REQUEST FOR PