System Integrators/Suppliers/ Contractors observe the highest standard of ethics during the procurement and execution of such contracts in pursuance of this policy:

"Corrupt Practice" means the offering, giving, receiving, or soliciting of anything of values to influence the action of an official in the procurement process or contract execution, AND "Fraudulent Practice" means a misrepresentation of facts to influence a procurement process or the execution of the contract to the detriment of StockHolding and includes collusive practice among System Integrators (before or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive StockHolding of the benefits of free and open competition.

StockHolding reserves the right to reject a proposal for award if it determines that the System Integrator recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

StockHolding reserves the right to declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if at any time it determines that the firm has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

1.11 Validity of Quotes

All the prices, technical specifications, and other terms and conditions of the offer proposed by the System Integrator shall be **valid** for a **minimum** period of 3 **months from the date of submission of the bid**.

1.12 Right to Verification

StockHolding reserves the right to verify any or all statements made by the System Integrator in the tender document and to inspect the System Integrator's facilities, if necessary, to establish to its satisfaction about the System Integrator's capacity to perform the job.

StockHolding if deemed fit, will inspect any or all of the Components/networking equipments at System Integrator's warehouse before shipment to StockHolding, to verify that the networking equipments (hardware and software components/media) and Systems supplied to StockHolding are as per the technical specification specified in the purchase agreement.

1.13 Warranty

The warranty should be for a minimum period of three years on-site and comprehensive and BACK-TO-BACK from OEM from the date of installation. During the entire period of 3 years (36 months) support, the System Integrator will have to undertake comprehensive maintenance of the entire equipments supplied and provide onsite support with SLA as mentioned in Section 5: Service Level requirements.

The System Integrator will warrant all the hardware and software against defects arising out of faulty design, materials provided to us. The System Integrator will provide support for hardware and pre-installed software components including switch operating system during the warranty period. If the pre-installed operating system software (IOS) is not latest one, then System Integrator will download and install the latest and stable (n-1) IOS on all the switches deployed in the StockHolding network. Defective hardware shall be replaced by the System Integrator at his own cost, including the cost of transport.



The System Integrator warrants that the Goods supplied under the contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract.

The warranty should cover all parts including updates, upgrades of software, maintenance, or support for its proper operation, performance, and output as specified in the RFP technical specifications for 36 months from the date of installation at StockHolding's Data Centre Mahape and Bangalore location with no additional cost attached to it.

The System Integrator shall make available the spare parts, components, etc. for the equipments for a warranty period of 3 years. If any of the peripherals/components are not available during the warranty period, the substitution shall be carried out with peripherals/components of equivalent or higher capacity or higher switch model.

Further, provided that StockHolding may, during the currency of the warranty, shifts the goods wholly or in part to other location(s) within the country and in such case, the supplier undertakes to continue to warrant, maintain the goods at the new location without any other additional cost to StockHolding.

The selected System Integrator shall provide the preventive maintenance schedules per quarter, which shall be specified in advance as and when required.

The list of critical and hot-swappable spares, the System Integrator proposes to stock at the site for the entire period of 3 years should be furnished separately.

Further, during the warranty and post-warranty period, a proportionate penalty will be levied in case of downtime of the networks, which shall include an extension of the warranty period to the extent of downtime.

1.14 Order Cancellation and Termination

StockHolding reserves its right to cancel the order in the event of one or more of the following situations that are not occasioned due to reasons solely and directly attributable to StockHolding alone:

Prior to the delivery of the network switches, StockHolding may at any time terminate the contract by gaining one month after the normal delivery schedule, If the System Integrator becomes bankrupt or otherwise insolvent. Termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to StockHolding.

StockHolding reserves the right to cancel the contract in the event of happening one or more of the following conditions.

- Failure of the successful System Integrator to accept the order.
- Delay in delivery beyond the normal delivery schedule of 10-12 weeks, post which StockHolding will initiate a penalty clause as per section 5 for a maximum period of 4 weeks post which StockHolding will be in a position to go ahead with entire Order Cancellation.
- A serious discrepancy in the quality of service/hardware/software is expected during the implementation, rollout, and subsequent maintenance process.



Delay in completing installation/implementations and accepting tests/checks beyond the specified period
of 3 months.

1.15 Taxes & levies

All-Inclusive except for GST. GST payable extra at actual as per prevailing rates.

1.16 Payment Terms

- (a) 60% payment after ensuring power-on self-test on an entire bill of material (hardware and software) and submission of an original tax invoice and delivery challan duly certified by shell official/branch officials(s),
- **(b)** Balance 30% payment on by StockHolding official(s) after complete implementation/integration of switches in Data Centre and 3-years warranty confirmation on the letterhead of OEM as well as System Integrator letterhead with duly signed by the Authorized Signatory (With all details) mentioning the serial numbers of switches.
- (c) Balance 10% payment on submission of bank guarantee (BG) for 10% of purchase order value from banks other than co-operative banks and BG should be valid for an entire warranty period of Data Centre, Campus, and access switches
- (d) Deduction of Income Tax, Goods and Services Tax, and other applicable statutory duties would be as per the extant rules/laws.
- **(e)** Quarterly advance payment towards vendor support during warranty period except for last quarter payment which is done at end of the quarter.

All the above documents are to be submitted at StockHolding's Mahape office for payment processing

1.17 Refund of Earnest Money Deposit (EMD)

- (a) EMD will be refunded to the successful System Integrator, only after completion of delivery. In all respects to the satisfaction of the purchaser.
- (b) In case of unsuccessful System Integrators, the EMD will be refunded to them through NEFT within 15 days of the Reverse Auction
- (c) For System Integrators not qualified in the technical bid, the EMD will be refunded to them through NEFT within 15-20 working days of opening the technical bid
- (d) FORFEITURE OF E.M.D.:

The EMD made by the tenderer will be forfeited if -

- a. He withdraws his tender after acceptance.
- b. He withdraws his tender before the expiry of the validity period of the tender.
- c. He violates any of the provisions of the terms and conditions of this tender specification.

1.18 Force Majeure

The System Integrator will not be held responsible for breach of executing any obligation or delay in executing any obligations during below given circumstances/conditions:

- (a) War, Riots, Strike, Fire, Flood, Earthquake, Storm, Epidemic/Pandemic breakout, Power failure, Theft, etc.
- (b) Any Governmental priorities (Necessary proof for validation viz. Govt. Gazette notifications, Leading Newspaper reports, etc. should be made available) (c) Sabotage or omission of StockHolding



1.19 Dispute Resolution

In the event of any dispute arising out of or in connection with this Order, the parties shall use their best endeavour to resolve the same amicably AND if the dispute could not be settled amicably, the matter shall be settled in the court under Mumbai jurisdiction only. The final payment will be released only after the System Integrator complies with the above-mentioned clause

1.20 Right to alter RFP

- (a) StockHolding reserves the right to alter the RFP terms and conditions at any time before submission of the bids
- (b) StockHolding reserves the right to cancel the RFP by giving 60 days' notice to the bidder.
- (c) StockHolding reserves the right to purchase a similar device from anyone else within the contractual period should the need arise.
- (d) StockHolding reserves the right to modify, amend, alter and/or cancel the entire RFP at any stage without assigning any reason whatsoever.

StockHolding's decision in this regard will be final and binding on all System Integrators

1.21 No Commitment to accept lowest or any other bid (RFP)

StockHolding shall be under no obligation to accept the lowest or any other offer received in response to this tender (RFP) notice. StockHolding further reserves the right to reject any or all offers based on its evaluation of the offers received, or based on stability, capabilities, track records, reputation among users, and other similar credentials of a System Integrator. When StockHolding makes any such rejection, StockHolding will not be bound to give any reason and/or justification in this regard to the System Integrator.

1.22 Integrity Pact

The System Integrator will have to enter into an Integrity Pact with Stock Holding Corporation of India Limited. The format (text) for the Integrity Pact is provided as **Annexure - 6.** The System Integrator will have to submit a signed and stamped copy of the Integrity Pact by the authorized signatory.

1.23 Non-Disclosure Agreement (NDA)

The successful System Integrator will sign a Non-Disclosure Agreement (NDA) with Stock Holding Corporation of India Limited. The draft text of the NDA will have to be approved by the legal department of Stock Holding Corporation of India Limited

1.24 Indemnify

The System Integrator should hereby indemnify, protect and save StockHolding against all claims, losses, costs, damages, expenses, action suits, and other proceedings, resulting from infringement of any patent, trademarks, copyrights, etc. or such other statutory infringements in respect of all the equipment offered by the System Integrator. Any publicity by System Integrator in which the name of StockHolding is used should be done only with the explicit permission of StockHolding.



1.25 Exit clause

StockHolding reserves the right to terminate this Agreement by giving a 02-month notice, if it is not satisfied with the Services. The reasonable number of incidents of the non-performance of the obligations as per this Agreement will be provided before the termination notice is served on the. In case of termination, payments due till the date of termination only would be paid. The balance payment for the remaining Agreement Term will not be paid to the System Integrator

1.26 For the System & Other Software, the following will apply:

The Supplier shall provide complete and legal documentation of equipment, all subsystems, operating systems, compiler, system software, and the other software. The Supplier shall also provide licensed software for all software products, whether developed by it or acquired from others. The Supplier shall also indemnify StockHolding against any levies/penalties on account of any default in this regard.

Section 2 - Technical Specifications

2.1 Introduction to Technical specifications

The System Integrator should consider all IT components that are required to make the Network & Security Operations fully operational in a comprehensive manner and implement "Data Centre, Campus and access switching and routing Network Solution." Specifically, the System Integrator should consider the following in their response to this tender:

- · Primary Data Centre Connectivity.
- 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.

The System Integrator shall ensure that solutions proposed by him are in line with the following principles laid down by StockHolding:

- High Availability
- Scalability
- · Security and
- Reliability

StockHolding has more than 200+ branches set up across pan India. All the branches are fully networked and are connected to the Data Centre (DC) Mahape, Navi Mumbai, and Disaster Recovery Centre (DR) at, Bangalore through MPLS Wide Area Network (WAN). WAN consists of more than 200+ branches connected through Backhaul MPLS links at DC Mahape as well as DR Bangalore via around 200+ MPLS links and 108 WIMAX



connections as a backup. StockHolding also has a Near Disaster Recovery site (NDR) at Airoli to hosts its Storage, LAN, WAN, Extranet to provide zero data loss.

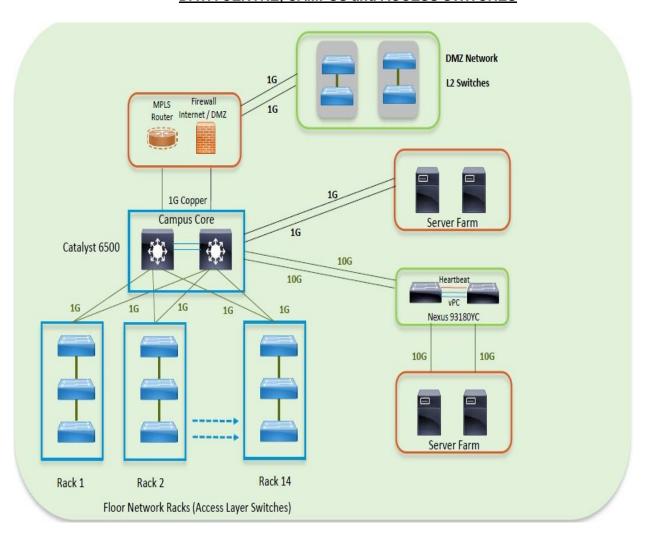
Most of the branches are now connected on Stock Holding's MPLS cloud from multiple MPLS service providers and having two separate links from two different service providers, wherever possible. Currently, StockHolding is using Cisco 6509 Supervisor engine 7 in VSS as core switches in the Data centre network. The current architecture is Core + Access Layer and the same needs to be revamped with Core + Distribution + Access Layer along with segregation of secure switching and routing topology with internal firewall architecture. In the designed architecture, we have provided an existing network architecture diagram along with a proposed network architecture diagram.

As StockHolding's current network backbone is on 1GB Ethernet and all the switches in campus, DC and DR network are end of life and due for a refresh, hence no development and no Technical Assistance Centre support is available for these switches from OEM. StockHolding is having a roadmap for Software Defined Network (SDN) and virtualized environment (VDI) wherever possible in DC and DR, which requires the up-gradation from existing 1G to high bandwidth 10G network access for servers. The user systems are already upgraded from 100mbps to 1G and there is a need for upgrading the switches to 1G user port and 10G Uplink. Also, servers support dual-homing (teaming) functionality but the current network architecture in the server farm does not support Active-Active design.

2.2 Network Diagrams

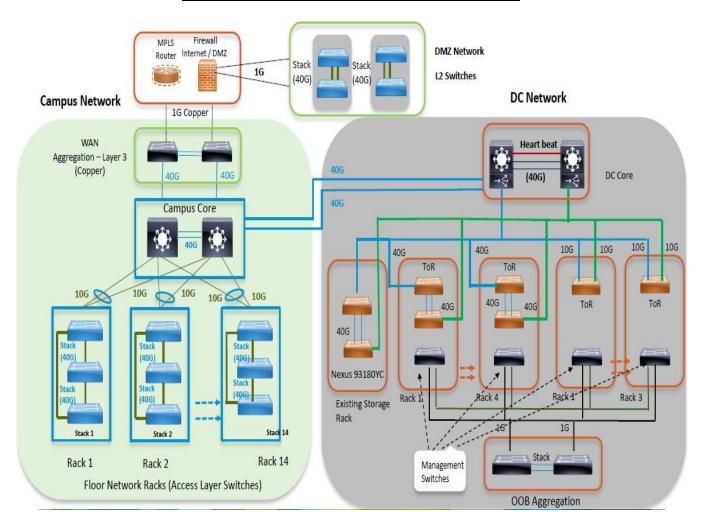
2.2.1 Existing Network Diagram





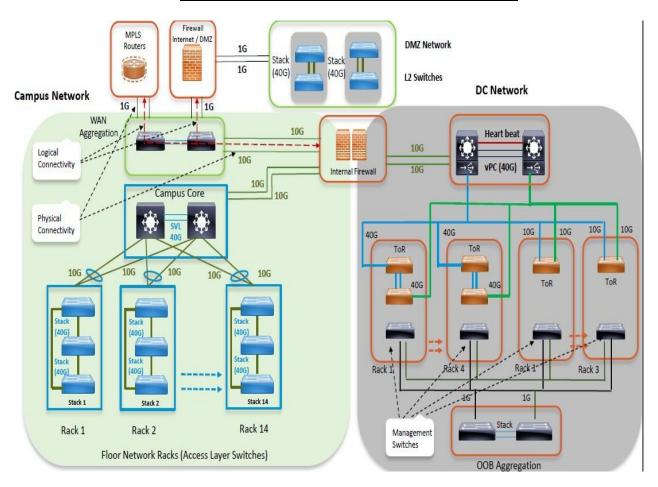
2.2.2 Proposed Network Diagram - I





2.2.3 Proposed Network Diagram: 2





Technical Specification of Switches. (Annexure - A)

System Integrators participating in the "Request for proposal for Data-centre, Campus and access switches refresh" have to provide quotes for the "Data-centre, Campus and access Switches" network. I.e. Data-Centre Core, Data-Centre Access Switches, Campus Core, and Campus access switches, and accordingly System Integrator has to consider and quote for the uplink cables, SFP Modules in Data-centre switches as these switches will be directly connected to Data-centre switches.

All switches supplied under DC campus and access switches should be provided with redundant power supplies

Data-Centre Core Switch Specification:



	Spine (40/100G Fiber) Switch Specification		
Serial Number	Solution Requirement		
1	The OEM for the proposed switches/devices should be part of the Gartner Leader Quadrant for DC Networking for the last 1 years		
2	The Release date of the switch should be after 2020 onwards and it should not declared the end of the sale as on date and be supported by OEM for minimum 8 years from the date of purchase.		
3	End of Sale should have not to be declared for the proposed network switch model.		
4	The Switch should support non-blocking Layer 2 switching and Layer 3 routing.		
5	Switch should be 1 RU from factor		
6	The Switch used have the capability to function in line rate for all ports		
7	Switch should support the complete STACK of IPv4 and IPv6 services.		
8	All the relevant licenses for features asked in RFP should be included in the solution and features should be supported from Day 1		
9	Switch and optics should be from the same OEM and not third party		
	Hardware and Interface Requirement		
1	Switch should have the following interfaces:		
	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		
2	Switch should have console port for local management & management interface for Out of band management.		
3	Switch should be rack mountable and support side rails if required		
4	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.)		
5	Switch should be provided with power redundancy (Dual power supply).		
	Performance Requirement		
1	Switch should support minimum 64 VRF instances with route leaking functionality.		
2	The switch should support minimum 128k IPv4 LPM routes.		
3	Switch should have minimum 32MB system packet buffer. (Packet buffer should enough to support port density)		
4	The switch should support minimum 4k multicast routes.		
5	Switch should support minimum 6.4 Tbps of bi-directional switching capacity and 2 bpps forwarding rate.		
	Network Virtualization Features		
1	Switch should support SDN and Network Virtualization using Virtual Over Lay Network using VXLAN (RFC 7348)		
	Layer2 Features		
1	Spanning Tree Protocol (IEEE 802.1D, 802.1W, 802.1S)		
2	Switch should support VLAN Trunking (802.1q)		



4 Switch should support VLAN tagging (IEEE 802.1q) 5 Switch should support IEEE Link Aggregation and Ethernet Bonding functionality (IEEE 802.3a to group multiple ports for redundancy 6 Switch should support Link Layer Discovery Protocol as per IEEE 802.1AB for finding media lefailures 7 The switch should support BGP EVPN (RFC 7432) Route Type 2, Type 4 and Route Type 5 for the overlay control plane Layer3 Features 1 Switch should support static and dynamic routing 2 Switch should provide multicast traffic reachable using: a. PIM-SM (RFC 4601)
to group multiple ports for redundancy Switch should support Link Layer Discovery Protocol as per IEEE 802.1AB for finding media le failures The switch should support BGP EVPN (RFC 7432) Route Type 2, Type 4 and Route Type 5 for the overlay control plane Layer3 Features Switch should support static and dynamic routing Switch should provide multicast traffic reachable using: a. PIM-SM (RFC 4601)
6 Switch should support Link Layer Discovery Protocol as per IEEE 802.1AB for finding media lefailures 7 The switch should support BGP EVPN (RFC 7432) Route Type 2, Type 4 and Route Type 5 for the overlay control plane Layer3 Features 1 Switch should support static and dynamic routing 2 Switch should provide multicast traffic reachable using: a. PIM-SM (RFC 4601)
failures The switch should support BGP EVPN (RFC 7432) Route Type 2, Type 4 and Route Type 5 for the overlay control plane Layer3 Features Switch should support static and dynamic routing Switch should provide multicast traffic reachable using: a. PIM-SM (RFC 4601)
the overlay control plane Layer3 Features Switch should support static and dynamic routing Switch should provide multicast traffic reachable using: a. PIM-SM (RFC 4601)
1 Switch should support static and dynamic routing 2 Switch should provide multicast traffic reachable using: a. PIM-SM (RFC 4601)
2 Switch should provide multicast traffic reachable using: a. PIM-SM (RFC 4601)
a. PIM-SM (RFC 4601)
b. PIM-SSM (RFC 3569)
c. Support Multicast Source Discovery Protocol (MSDP)
d. IGMP v1, v2 and v3
3 Switch should support Multicast routing.
Quality of Service
1 Switch system should support 802.1P classification and marking of packet using:
a. CoS (Class of Service)
b. DSCP (Differentiated Services Code Point)
Switch should support for different type of QoS features for ream time traffic differential treatm using
a. Weighted Random Early Detection or Equivalent feature.
b. Strict Priority Queuing
Switch should support to trust the QoS marking/priority settings of the end points as per the defined policy
Security
Switch should support control plane Protection from unnecessary or DoS traffic by control plane protection policy
Switch should support for external database for AAA using:
RADIUS
Switch should support to restrict end hosts in the network. Secures the access to an access of trunk port based on MAC address. It limits the number of learned MAC addresses to deny MA address flooding
Switch should support for Role Based access control (RBAC) for restricting host level network access as per policy defined
5 Switch should support Spanning tree BPDU Protection or Equivalent feature.
Manageability
Switch should support for sending logs to multiple centralized syslog server for monitoring and audit trail
2 Switch should provide remote login for administration using:
a. Telnet



	b. SSHv2
3	Switch should support for capturing packets for identifying application performance using local and remote port mirroring for packet captures
4	Switch should support for management and monitoring status using different type of Industry standard NMS using:
	a. SNMP v1 and v2, SNMP v3 with Encryption, Streaming telemetry should be supported on the proposed switch.
5	Switch should provide different privilege for login in to the system for monitoring and management
6	OEM should provide 24*7 support with 4 hours part replacement
7	OEM should have service depot across metro cities in India
8	OEM should provide public references for all of the above specifications / features mentioned.

Data-Centre Access Switch Specification:

Copper (100MB/1G/10G Copper) Switch Specification	
Serial Number	Feature Set
1	Solution Requirement
1.1	The OEM for the proposed switches should be part of Gartner Leader Quadrant for DC Networking for last 1 year.
1.2	The Release date of the switch should be after 2020 onwards and it should not declared end of sale as on date and to be supported from OEM for minimum 8 years from the date of purchase.
1.3	End of Sale should have not be declared for proposed network switch model.
1.4	Switch should be 1 RU from factor
1.5	The Switch should support non-blocking Layer 2 switching and Layer 3 routing
1.6	Switch should support the complete STACK of IPv4 and IPv6 services.
1.7	The Switch used have the capability to function in line rate for all ports
2	Hardware and Interface Requirement
2.1	Switch should have the following interfaces:
	a. 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
2.2	Minimum system memory 16 GB. (Device flash and memory can be sufficient to take update of software till EOL. & device memory should be sufficient according to port density.)
2.3	Switch should have console port for local management & management interface for Out of band management
2.4	Switch should be rack mountable and support side rails if required
2.5	Switch should be provided with power redundancy (Dual power supply)
2.6	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.)
2.6 3	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



3.2	Switch should support minimum 64 VRF instances with route leaking functionality.
3.3	The switch should support 128K IPv4 LPM routes.
3.4	Switch should have minimum 32MB system packet buffer. (Packet buffer should enough to support density)
3.5	The switch should support minimum 4k multicast routes
3.6	Switch should support minimum 2.16 Tbps of switching capacity
4	Network Virtualization Features
4.1	Switch should support SDN and Network Virtualisation using Virtual Over Lay Network using VXLAN (RFC 7348)
5	Layer2 Features
5.1	Spanning Tree Protocol (IEEE 802.1D, 802.1W, 802.1S)
5.2	Switch should support VLAN Trunking (802.1q)
5.3	Switch should support minimum 64K no. of MAC addresses
5.4	Switch should support VLAN tagging (IEEE 802.1q)
5.5	Switch should support IEEE Link Aggregation and Ethernet Bonding functionality (IEEE 802.3ad) t group multiple ports for redundancy
5.6	Switch should support Link Layer Discovery Protocol as per IEEE 802.1AB for finding media level failures
5.7	The switch should support BGP EVPN (RFC 7432)
6	Layer3 Features
6.1	Switch should support static and dynamic routing
6.2	Switch should provide multicast traffic reachable using:
	a. PIM-SM (RFC 4601)
	b. PIM-SSM (RFC 3569)
	c. Support Multicast Source Discovery Protocol (MSDP)
	d. IGMP v1, v2 and v3
7	Quality of Service
7.1	Switch system should support 802.1P classification and marking of packet using:
	a. CoS (Class of Service)
	b. DSCP (Differentiated Services Code Point)
7.2	Switch should support for different type of QoS features for ream time traffic differential treatment using
	a. Weighted Random Early Detection or Equivalent feature
	b. Strict Priority Queuing
7.3	Switch should support to trust the QoS marking/priority settings of the end points as per the define policy
8	Security
8.1	Switch should support control plane Protection from unnecessary or DoS traffic by control plane protection policy
8.2	Switch should support for external database for AAA using:
	RADIUS
8.3	Switch should support to restrict end hosts in the network. Secures the access to an access or trunk port based on MAC address. It limits the number of learned MAC addresses to deny MAC
24 of (StockHolding / Information Tochnology



	address flooding
8.4	Switch should support for Role Based access control (RBAC) for restricting host level network access as per policy defined
8.5	Switch should support Spanning tree BPDU Protection or Equivalent feature.
9	Manageability
9.1	Switch should support for sending logs to multiple centralized syslog server for monitoring and audit trail.
9.2	Switch should provide remote login for administration using:
	a. Telnet
	b. SSHv2
9.3	Switch should support for capturing packets for identifying application performance using local and remote port mirroring for packet captures
9.4	Switch should support for management and monitoring status using different type of Industry standard NMS using:
	a. SNMP v1 and v2, SNMP v3 with Encryption, Netconf/YANG, and Streaming telemetry should be supported on the proposed switch.
9.5	Switch should provide different privilege for login in to the system for monitoring and management
10	General
10.1	All the relevant licenses for features asked in RFP should be included in the solution and features should be supported from Day 1
10.2	Switch and optics should be from the same OEM.
10.3	OEM should provide 24*7 support with 4 hours part replacement.
10.4	OEM should have service depot to across metros cities and should submit the details of depots to meet the SLA for 4 hours part replacement.
10.5	OEM should provide public references for all of the above specifications / features mentioned.

Campus Core Fibre Switch Specification:

	Fiber (1G/10G/25G) Switch Specification	
1	General Features :	
1.1	The OEM of the proposed switches/devices should be part of the leader's quadrant for Gartner's List of Wired and Wireless LAN Infrastructure for last 1 year.	
1.2	The Release date of the switch should be after 2020 onwards and it should not declared end of sale as on date and to be supported from OEM for minimum 8 years from the date of purchase.	
1.3	End of Sale should have not be declared for proposed network switch model.	
1.4	Switch shall be 1U to 3U and rack mountable in standard 19" rack.	
1.5	Minimum 24 ports support 1/10/25G SFP28 ports and minimum 4-port 40/100G for uplink with QSFP+	
1.6	Switch shall 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.)	
1.8	Switch shall have hot swappable 1:1 redundant internal power supply and redundant fan.	



1.9	Switch shall support our current switch feature i.e. VSS or equivalent feature 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.)
2	Performance :
2.1	Switching system shall have minimum 1.5 Tbps of switching fabric and minimum 1Bpps of forwarding rate.
2.2	Switching system shall have minimum 64K MAC Addresses and minimum 500 VLANs.
2.3	Switch should support minimum 5K ACLs.
2.4	Switch should support minimum 4K IPv4 Multicast routes.
2.5	Switch should support minimum 4K IPv6 Multicast routes.
2.6	Switch should support minimum 32K IPv4 routes.
2.7	Switch should support minimum 32K IPv6 routes.
2.8	Switch shall support application visibility and traffic monitoring with minimum 10K sflow/jflow/netFlow entries.
2.9	Minimum Packet buffer : 32 MB (Packet buffer should enough to support port density)
2.10	The device should be IPv6 from day one.
3	Functionality:
3.1	Switch should support modular operating system
3.2	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
3.3	The switch should support L2 encryption between switches.
	Must support BGP, IS-IS, VRF, VXLAN, OSPF Routed Access, Policy-Based Routing (PBR), PIM
3.4	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1
3.4	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1 Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict
	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1
3.5	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1 Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing 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
3.5	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1 Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing 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.
3.5 3.6 3.7	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1 Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing 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. Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security.
3.5 3.6 3.7 3.8	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1 Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing 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. Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security. IPv6 support in hardware, providing wire rate forwarding for IPv6 network Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment. Eight egress queues per port for different types.
3.5 3.6 3.7 3.8 3.9	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1 Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing 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. Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security. IPv6 support in hardware, providing wire rate forwarding for IPv6 network Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment.
3.5 3.6 3.7 3.8 3.9 3.10	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1 Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing 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. Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security. IPv6 support in hardware, providing wire rate forwarding for IPv6 network Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment. Eight egress queues per port for different types. Switch should have functionality for multiple checks such as checksum, integrity, corruption etc are
3.5 3.6 3.7 3.8 3.9 3.10 3.11	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1 Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing Switch should support management features like SSHv2, SNMPv3c, 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. Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security. IPv6 support in hardware, providing wire rate forwarding for IPv6 network Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment. Eight egress queues per port for different types. Switch should have functionality for multiple checks such as checksum, integrity, corruption etc are done during boot time. To check integrity, Authentic OS, firmware and BIOS.
3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12	SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1 Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing 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. Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security. IPv6 support in hardware, providing wire rate forwarding for IPv6 network Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment. Eight egress queues per port for different types. Switch should have functionality for multiple checks such as checksum, integrity, corruption etc are done during boot time. To check integrity, Authentic OS, firmware and BIOS. Support for detecting Unidirectional links failure and disable link to avoid loop inside the network



3.16	Programmable ASIC templates to maximize the resources on switch like - MAC address table, Unicast multicast routing etc.
4	General:
4.1	Switch shall conform to UL 60950, IEC 60950, CSA 60950, EN 60950 Standards
4.2	All the relevant licenses for features asked in RFP should be included in the solution and features should be supported from Day 1
4.3	Switch and optics should be from the same OEM
4.4	OEM should provide 24*7 support with 4 hours part replacement
4.5	OEM should have service depots across metro cities in India.
4.6	OEM should provide public references for all of the above specifications / features mentioned.

Campus Core Copper Switch Specification:

Serial Number	General Specifications
1.1	General Features :
1.1.1	The OEM of the proposed switches/devices should be part of the leader's quadrant for Gartner's List of Wired and Wireless LAN Infrastructure for last 1 year.
1.1.2	The Release date of the switch should be after 2020 onwards and it should not declared end of sale as on date and to be supported from OEM for minimum 8 years from the date of purchase.
1.1.3	End of Sale should have not be declared for proposed network switch model.
1.1.4	Switch should be 1U and rack mountable in standard 19" rack.
1.1.5	Switch should support internal hot-swappable Redundant Power supply from day 1.
1.1.6	Switch should have redundant hot swappable fans.
1.1.7	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.)
1.1.8	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 320 Gbps of stacking throughput.
1.2	Performance :
1.2.1	Switch shall have minimum 256 Gbps of switching fabric and minimum 190 Mbps of forwarding rate.
1.2.2	Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.
1.2.3	Should support minimum 16K IPv4 routes or more and 8K IPv6 routes or more
1.2.4	Switch shall have 2K or more multicast routes.
1.2.5	Switch should support at least 64K flow entries



1.2.6	Switch should support RPVST and MSTP Instances.
1.2.7	Switch should have 16MB or more packet buffer. (Packet buffer should enough to support port density)
1.3	Functionality:
1.3.1	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.
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1
1.3.3	Should support advance Layer 3 protocol like BGPv4, BGPv6, VRF, VXLAN, IS-ISv4, OSPFv3 from Day-1
1.3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.
1.3.5	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.
1.3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.
1.3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and layer 2 encryption between switches.
1.3.8	Switch should have functionality for multiple checks such as checksum, integrity, corruption etc are done during boot time. To check integrity, Authentic OS, firmware and BIOS.
1.4	Interface
1.4.1	Interface Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port uplink ports on day 1 and flexibility to support minimum 2 x 40G module on the uplink slot.
	Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port
1.4.1	Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port uplink ports on day 1 and flexibility to support minimum 2 x 40G module on the uplink slot. Certification: Switch shall confirm to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.
1.4.1	Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port uplink ports on day 1 and flexibility to support minimum 2 x 40G module on the uplink slot. Certification: Switch shall confirm to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall confirm to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements.
1.4.1 1.5 1.5.1	Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port uplink ports on day 1 and flexibility to support minimum 2 x 40G module on the uplink slot. Certification: Switch shall confirm to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall confirm to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A
1.4.1 1.5 1.5.1 1.5.2	Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port uplink ports on day 1 and flexibility to support minimum 2 x 40G module on the uplink slot. Certification: Switch shall confirm to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall confirm to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements. Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common
1.4.1 1.5 1.5.1 1.5.2 1.5.3	Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port uplink ports on day 1 and flexibility to support minimum 2 x 40G module on the uplink slot. Certification: Switch shall confirm to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall confirm to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements. Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.
1.4.1 1.5 1.5.1 1.5.2 1.5.3 1.6	Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port uplink ports on day 1 and flexibility to support minimum 2 x 40G module on the uplink slot. Certification: Switch shall confirm to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall confirm to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements. Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification. General All the relevant licenses for features asked in RFP should be included in the solution and features
1.4.1 1.5 1.5.1 1.5.2 1.5.3 1.6 1.6.1	Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port uplink ports on day 1 and flexibility to support minimum 2 x 40G module on the uplink slot. Certification: Switch shall confirm to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall confirm to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements. Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification. General All the relevant licenses for features asked in RFP should be included in the solution and features should be supported from Day 1
1.4.1 1.5 1.5.1 1.5.2 1.5.3 1.6 1.6.1 1.6.2	Switch shall have 48 nos. 10/100/1000 Base-T ports and modular uplinks to have 6 x 10G port uplink ports on day 1 and flexibility to support minimum 2 x 40G module on the uplink slot. Certification: Switch shall confirm to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall confirm to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements. Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification. General All the relevant licenses for features asked in RFP should be included in the solution and features should be supported from Day 1 Switch and optics should be from the same OEM.

Campus Access Switch (24 port / 48 port) Switch Specification:

	Access (1G Copper) Switch Specification
	Access Switch - 24 Port / 48 Port



Serial Number	General Specifications
1	General Features :
1.1	The OEM of the proposed switches/devices should be part of the leader's quadrant for Gartner's List of Wired and Wireless LAN Infrastructure for last 1 year.
1.2	The Release date of the switch should be after 2020 onwards and it should not declared end of sale as on date and to be supported from OEM for minimum 8 years from the date of purchase.
1.3	End of Sale should have not be declared for proposed network switch model.
1.4	Switch should be 1U and rack mountable in standard 19" rack.
1.5	Switch should have provision for internal field replaceable unit redundant power supply
1.6	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.)
1.7	Switch should have dedicated slot for modular stacking with 50cm stack cable from day-1 in addition to asked uplink ports. Should support for minimum 72 Gbps of stacking throughput for 24port and 144 Gbps of Stacking throughput for 48port switches with 8 switches in single stack.
2	Performance :
2.1	Switch shall have minimum 120 Gbps of switching fabric and 95 Mpps of forwarding rate for 24 port switch. 176Gbps switching fabric and 130Mpps forwarding rate for 48 port switch.
2.2	Switch shall have minimum 16K MAC Addresses and 250 active VLAN.
2.3	Should support minimum 2K IPv4 routes or more if configured in VXLAN.
2.4	Switch shall have 1K or more multicast routes.
2.5	Switch should support at least 16K flow entries
2.6	Switch should support RPVST and MSTP Instances.
2.7	Switch should have 4MB or more packet buffer. (It should be sufficient according to port density.)
3	Functionality:
3.1	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.
3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1
3.3	Switch should have provision to support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs with add on license in future.
3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight ingress or egress queues.
3.5	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.
3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.
3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and layer 2 encryption between switches



3.8	Switch should have functionality for multiple checks such as checksum, integrity, corruption etc. are done during boot time. To check integrity, Authentic OS, firmware and BIOS.
4	Interfaces
4.1	Switch shall have minimum 24 numbers and 48 numbers 100MB/1G Base-T ports and additional minimum 2 nos. 10G SFP+ uplinks ports.
4.2	All 24 / 48 ports should support PoE (802.3af) and PoE+ (802.3at) with a PoE power budget of 370 W for 24 port and 740W for 48 port switch.
4.3	Always on PoE that supplies PoE power even during scheduled reloads & firmware upgrades
5	Certification:
5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.
5.2	Switch shall conform to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements.
5.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.
6	General:
6.1	All the relevant licenses for features asked in RFP should be included in the solution and features should be supported from Day 1
6.2	Switch and optics should be from the same OEM
6.3	All relevant licenses for all the above features and scale should be quoted along with switch
6.4	OEM should provide 24*7 support with NBD part replacement
6.5	OEM should have service depot across metro cities in India.
6.6	OEM should provide public references for all of the above specifications / features mentioned.

Other Connectivity – 24 Port Switch Specification

S. No.	General Specifications
1	General Features :
1.1	The OEM of the proposed switches/devices should be part of the leader's quadrant for Gartner's List of Wired and Wireless LAN Infrastructure for last 1 year.
1.2	The Release date of the switch should be after 2020 onwards and it should not declared end of sale as on date and to be supported from OEM for minimum 8 years from the date of purchase.
1.3	End of Sale should have not be declared for proposed network switch model.
1.4	Switch should be 1U and rack mountable in standard 19" rack.
1.5	Switch should support internal hot-swappable Redundant Power supply from day 1.
1.6	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.)



1.7	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 48 Gbps of stacking throughput.
1.8	Interfaces
1.8.1	Switch shall have 24 numbers 10/100/1000 Base-T ports and additional minimum 2 X 10G SFP+ uplinks ports. from Day-1
2	Performance :
2.1	Switch shall have minimum 128 Gbps of switching fabric and 95 Mpps of forwarding rate
2.2	Switch shall have minimum 16K MAC Addresses and 250 active VLAN.
2.3	Should support minimum 2K IPv4 routes in case we use VXLAN in future.
2.4	Switch shall have 1K or more multicast routes.
2.5	Switch should support at least 16K flow entries.
2.6	Switch should support RPVST and MSTP Instances.
2.7	Switch should have minimum 4MB or more packet buffer. (It should be sufficient according to port density.)
3	Functionality:
3.1	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.
3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1
3.3	Switch should have provision to support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs with add on license in future.
3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight ingress or egress queues.
3.5	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.
3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.
3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and layer 2 encryption between switches
3.8	Switch should have functionality for multiple checks such as checksum, integrity, corruption etc. are done during boot time. To check integrity, Authentic OS, firmware and BIOS.
4	Certification:



4.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.
4.2	Switch shall conform to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements.
4.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.
5	General:
5.1	All the relevant licenses for features asked in RFP should be included in the solution and features should be supported from Day 1
5.2	Switch and optics should be from the same OEM
5.3	All relevant licenses for all the above features and scale should be quoted along with switch
5.4	OEM should provide 24*7 support with 4 hours part replacement.
5.5	OEM should have service depot across metro cities in India.
5.6	OEM should provide public references for all of the above specifications / features mentioned.

Other Connectivity Switches - 48 port

S. No.	General Specifications
1	General Features :
1.1	The OEM of the proposed switches/devices should be part of the leader's quadrant for Gartner's List of Wired and Wireless LAN Infrastructure for last 1 year.
1.2	The Release date of the switch should be after 2020 onwards and it should not declared end of sale as on date and to be supported from OEM for minimum 8 years from the date of purchase.
1.3	End of Sale should have not be declared for proposed network switch model.
1.4	Switch should be 1U and rack mountable in standard 19" rack.
1.5	Switch should support internal hot-swappable Redundant Power supply from day 1.
1.6	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.
1.7	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.
1.8	Interfaces
1.8.1	Switch shall have 48 numbers 10/100/1000 Base-T ports and additional minimum 2 X 10G SFP+ uplinks ports from Day-1.
2	Performance :



2.1	Switch shall have minimum 176 Gbps of switching fabric and 112 Mpps of forwarding rate.
2.2	Switch shall have minimum 16K MAC Addresses and 250 active VLAN.
2.3	Should support minimum 2K IPv4 routes in case we use VXLAN in future.
2.4	Switch shall have 1K or more multicast routes.
2.5	Switch should support at least 16K flow entries
2.6	Switch should support RPVST and MSTP Instances.
2.7	Switch should have 6MB or more packet buffer. (It should be sufficient according to port density.)
3	Functionality :
3.1	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.
3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1
3.3	Switch should have provision to support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs with add on license in future.
3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight ingress or egress queues.
3.5	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.
3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.
3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.
3.8	Switch should have functionality for multiple checks such as checksum, integrity, corruption etc. are done during boot time. To check integrity, Authentic OS, firmware and BIOS.
4	Certification:
4.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.
4.2	Switch shall conform to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements.



4.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.
5	General:
5.2	All the relevant licenses for features asked in RFP should be included in the solution and features should be supported from Day 1
5.3	Switch and optics should be from the same OEM
5.4	All relevant licenses for all the above features and scale should be quoted along with switch
5.5	OEM should provide 24*7 support with 4 hours part replacement.
5.6	OEM should have service depot across metro cities in India.
5.9	OEM should provide public references for all of the above specifications / features mentioned.

Out-of-Band Management Core Switch Specification

S. No.	General Specifications
1.1	General Features :
1.1.1	The OEM of the proposed switches/devices should be part of the leader's quadrant for Gartner's List of Wired and Wireless LAN Infrastructure for last 1 year.
1.1.2	The Release date of the switch should be after 2020 onwards and it should not declared end of sale as on date and to be supported from OEM for minimum 8 years from the date of purchase.
1.1.3	End of Sale should have not be declared for proposed network switch model.
1.1.4	Switch should be 1U and rack mountable in standard 19" rack.
1.1.5	Switch should support internal hot-swappable Redundant Power supply from day 1.
1.1.6	Switch should have redundant hot swappable fans.
1.1.7	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.)
1.1.8	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 48mbps of stacking throughput with 2 switch in single stack.
1.2	Performance :
1.2.1	Switch shall have minimum 128 Gbps of switching fabric and 95.23 Mpps of forwarding rate.
1.2.2	Switch shall have minimum 32K MAC Addresses and 500 active VLAN.
1.2.3	Should support minimum 2K IPv4 routes or more and 4K IPv6 routes or more
1.2.4	Switch shall have 1K or more multicast routes.
1.2.5	Switch should support at least 64K flow entries.
1.2.6	Switch should support RPVST and MSTP Instances.



1.2.7	Switch should have minimum 8MB or more packet buffer. (It should be sufficient according to port density.)
1.3	Functionality:
1.3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1
1.3.3	Should support advance Layer 3 protocol like BGPv4, BGPv6, VRF, VXLAN, IS-ISv4, OSPFv3, MP-BGP with a license upgrade in future.
1.3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight ingress or egress queues.
1.3.5	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.
1.3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.
1.3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and layer 2 encryption between switches.
1.3.8	Switch should have functionality for multiple checks such as checksum, integrity, corruption etc are done during boot time. To check integrity, Authentic OS, firmware and BIOS.
1.4	Interface
1.4.1	Switch shall have minimum 24 nos. 100/1000 Base-T ports and additional minimum 2 nos. SFP uplinks ports.
1.5	Certification:
1.5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.
1.5.2	Switch shall conform to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements.

Out-of-Band Management Access 48 port Switch Specification

S. No.	General Specifications
1	General Features :
1.1	OEM should be listed in the Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 1 year before releasing this RFP.
1.2	The Release date of the switch should be after 2020 onwards and it should not declared end of sale as on date and to be supported from OEM for minimum 8 years from the date of purchase.
1.3	End of Sale should have not be declared for proposed network switch model.
1.4	Switch should be 1U and rack mountable in standard 19" rack.
1.5	Switch should support internal hot-swappable Redundant Power supply from day 1.
1.6	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.)
1.7	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports.



2	Performance :
2.1	Switch shall have minimum 120 Gbps of switching fabric and 95 Mpps of forwarding rate
2.2	Switch shall have minimum 16K MAC Addresses and 250 active VLAN.
2.3	Should support minimum 2K IPv4 routes.
2.4	Switch shall have 1K or more multicast routes.
2.5	Switch should support at least 16K flow entries
2.6	Switch should support 128 or more STP Instances.
2.7	Switch should have minimum 6MB or more packet buffer.
3	Functionality :
3.1	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.
3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1
3.3	Switch should have provision to support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs with add on license in future.
3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.
3.5	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.
3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.
3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.
3.8	Switch should have functionality for multiple checks such as checksum, integrity, corruption etc are done during boot time. To check integrity, Authentic OS, firmware and BIOS.
4	Interfaces
4.1	Switch shall have 48 numbers 100/1000 Base-T ports and additional minimum 2 nos. 1G SFP uplinks ports.
5	Certification:
5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.
5.2	Switch shall conform to EN 55022 Class A or CISPR22 Class A or CE Class A or FCC Class A Standards for EMC (Electro Magnetic Compatibility) requirements.



5.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.
6	General:
6.1	All the relevant licenses for features asked in RFP should be included in the solution and features should be supported from Day 1
6.2	Switch and optics should be from the same OEM
6.3	All relevant licenses for all the above features and scale should be quoted along with switch
6.4	OEM should provide 24*7 support with NBD part replacement
6.5	OEM should have service depot across metro cities in India.
6.6	End of Sale should have not be declared for proposed network switch model.
6.9	OEM should provide public references for all of the above specifications / features mentioned.

Note: All the licenses required for Switches connectivity and end to end functionality has to be taken care by the respective System Integrator. Any license related Challenges during Installation and Implementation shall be taken care by System Integrator. It is System Integrators responsibility to make sure that correct licenses has to be deployed on all the Switches to achieve desired functionality.

It is the System Integrators ownership and responsibility to ensure that all the licenses deployed on all the switches will be back align with respective OEM and copy of these licenses provided to Stockholding in respective format and complete details of Inventory of each line item should be available with Stockholding in editable format to be provided to Stockholding by Successful bidder after releasing the purchase order from Stockholding.

SECTION 3 - Requirements for DC-Mahape

- 3.1 The System Integrator should install and configure the "Data centre switches", "Campus and Access Switches" as per the specification given below.
 - 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.
 - The System Integrator should include support (Back to back replacement) from the principle manufacturers OEMs and the proof of same needs to be submitted after switches deployed in StockHolding and within 30 days of time frame during installation and implementation.
 - The System Integrator should specify the Bill of material with Part Nos. for the items required as per the specifications mentioned below. If any item is left out or any licenses



are miss to be considered, it will be the responsibility of the System Integrator to supply and commission without any additional cost to StockHolding. We have provided bifurcation of required quantities as per our understanding of the setup. System Integrator has to consider all the possible combinations of network connectivity of Datacentre OEM and Campus and Access Switches OEM switches for Campus Core copper, Campus Core Fibre and Data centre access switches network connectivity and accordingly provide us a proper justification for detailed bill of material before bidding.

3.2 Requirements:

For Mahape: Data Centre Switches

No	Item Description	Qty
	Data-Centre Switches:	
1.	Data-Centre Core Switch (DC Server Farm - 40/100G fiber)	2
2.	Data-Centre Access Switches (100MB/1G/10G Copper)	8
	Campus Core and Access switches:	
1.	Campus-Core Fibre Switches	02
2.	Campus-Core Copper Switches	02
3.	Out-of-Band Core Switches	02
4.	Out-of-Band Management Switches	08
5.	Access Switch 48-port. (With Stacking Functionality – For Access Layer)	24
6.	Access Switch 24-port. (With Stacking Functionality – For Access Layer)	02
7.	Access Switch 48-port PoE (With Stacking Functionality – For Access Layer)	10
8.	Access Switch 24-port PoE (With Stacking Functionality – For Access Layer)	04
9.	Other Connectivity 48 port Switch (With Stacking Functionality – For Data-Centre.	12
10.	Other Connectivity 24-port Switch (With Stacking Functionality – For Data-Centre	04
11.	Access Switch 48-port (With Stacking Functionality – As a spare)	03
12.	Access Switch 48-port PoE (With Stacking Functionality – As a spare)	02

For Bangalore: Bangalore Switches

No	Item Description	Qty
	Bangalore Switches	
1.	Data-Centre Access Switches (100MB/1G/10G Copper)	4
	Campus and Access segment switches:	
1.	Out-of-Band Management Switches	6
2.	Other Connectivity 48 port Switch (With Stacking Functionality – For Bangalore DR DataCentre.	8
3.	Other Connectivity 24-port Switch (With Stacking Functionality – For Bangalore DR DataCentre.	4

Note: Fibre Cabling for Mahape Data Centre and All passive cables (Fibre / CAT6) required for the connectivity to be supplied by the System Integrator participated in this RFP and is not included in the proposed switches specification.



All the participating System Integrator has to conduct a Site Survey at Stockholding Mahape Data Centre Site and include the cost of Fibre cabling and passive cabling as a separate line item in Bill of Material along with Bill of Quantity in the proposal to be submitted during bidding process. Quantity of propose passive cabling and Fibre Cable connectivity, Number of LIUs, Number of Aerial Panel Holder Kit etc. has been provided here is only for the reference purposed as per our understanding. In case of any modifications (Addition / Deletion) in product code and number of cable quantity has to be taken care by respective System Integrator and cost of the same needs to be included for end to end passive and fibre cable connectivity during bidding process.

Propose the required passive cabling for the project.

Summary - Mahape proposed SFP Bifurcation (DC Core and Campus /Access Switches)

Sr	Summary	Qty
Data C	Data Centre	
1	40G Transceiver (Multimode)	42
2	10G Transceiver (Multimode)	92
3	40G Dac Cables (10M) Active Optical Cable	03
4	40G Dac Cables (3M) Active Optical Cable	02
5	40G Dac Cables (1M) Active Optical Cable	08
6	1G Transceivers Multimode	04
7	1G Transceivers Copper	10
8	40G to 10G converter / Adapter	12
9	Stack Cables (3M)	05
10	Stack Cables (1M)	10

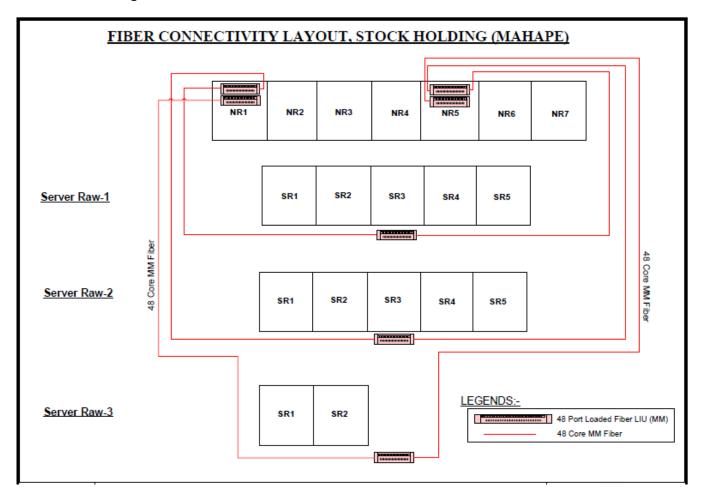
DR - Bangalore:

Summary - Bangalore proposed SFP Bifurcation

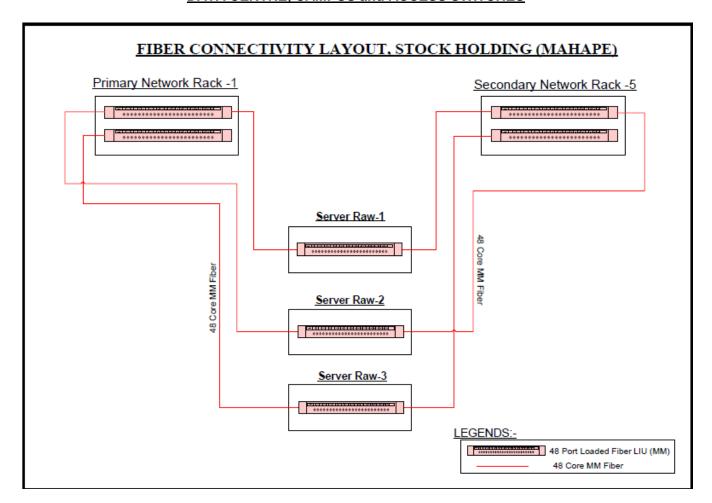
Serial Number	Summary	Qty
Data Cen	tre	
1	40G Transceiver (Multimode)	00
2	10G Transceiver (Multimode)	32
3	40G Dac Cables (10M) Active Optical Cable	00
4	40G Dac Cables (3M) Active Optical Cable	00
5	40G Dac Cables (1M) Active Optical Cable	04
6	1G Transceivers Multimode	24
7	1G Transceivers Copper	00
8	40G to 10G converter	08



3.3 Fibre Cabling for DC Data-Centre







AMI	AMP SUPPLY COMPONENTS				
Sr. No.	Part No. Product description		Qty	Unit	
Α		Fiber Connectivity			
1	A <u>or</u>	OM4 LazrSPEED® Indoor Low Smoke Zero Halogen Riser Distribution Cable, 48 fiber single-unit	368	Mtrs.	
	В	OM4 LazrSPEED® Indoor Low Smoke Zero Halogen Riser Distribution Cable, 24 fiber single-unit	736	Mtrs.	
2	4-2122146-3 (A or)	24F, 1U, LC MM OM4, Loaded with Pigtails, Splice tray, adapter & splice protectors	14	Nos.	
3	4-2122146-4 (B)	48F, 1U, LC MM OM4, Loaded with Pigtails, Splice tray, adapter & splice protectors	7	Nos.	
4	FFXLCLC42-MXM003	LC-LC Multimode 50/125 micron Duplex Patch Cord, 3 Meter	20	Nos.	
5	FFXLCLC42-MXM005	LC-LC Multimode 50/125 micron Duplex Patch Cord, 5 Meter	20	Nos.	
6	1967330-2	Aerial Panel holder kit for Basket tray, 2U	3	Nos.	
7	Local	100 x 50mm Basket with standard accessories	18	Mtrs.	
8	Local	C-Angle supporting bracket	6	Nos.	
9	Local	Miscellaneous Materials (Tie, Sticker Label, Nut-Bolt, Screw, DWG etc.)	1	LS	

Sr. No.	Part No.	Service Description	Qty	Unit
1	Service	Laying of Fiber cable	368	Mtrs.
2	Service	Fiber Splicing Charges	576	Nos.
3	Service	Fiber (OLTS) Testing & Documentation Charges (Only rack side)	576	Nos.
4	Service	Basket tray installation charges	18	Mtr
5	Service	C-Type supporting bracket installtion charges	6	Nos.
6	Service	Project Management Charges	1	LS



Scope of Work

Sr. No.	Work Description
1	Laying of fiber cable work
2	Laying of basket tray work
3	Fiber Splicing work
4	Fiber Testing (OLTS) work
5	Network Switch Patching Work
6	Labelling of all the points copper both side
7	Project Documentation

SECTION 4 - Scope of Work and Deliverables

Scope of Work:

StockHolding is expecting that successful System Integrator should initiate the planning activities post 7 days after releasing the purchase order and all the planning along with documentation should be completed before delivery of the material, so in a phase wise manner activities can be initiated from day 1 after receiving the material at StockHolding Mahape and Bangalore location.

Passive cabling for Data-centre will be the successful System Integrator's responsibility and System Integrator has to deliver the same as per criteria set by StockHolding. System Integrator can get this work done through cabling vendor and include additional scope of work for the fibre cabling and submit the final documentation to StockHolding.

- Passive Cabling should be initiated after receiving the purchase order from StockHolding and parallel work with existing fibre cabling to be initiated in StockHolding Datacentre.
- All cable runs will be tested and certified. The successful System Integrator will provide a complete testing report for all fiber cable runs along with documentation of entire layout in original formats.
- The successful System Integrator will provide all fiber cables as specified in section 3. A variety of 3 meter to 5 meter jumper cables will be provided customized to the lengths needed in each rack space and terminated using LC connectors.
- All fiber cable runs will be clearly and professionally labelled at each end of the run. Handwritten labels are not acceptable.
- All fiber cables runs will be terminated on rack mounted LIUs using LC connectors.
- Prepare detailed project implementation plan including
 - Planning phase

Project kick off meeting with StockHolding to discuss and finalize the following

Scope of Work Design Summary



Breakup Details Connectivity Details Project Team Details Project Plan

Rack Elevation template

Numbering and labelling schemes

Risk and Mitigation

Project Communication plan

Escalation Matrix

- Design detailed Data Centre core network switches, Campus and access switches architecture in consultation with StockHolding
 - Detailed DC-Core Network architecture.
 - · Detailed Campus and Access switch network architecture.
- Pre implementation/implementation/post implementation approach.
- The Project Team with well-defined roles and responsibilities as per Section 6 Project Management.
- The Project Management methodology for: o Scheduling

Tracking and Monitoring Identifying risks

- Project Review mechanisms and methodology
- Organisation escalation matrix
- Supply of equipment as mentioned in Section 3 with correct Bill of Material

Configure the equipment required as per the specifications mentioned in Section 2

- Unpack and take inventory of supplied equipment as per format provided both In hard and soft copy (Equipment Inventory Annexure – Will be provided to Successful System Integrator))
- Cross check the delivery invoice with the ordered bill of material/bill of quantity Submit the inventory to StockHolding certifying whether the ordered equipment have been received and report any deviations.
- Installation of the equipment and configuring as per the project and implementation plan submitted to StockHolding
- Properly label all equipment and cables for easy identification and carry out Cable dressing activities.
- Prepare and submit documentation of equipment delivered and commissioned
- Plan and design the required IP schema as per StockHolding Requirements.
- Prepare and submit to StockHolding all relevant documentation along with Network diagrams in Visio formats for all components (network, security, application, etc.) including:
 - Overall Design documents
 - Detailed Design documents
 - · integration documents
 - Operations and Management documents
- Help to prepare a detailed User Acceptance Test (UAT) plan and test scenarios for carrying out the tests.



- ➤ 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.
- > Supply and installation of network switches complying with the technical specifications given in **Annexure-** A along with software, accessories, cables, power cords and necessary documents/manuals at respective StockHolding DC and DR locations.
- Integrate and carry out any integration and interfacing required between different network / network subnets and security devices as required by StockHolding and provide solution for the same as per the requirements of StockHolding.
- ➤ Configuration of management IP address, rack mounting after removal of existing switches from racks, termination of field (LAN) and other cables on to the switch and integration with existing LAN / WAN as per the configuration decided for the switches.
- Any issues arising out during implementation vis-à-vis to licenses considered for Implementation is totally a System Integrator's responsibility. Any deviation and challenges arise during actual implementation System Integrator has to provide a solution for the same without involving additional cost to StockHolding and without deviating the desired functionality of proposed solution.
- 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.
- Configuration and re-configuration of the switches has been considered if existing other technologies like network and network-security devices should not perform or work as per their desired standard or functionality.
- All the switches supplied by respective System Integrator should be harden as per the CIS benchmark guidelines followed by StockHolding on quarterly basis. We expect that System Integrator should visit StockHolding office from time to time till completion of Warranty period to take care of switch security and hardening related aspects.
- 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.

Deliverables:

- Supply of material with correct Bill of material.
- Project plan for implementation.
- The System Integrator has to advice StockHolding on the integration of the existing network equipment with proposed new core Switches and their integration with Campus and access switches and ensure smooth network connectivity and functionality will be established at StockHolding Mahape and Bangalore locations.
- Prepare and submit to StockHolding all relevant systems documentation & detailed project plan for implementation along with bar chart.
- > The System Integrator should consider all IT components that are required to make the network and security setup operations fully operational in a comprehensive manner and implement secure "DC Core, Campus and Access switches Solution".



- 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:
 - 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.
- ➤ Proof of back to back support and replacement from the Original Equipment Manufacturer (OEM) principal manufacturers along with the Invoice for payment.
- Documentation of the steps involved in commissioning the system prior to start of commissioning and getting it approved from StockHolding.
- Documentation of the system commissioned. The documentation should consist of following details:
 - Configuration details of each equipment with valid and detail justification for network connectivity.
 - Rack layout.
 - Cabling details.
 - Cable Tagging for entire setup. (DC, DR, Hub Rooms)
 ☐ Equipment details.
- Training for StockHolding Networking team (10 official) in batches. By certified and trained engineers/personnel from the OEM.
 - The training should cover all aspects of setup, commissioning and management of the configuration and setup and management of the equipment supplied and commissioned including any technology up gradation during the warranty period.
 - Training charges, if any, should be quoted by the System Integrator separately in the Commercial Bid.
 - The System Integrator should specify a training schedule for a batch of 2-3 officers over a period of warranty years covering various aspects as mentioned below:
 - Building and Securing DC Architectures.
 - Routing and Switching with IP/multicast.
 - Design, Deployment, Management and Security of routers/switches.
 - Design, Deployment and Management of content and security appliances/hardware in the DC network environment, etc.)
 - DR Design, Deployment and Management (Network &security)

SECTION 5 - Service Level Agreement

1. The System Integrator should provide 24 hours support on all seven days of the week (24x7x365) on the complete range of Hardware and Operating system supplied as defined in Bill of Material



□ Network System Uptime:

Coverage : 24 x 7 x 365

Response Time : 2 Hours

Resolution Time : 4 Hours

Network uptime : 100% calculated monthly

- 2. As StockHolding has floating the RFPs for Data Centre switches and Campus and Access switches, it may possible that we may have multi-vendor deployment in StockHolding DC and DR networks. Considering this we are expecting that both OEM along with partner should have complete ownership in problem management and incident management as per the SLA resolution time.
- 3. During any incidence in future related to architectural design then OEM along with partner should be involve in problem resolution and provide solution to StockHolding as per the SLA resolution time.
- 4. During any incidence, related to product design then respective OEM along with their partner should be involve in problem resolution and provide solution to StockHolding as per the SLA resolution time.
- 5. A Separate penalty of 1% of the BG value of the purchase order per incidence not meeting the resolution time will be applicable to System Integrator for not meeting the criteria as per the SLA terms and condition after completion of Implementation and during the time period of 3 years of warranty.

Penalty Clause

Late Delivery and Penalty: In case of delayed shipment, except for force majeure, the System Integrator shall pay to StockHolding for every week of delay a penalty amounting to [1%] of the total value of the purchase order shipment has been delayed. Any fractional part of a week is to be considered as a full week. The total amount of penalty shall not, however, exceed [4%] of the total value of the purchase order and is to be deducted from the amount due at the time of payment. Further delay will terminate this contract.

Late Implementation and Penalty: In case of delayed Implementation, except for force majeure, the System Integrator shall pay to StockHolding for every week of delay a penalty amounting to (0.5%) of the total value of the purchase order. Any fractional part of a week is to be considered as a full week. The total amount of penalty shall not, however, exceed BG value of the purchase order and is to be deducted from the amount due at the time of payment. Further delay will terminate this contract.

The System Integrator shall ensure that in case of a break down/malfunctioning of network switches, switch components accessories, switch IOS, the relevant defect is attended **immediately** and rectified **within 2 hours** of the receipt/notice of the complaint.

- System Integrators Responsibility:
 - 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

- The System Integrator should stock necessary spares (preferably at StockHolding site) to meet the desired SLA.
- The System Integrator should perform provide and apply all available patches and release updates
- The System Integrator should maintenance services on mutually agreed schedule
- The System Integrator should commission and maintain and assure storage replication solution between DC at Mahape and DR at Bangalore.
- 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.
- Switch IOS Software updates and upgrades as per the latest updates declared by OEM.
 System Integrator has to ensure that proactive monitoring of switch IOS updates and upgrades to be provided to StockHolding on quarterly basis till WARRANTY period.
- On-Site support from System Integrator for day-to-day operational / technical issues as and when arises.

> Exclusions:

- 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

SECTION 6 - Project Management

StockHolding expects that the successful System Integrator establishes a Project Management Office (PMO) to carry out the various tasks involved in the project like Project scheduling, tracking, monitoring, identifying risks, reporting to StockHolding on the overall progress of the project, etc.

As part of Project Management, the System Integrator should establish:

- 1. The Project Management Office (PMO) headed by a Project Manager who is sufficiently experienced in handling such large and complex projects.
- 2. The Project Team with well-defined roles and responsibilities.
- 3. The Project Management methodology for:
 - a. Scheduling
 - b. Tracking and
 - c. Monitoring



4. Project Review mechanisms and methodology.

The Project Manager should periodically review the progress of the project at least on a weekly basis and report the same to the stakeholders in StockHolding. The Project Manager should identify any risks in the project and measures to mitigate such risks.

The PMO should enforce the Project Management methodology on the teams and members that are working under the PMO for this project. The PMO will also be responsible for submitting all the required documents to StockHolding from time to time or that are Project deliverables.

Project Manager

Upon award of the contract, the System Integrator shall assign a full time Project Manager, who will act as the central point of contact, escalation and management of issue that may arise from the delivery of the proposed services outlined in the document.

The Project Manager shall have the overall responsibility for coordination of the work in the phases, Factory Simulation Testing and dynamic testing at the site. He shall act as a focal point for all correspondence, provide StockHolding with schedules and Progress Reports, and assist StockHolding Inspects the engineers during regular visits. His base of operation shall be Mumbai.

The Project Manager shall be responsible for consistent and uniform project delivery throughout the execution phase and have the authority to control all aspects of the job.

The Project Manager should provide the management interface facility and will have the responsibility for managing the complete service delivery during the contractual arrangement with STOCKHOLDING.

The Project Manager should be available during normal STOCKHOLDING working hours on all STOCKHOLDING working days. However, if STOCKHOLDING representative decides that their services are required beyond normal working hours, they need to be present at site.

The Project Manager should have experience in setting up of large IT-infrastructure sites similar to StockHolding's requirement and should preferably be a certified Project Management Professional (PMP).

The Project Manager will track and control the project delivery, daily/weekly reports are to be submitted to StockHolding. He should conduct weekly review with all the System Integrators involved in the execution phase; this review meeting will be governed by StockHolding.

StockHolding and its consultant will interview the System Integrator Project Manager, in case the proposed project manager is not found suitable by StockHolding, the System Integrator will have to propose alternatives. The final selected Project Manager will have to pass the interview carried out by StockHolding.

Project Review

The System Integrator must submit the project management report in Technical Bid, which details all the activities and the methodology to be adopted by the System Integrator in completing the project within the time frame drawn by StockHolding. The project management should cover all the deliverables/activities of the project and the team structure required for carrying out the activity within the time frame.



Resources expected to be deployed from the selected System Integrator side with their profile should be submitted along with the response to the Tender. The System Integrators must provide adequate number of qualified and experienced personnel and form required number of teams to carry out in parallel various activities/tasks involved in implementation so that the project can be completed as scheduled.

Project tracking and monitoring methodology

The selected System Integrator shall submit a detailed PERT (Project Evaluation and Review Technique) and Gantt chart in MS project format within one week from the effective date. The System Integrator shall submit weekly report on the progress of the project and also the status as on the scheduled date and actual date of each activity detailing any deviation from baseline PERT and Gantt chart. However, for escalation purposes, details of other persons shall also be given.

Primary responsibilities of the project manager

- Preparation of a detailed project plan
- Project plan execution
- Maintain and tracking of project plan on daily basis
- Preparation of risk log and dependency log and risk management plan
- Preparation of progress report on weekly basis
- · Preparation of deviation and change management log and maintain the same on daily basis
- Preparation of weekly review agenda and arranging meetings with various System Integrators, consultants and stakeholders.
- Preparation and submission of escalation matrix for various System Integrators involved in the project.
- Preparation of issue log and review with consultants.
- Preparation for steering committee meeting agenda every month.
- · Arrange weekly meetings on site with consultants and all involved vendors.



<u>Annexure - 1</u> System Integrator's Profile

Serial No.	Parameters	Response		
1	Name of the Firm/Company			
2	Year of Incorporation in India			
3	Names of the Partners/Directors			
4	Company PAN no			
5	Company GSTN no. (please mention for all states)			
4	Name and Address of the Principal Banker			
	Addresses of Firm/Company			
5	a) Head Office			
	b) Local Office in Mumbai(if any)			
	Authorized Contact person			
	a) Name and Designation			
6	b) Telephone number			
	c) E-mail ID.			
7	The System Integrator quoting should have at least 5 Expert level certified Engineers, 10 Professional level certified engineering and 20+ Associate level engineers.			
	Financial parameters			
	Business Results (last three years)	Annual Turno (Rs. in Crore		Operating Profit (Rs. in Crores)
	2018-19			
	2019-20			
	2020-21			
7	(Only Company figures need to be mentioned not to include group/subsidiary Company figures)	(Mention the only)	abo	ve Amount in INR
-	Details of Reference Customer			
	Customer Name and Contact No.	Brief Details of hardware supplied	Da	number and te(Attached PO h masked price)
	1			. ,
	2			
	3			
	4			

N.B. Enclose copies of Audited Balance Sheet along with enclosures

Dated	this	Day of	 2021

(Signature)

Page **50** of **66**



(In the capacity of)

Duly authorized to sign bid with seal for & on behalf of (Name & Address of the System Integrator

Note:

- 1. Letter of Authorization shall be issued by either Managing Director having related Power of Attorney issued in his favour or a Director of the Board for submission of Response to RFP/Tender.
- 2. All self-certificates shall be duly signed and Stamped by Authorized signatory of the System Integrator Firm unless specified otherwise.
- 3. System Integrator response should be complete; Yes/No answer is not acceptable...
- 4. Details of clients and relevant contact details are mandatory. System Integrators may take necessary approval of the clients in advance before submission of related information. StockHolding will not make any separate request for submission of such information.

Annexure - 2 Eligibility Criteria (Documents to be submitted online along with Technical Bid)

SN.	Criteria	Compliance (Yes/No)	Details of proof attached
1	The System Integrator is a company/firm incorporated in India having Annual Turnover of Rs. 100.00 crores in previous three financial years i.e. 2018-19, 2019-20, and 2020-21. This must be individual company turnover and not group of companies		
2	The System Integrator should be in operating profit in two years in the last three audited financial years i.e. 2018-19, 2019-20, and 2020-21.		
3	The System Integrator should be Original Equipment Manufacturer [OEM] or authorized Gold or Premium of OEM and must bid for complete solution.		
4	The System Integrator should bid for any OEM's who are part of the respective Gartner Leader Quadrant for Data Centre Networking for last 3 years and Wired and wireless infrastructure for last 1 year.		
5	The System Integrator should be in the business of supply, installation, configuration, maintenance and support of network hardware for at least five [5] years as on date of this RFP.		
6	The System Integrator should not be blacklisted by any Government Body. PSU, Bank, NGO, Autonomous body due to any reason		
7	The System Integrator should have at least five enterprise/corporate customers in India in last three financial years where System Integrator has undertaken System Integration and deployment projects related to Switching and routing technology with integration of more than 200+network devices.		



8.	The System Integrator quoting the solution should have at least 5 Expert level certified Engineers, 10 Professional level certified engineering and 20+ Associate level engineers. Certified by OEM	
9.	System Integrator must abide by applicable labor laws, human rights, and regulations in their regions of business. System Integrator need to adhere to laws addressing child forced or trafficked labor	

Authorized Signatory:

Place: Name & Designation:
Date: Business Address & email id:

Note:

- 1.Letter of Authorization shall be issued by either Managing Director having related Power of Attorney issued in his favour or a Director of the Board for submission of Response to RFP/ Tender.
- 2. All self-certificates shall be duly signed and Stamped by Authorized signatory of the System Integrator Firm unless specified otherwise.
- 3. System Integrator response should be complete; Yes/No answer is not acceptable...

Details of clients and relevant contact details are mandatory. System Integrators may take necessary approval of the clients in advance before submission of related information. StockHolding *will not make any separate request for submission of such information.*



Annexure - 3 TECHNICAL BID

For Mahape: Data Centre Switches

S.No	Item Description	Compliance (Y/N)	Deviation (if any
	Data-Centre Switches:		
1.	Data-Centre Core Switch (DC Server Farm - 40/100G fiber)		
2.	Data-Centre Access Switches (100MB/1G/10G Copper)		
	Campus Core and Access switches:		
1.	Campus-Core Fibre Switches		
2.	Campus-Core Copper Switches		
3.	Out-of-Band 24-port Core Switches		
4.	Out-of-Band 48-port Management Switches		
5.	Access Switch 48-port. (With Stacking Functionality – For Access Layer)		
6.	Access Switch 24-port. (With Stacking Functionality – For Access Layer)		
7.	Access Switch 48-port PoE (With Stacking Functionality – For Access Layer)		
8.	Access Switch 24-port PoE (With Stacking Functionality – For Access Layer)		
9.	Other Connectivity 48 port Switch (With Stacking Functionality – For Data-Centre.		
10.	Other Connectivity 24-port Switch (With Stacking Functionality – For Data-Centre		
11.	Access Switch 48-port (With Stacking Functionality – As a spare)		
12.	Access Switch 48-port PoE (With Stacking Functionality – As a spare)		



Annexure - 4 Indicative Commercial Bid Format for Data Canter switches

	Indicative Commercial L			1			
SI. No	Description	Basic unit price (Rs.) (a)	Licence price (b)	Total price (a+b)	Total Qty (c)	Total Amount Exclusive of taxes (Rs.) (a+b) *c	Submitted (Yes/No)
(A)	Data-Centre Switches (For Mahape) with three years Warranty	XX	xx	XX		XX	
1	Data-Centre Core Switch (DC Server Farm - 40/100G fiber)	XX	XX	XX	02	XX	
2	<u>Data-Centre Access</u> <u>Switches</u> (100MB/1G/10G <u>Copper)</u>	XX	XX	XX	08	XX	
	Campus Core and Access switches: (For Mahape) with three years Warranty						
1.	Campus-Core Fibre Switches	XX	XX	XX	02	XX	
2.	<u>Campus-Core</u> <u>Copper</u> <u>Switches</u>	XX	XX	XX	02	XX	
3.	Out-of-Band 24-port Core Switches	XX	XX	XX	02	XX	
4.	Out-of-Band 48-port Management Switches	XX	XX	XX	08	XX	
5.	Access Switch 48-port. (With Stacking Functionality – For Access Layer)	XX	xx	XX	24	XX	
6.	Access Switch 24-port. (With Stacking Functionality – For Access Layer)	XX	XX	XX	02	XX	
7.	Access Switch 48-port PoE (With Stacking Functionality – For Access Layer)	XX	xx	XX	10	XX	
8.	Access Switch 24-port PoE (With Stacking Functionality – For Access Layer)	XX	xx	XX	04	XX	
9.	Other Connectivity 48 port Switch (With Stacking Functionality – For DataCentre.	XX	XX	XX	12	XX	



	Other Connectivity 24-port			XX	04		
10.	Switch (With Stacking Functionality – For DataCentre	XX	XX			XX	
11.	Access Switch 48-port (With Stacking Functionality – As a spare)	xx	XX	XX	03	XX	
12.	Access Switch 48-port PoE (With Stacking Functionality – As a spare)	xx	XX	XX	02	XX	
13.	Mahape proposed SFP Bifurcation (DC Core and Campus /Access Switches)	xx	xx	XX		XX	
(B)	Bangalore Switches (With three years Warranty						
1.	Data-Centre Access Switches (100MB/1G/10G Copper)	XX	XX	XX	04	XX	
	Campus and Access segment switches (With three years Warranty:						
1.	Out-of-Band Management Switches	XX	xx		06	XX	
2.	Other Connectivity 48 port Switch (With Stacking Functionality – For Bangalore DR Data-Centre.	xx	xx		08	xx	
3.	Other Connectivity 24-port Switch (With Stacking Functionality – For Bangalore DR Data-Centre.	xx	XX		04	xx	
4.	Bangalore proposed SFP Bifurcation	XX	XX			XX	
(C)	Fibre Cabling for DC Data Centre (As per the Passive Cabling Bill of Material for DC) with Three years support.	XX	xx			xx	
(D)	Passive cables (LIUs, Fibre / CAT6) required for the connectivity with Three Years					XX	



	Support.				
(E)	Implementation Cost.			XX	
(F)	3 Years Share Support from System Integrator.			XX	
	Total			xxx	

Note: Above price should be excluding of Taxes

Note:

- (1) Applicable GST payable at actual as per prevailing rate as per Government notification. In case of tax exemption or lower TDS; System Integrator has to submit letter from Government Authority for tax exemption or lower TDS (to be submitted along with each of the invoice(s).
- (2) System Integrator must take care in filling price information in the Commercial Offer, to ensure that there are no typographical or arithmetic errors. Unit price of above items must be quoted in word and number. All fields must be filled in correctly. Please note that any Commercial Offer, which is conditional and / or qualified or subjected to suggestions, will also be summarily rejected. This offer shall not contain any deviation in terms & conditions or any specifications, if so such an offer will also be summarily rejected.

Annexure - 5

Interest free Earnest Money Deposit (EMD) Format OR MSME/NSIC for Supply and Maintenance of Data Centre, campus and access switches

PAN & GST number of System Integrator	Bank Name & branch address ,IFSC code	Bank account number	EMD amount paid INR in	UTR No. / MSME/NSIP document no	Date of Payment (NEFT)	Document MSME/NSIC / EMD Bank receipt to be uploaded
1.						

Daica iiii3 Day oi 202	Dated this	Day of	2021
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(Signature)

(In the capacity of)

Duly authorized to sign bid with seal for & on behalf of (Name & Address of the System Integrator)



Annexure - 6

Covering Letter-1

(To be executed on plain paper and submitted only by the successful System Integrator)

	(Name of the Department / Office) for RFP Reference
	Number: IT-11/2021-22 dated 25-Oct-2021
	This pre-bid pre-contract Integrity Pact (Agreement) (hereinafter called the Integrity Pact) (IP) is made or day of the, between, on one hand, StockHolding ., a company
	incorporated under Companies Act, 1956, with its Registered Office at 301, Centre Point Building, Dr. Babasaheb R. Ambedkar Road, Parel, Mumbai – 400012, acting through its authorized officer,
	(hereinafter called Principal), which expression shall mean and include unless the context otherwise requires, his successors in office and assigns) of the First Part
	And
M/s	
	(with complete address and contact
details	s) represented by Shri (i.e. s System
ntegra	ators) hereinafter called the `Counter Party') which expression shall mean and include, unless the ct otherwise requires, his successors and permitted assigns) of the Second Part.
AND V	VHEREAS the PRINCIPAL/Owner values full compliance with all relevant laws of the land, rules,
regula	tions economic use of resources and of fairness/transparency in its relation with System ator(s) /Contractor(s)/Counter Party(ies).
AND V	VHEREAS, in order to achieve these goals, the Principal/Owner has appointed Independent

AND WHEREAS, in order to achieve these goals, the Principal/Owner has appointed Independent External Monitors (IEM) to monitor the Tender (RFP) process and the execution of the Contract for compliance with the principles as laid down in this Agreement.

WHEREAS THE Principal proposes to procure the Goods/services and Counter Party is willing to supply/has promised to supply the goods OR to offer/has offered the services and WHEREAS the Counter Party is a private Company/Public Company/Government Undertaking/ Partnership, constituted in accorded with the relevant law in the matter and the Principal is a Government Company performing its functions as a registered Public Limited Company regulated by Securities Exchange Board of India. **NOW THEREFORE**, To avoid all forms of corruption by following a system that is fair, transparent and free from any influence prejudiced dealings prior to, during and subsequent to the tenor of the contract to be entered into with a view to "- Enabling the PRINCIPAL to obtain the desired goods/services at competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and Enabling the Counter Party to abstain from bribing or indulging in any type of corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the PRINCIPAL will commit to prevent corruption, in any form, by its officials by following transparent procedures. The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:



I. Commitment of the Principal / Buyer

- The Principal Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
 - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender (RFP) or the execution of the contract, procurement or services/goods, demand, take a promise for or accept for self or third person, any material or immaterial benefit which the person not legally entitled to.
 - (b) The Principal/Owner will, during the Tender (RFP) Process treat all System Integrator(s)/Counter Party (ies) with equity and reason. The Principal / Owner will, in particular, before and during the Tender (RFP) Process, provide to all System Integrator(s) / Counter Party (ies) the same information and will not provide to any System Integrator(s)/Counter Party (ies) confidential / additional information through which the System Integrator(s)/Counter Party (ies) could obtain an advantage in relation to the Tender (RFP) Process or the Contract execution.
 - a) The Principal / Owner shall endeavour to exclude from the Tender (RFP) process any person, whose conduct in the past been of biased nature.
- 2. If the Principal / Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC) / Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there is a substantive suspicion in this regard, the Principal / Owner / StockHolding will inform the Chief Vigilance Officer through the Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

II. Commitments of Counter Parties/System Integrators

- The Counter Party commits itself to take all measures necessary to prevent corrupt practices, unfair
 means and illegal activities during any stage of bid or during any pre-contract stage in order to
 secure the contract or in furtherance to secure it and in particular commit itself to the following.
 Counter Party (ies) / System Integrators commits himself to observe these principles during
 participation in the Tender (RFP) Process and during the Contract execution.
- 2. The Counter Party will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the PRINCIPAL, connected directly or indirectly with the bidding process, or to any person organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
- 3. The Counter Party further undertakes that it has not given, offered or promised to give directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Principal / StockHolding or otherwise in procurement the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Principal / StockHolding for forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Principal / StockHolding.
- 4. System Integrator / Counter Party shall disclose the name and address of agents and representatives, if any, handling the procurement / service contract.
- 5. System Integrator / Counter Party shall disclose the payments to be made by them to agents / brokers; or any other intermediary if any, in connection with the bid / contract.
- 6. The System Integrator / Counter Party has to further confirm and declare to the Principal / StockHolding that the System Integrator / Counter Party is the original integrator and has not



engaged any other individual or firm or company, whether Indian or foreign to intercede, facilitate or in any way to recommend to Principal / StockHolding or any of its functionaries whether officially or unofficially to the award of the contract to the System Integrator / Counter Party nor has any amount been paid, promised or intended to the be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.

(c) The System Integrator / Counter Party has to submit a Declaration along with Technical Bid, as given at Annexure-6

If bids are invited through a Consultant a Declaration has to be submitted along with the Technical Bids as given at Annexure.

- 7. The System Integrator / Counter Party, either while presenting the bid or during pre- contract negotiation or before signing the contract shall disclose any payments made, is committed to or intends to make to officials of StockHolding /Principal, or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 8. The System Integrator / Counter Party will not collude with other parties interested in the contract to impair the transparency, fairness and progress of bidding process, bid evaluation, contracting and implementation of the Contract.
- 9. The System Integrator / Counter Party shall not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 10. The System Integrator shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the Principal / StockHolding as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The System Integrator / Counter Party also Undertakes to exercise due and adequate care lest any such information is divulged.
- 11. The System Integrator / Counter Party commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 12. The System Integrator / Counter Party shall not instigate or cause to instigate any third person including their competitor(s) of bidding to commit any of the actions mentioned above.
- 13. If the System Integrator / Counter Party or any employee of the System Integrator or any person acting on behalf of the System Integrator / Counter Party, either directly or indirectly, is a relative of any of the official / employee of Principal / StockHolding, or alternatively, if any relative of an official / employee of Principal / StockHolding has financial interest / stake in the System Integrator's / Counter Party firm, the same shall be disclosed by the System Integrator / Counter Party at the time of filing of tender (RFP).
- 14. The term 'relative" for this purpose would be as defined in Section 2 Sub Section 77 of the Companies Act, 2013.
- 15. The System Integrator / Counter Party shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employees / officials of the Principal / StockHolding
- 16. The System Integrator / Counter Party declares that no previous transgression occurred in the last three years immediately before signing of this IP, with any other Company / Firm/ PSU/ Departments in respect of any corrupt practices envisaged hereunder that could justify System Integrator / Counter Party exclusion from the Tender (RFP) Process.
 - The System Integrator / Counter Party agrees that if it makes incorrect statement on this subject, System Integrator / Counter Party can be disqualified from the tender (RFP) process or the contract, if already awarded, can be terminated for such reason.



III. Disqualification from Tender (RFP) Process and exclusion from Future Contracts

- 1. If the System Integrator(s) / Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article II above or in any other form, such as to put his reliability or credibility in question, the Principal / StockHolding is entitled to disqualify the System Integrator / Counter Party / Contractor from the Tender (RFP) Process or terminate the Contract, if already executed or exclude the System Integrator / Counter Party / Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by Principal / StockHolding. Such exclusion may be for a period of 1 year to 3 years as per the procedure prescribed in guidelines of the Principal / StockHolding.
- 2. The System Integrator / Contractor / Counter Party accepts and undertake to respect and uphold the Principal / StockHolding's absolute right to resort to and impose such exclusion.
- 3. Apart from the above, the Principal / StockHolding may take action for banning of business dealings / holiday listing of the System Integrator / Counter Party / Contractor as deemed fit by the Principal / Owner / StockHolding.
- The System Integrator / Contractor / Counter Party can prove that it has resorted / recouped the damage caused and has installed a suitable corruption prevention system, the Principal / Owner/ StockHolding may at its own discretion, as per laid down organizational procedure, revoke the exclusion prematurely.
- IV. Consequences of Breach Without prejudice to any rights that may be available to the Principal / StockHolding / Owner under Law or the Contract or its established policies and laid down procedure, the Principal / StockHolding / Owner shall have the following rights in case of breach of this Integrity Pact by the System Integrator / Contractor(s) / Counter Party: -
- 1. Forfeiture of EMD / Security Deposit: If the Principal / StockHolding / Owner has disqualified the System Integrator(s)/Counter Party(ies) from the Tender (RFP) Process prior to the award of the Contract or terminated the Contract or has accrued the right to terminate the Contract according the Article III, the Principal / StockHolding / Owner apart from exercising any legal rights that may have accrued to the Principal / StockHolding / Owner, may in its considered opinion forfeit the Earnest Money Deposit / Bid Security amount of the System Integrator / Contractor / Counter Party.
- 2. Criminal Liability: If the Principal / Owner / StockHolding obtains knowledge of conduct of a System Integrator / Counter Party / Contractor, or of an employee of a representative or an associate of a System Integrator / Counter Party / Contractor which constitute corruption within the meaning of PC Act, or if the Principal / Owner / StockHolding has substantive suspicion in this regard, the Principal / StockHolding / Owner will inform the same to the Chief Vigilance Officer through the Vigilance Officer.

V. Equal Treatment of all System Integrators/Contractors / Subcontractors / Counter Parties

- 1. The System Integrator(s) / Contractor(s) / Counter Party (ies) undertake (s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The System Integrator / Contractor / Counter-Party shall be responsible for any violation(s) of the principles laid down in this Agreement / Pact by any of its subcontractors / sub-s.
- 2. The Principal / StockHolding / Owner will enter into Pacts on identical terms as this one with all System Integrators / Counterparties and Contractors.
- 3. The Principal / StockHolding / Owner will disqualify System Integrators / Counter Parties / Contractors who do not submit, the duly signed Pact, between the Principal / Owner / StockHolding and the System



Integrator/Counter Parties, along with the Tender (RFP) or violate its provisions at any stage of the Tender (RFP) process, from the Tender (RFP) process.

VI. Independent External Monitor (IEM)

- 1. The Principal / Owner / StockHolding has appointed competent and credible Independent External Monitor (s) (IEM) for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this Integrity Pact.
- 2. The IEM is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chief Executive Officer and Managing Director, Stock Holding Corporation of India Limited
- 3. The System Integrator(s)/Contractor(s) / Counter Party(ies) accepts that the IEM has the right to access without restriction, to all Tender (RFP) documentation related papers / files of the Principal / StockHolding / Owner including that provided by the Contractor(s) / System Integrator / Counter Party. The Counter Party / System Integrator / Contractor will also grant the IEM, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his or any of his Sub-Contractor's Tender (RFP) Documentation / papers / files. The IEM is under contractual obligation to treat the information and documents of the System Integrator(s) / Contractor(s) / Sub-Contractors / Counter Party (ies) with confidentiality.
- 4. In case of tender (RFP)s having value of 5 crore or more, the Principal / StockHolding / Owner will provide the IEM sufficient information about all the meetings among the parties related to the Contract/Tender (RFP) and shall keep the IEM apprised of all the developments in the Tender (RFP) Process.
- 5. As soon the IEM notices, or believes to notice, a violation of this Pact, he will so inform the Management of the Principal / Owner /StockHolding and request the Management to discontinue or take corrective action, or to take other relevant action. The IEM can in this regard submit non-binding recommendations. Beyond this, the IEM has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 6. The IEM will submit a written report to the CEO&MD, StockHolding. Within 6 to 8 weeks from the date of reference or intimation to him by the Principal / Owner / StockHolding and should the occasion arise, submit proposals for correcting problematic situations.
- 7. If the IEM has reported to the CEO&MD, StockHolding Ltd. a substantiated suspicion of an offence under the relevant IPC/PC Act, and the CEO & MD, StockHolding has not within reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the IEM may also transmit the information directly to the Central Vigilance Officer. 8. The word `IEM" would include both singular and plural.

VII. Duration of the Integrity Pact (IP)

This IP begins when both the parties have legally signed it. It expires for the Counter Party / Contractor / System Integrator, 12 months after the completion of work under the Contract, or till continuation of defect liability period, whichever is more and for all other System Integrators, till the Contract has been awarded. If any claim is made / lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Integrity Pact as specified above, unless it is discharged / determined by the CEO&MD StockHolding VIII. Other Provisions

- 1. This IP is subject to Indian Law, place of performance and jurisdiction is the Head Office / Regional Offices of StockHolding / Principal / Owner who has floated the Tender (RFP).
- 2. Changes and supplements in any Procurement / Services Contract / Tender (RFP) need to be made in writing. Change and supplement in IP need to be made in writing.



- 3. If the Contractor is a partnership or a consortium, this IP must be signed by all the partners and consortium members. In case of a Company, the IP must be signed by a representative duly authorized by Board resolution.
- 4. Should one or several provisions of this IP turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 5. Any dispute or difference arising between the parties with regard to the terms of this Agreement / Pact, any action taken by the Principal / Owner / StockHolding in accordance with this Agreement / Pact or interpretation thereof shall not be subject to arbitration.

IX. Legal and Prior Rights

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and / or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agrees that this Pact will have precedence over the Tender (RFP) / Contract documents with regard to any of the provisions covered under this Integrity Pact.

IN WITHNESS WHEREOF the parties have signe first above mentioned in the presence of the follow	d and executed this Integrity Pact (IP) at the place and date ving witnesses: -
	(For and on behalf of Principal / Owner / StockHolding
(For and on behalf of System Integrator / Counter	
WITNESSES:	
1	_ (Signature, name and address)
2	(Signature, name and address)
Note: In case of Purchase Orders wherein formal deleted from the past part of the Agreement	agreements are not signed references to witnesses may be
Annexure	e - 7
DECLARA Covering Letter on System Integrator's let	
RFP Reference Number: IT-11/2021-22 da To,	
Sub: For Supply, installation & Maintenance of Da	
Dear Sir,	
. , , ,	Holding) hereby declares that StockHolding has Central Vigilance Commission vide its Letter No to following the principles of transparency, equity and
·	ct Notice Inviting Tender (RFP) (NIT) is an invitation to rator will sign the Integrity Agreement, which is an



integral part of tender (RFP) documents, failing which the tenderer / System Integrator will stand disqualified from the tender (RFP)ing process and the bid of the System Integrator would be summarily rejected. This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of StockHolding

Yours faithfully,

For and on behalf of Stock Holding Corporation of India Limited (Authorized Signatory)

Annexure - 8

Compliance Statement

(To be submitted along with technical bid)

Subject: RFP for Supply, installation & Maintenance of Data Centre, Campus and Access Switches

RFP Reference Number: IT-11/2021-22 dated 25-Oct-2021

DECLARATION

We understand that any deviations mentioned elsewhere in the bid will not be considered and evaluated by StockHolding. We also agree that StockHolding reserves its right to reject the bid, if the bid is not submitted in proper format as per subject RFP.

Sr.	Item / Clause of the RFP	Compliance (Yes / No)
No.		
1	Objective of the RFP	
2	Eligibility Criteria	
3	Service Level Agreement (SLA) / Scope of Work	
4	Non-Disclosure Agreement	
5	Payment Terms	
6	Bid Validity, Order Cancellation, Exit Clause	
7	Right to alter RFP	
8	No Commitment to Accept Lowest or Any Other Bid (RFP)	
9	Force Majeure	
10	Compliance Statement	
11	Integrity Pact	
12	All General & Other Terms & Conditions in the RFP	
13	Requirement	
14	Bid Formats (Technical & Indicative Price Bid)	
15	Annexures in the RFP	
16	Pre-Bid Meeting	
17	Project Management	
18	Technical specification	

e with	ı seal
	IC WILL

Name & Designation:

Page **63** of **66**



Annexure - 9

Letter of Acceptance
(To be submitted along with Technical Bid) RFP Reference Number: IT-11/2021-22 dated 25-Oct-21 To,
Stock Holding Corporation of India Limited
Plot No. P-51, T.T.C. Industrial Area
M.I.D.C., Mahape, Kalyan-Shil Road
Navi Mumbai PIN 400710
Dear Sir,
Sub: For Supply, Installation & Maintenance of Data Centre, Campus and Access switches
With reference to the above RFP, having examined and understood the instructions, annexures, terms and conditions forming part of the RFP.
We further confirm that the offer is in conformity with the terms and conditions as mentioned in the RFP. We also confirm that the offer shall remain valid for the entire Agreement Period from the date of the offer. We also confirm that we also comply terms and conditions.
We also understand and accept that StockHolding can modify, amend, alter and/or cancel the entire RFP at any stage without assigning any reason whatsoever. We further understand and accept that StockHolding's decision in this regard will be final and binding on us.
We also accept that StockHolding's decision(s) with reference to this RFP pertaining to evaluation process of System Integrator responses will be final and binding on us. We also understand and accept that no queries will be entertained in this regard by StockHolding.
StockHolding is not bound to accept the lowest or any bid received by StockHolding, and it may reject all or any bid. If our bid is accepted, we are responsible for the due performance of the contract. Authorized Signatories
(Name & Designation, seal of the firm)
Date:
Place:

also



Annexure - 10

Manufacturer Authorisation Format

(To be submitted on OEM's letter head)
RFP Reference Number: IT-11/2021-22 dated 25-Oct-2021
Date:
То
StockHolding Corporation of India Ltd SHCIL House. Plot No -51, TTC MIDC .
Mahape,
Navi Mumbai 400701
Dear Sir,
Sub: Manufacturer Authorisation for RFP NO. We <oem name=""></oem> having our registered office at <oem address=""></oem> are an established and reputed manufacturer of <hardware details=""></hardware> .
We confirm that <system integrator="" name=""></system> having its registered office at <system b="" integrator<=""> Address> is our authorized partner/ re-seller/ dealer for our <hardware details=""></hardware>. We authorize them to quote for our equipments in the above mentioned RFP.</system>
Further, we assure that we would extend full support to them in all respects for supply, warranty and maintenance of our products. We also ensure to provide the service support for the supplied equipments during the warranty period as per RFP terms.
We also undertake that in case of default in execution of this RFP by the <system integrator="" name=""></system> , the <oem name=""></oem> will take all necessary steps for successful execution of this project as per RFP requirements. <oem name=""></oem>
<authorised signatory="" stamp="" with=""></authorised>



Annexure-11

(Pre-bid Query format for System Integrator/OEM)

RFP Reference Number: IT-11/2021-22 dated 25-Oct-21

Serial Number	RFP Heading	Section	Specification	Page Number	Pre-bid Query	Change Requested	Justification for Change
1							
2							
3							
4							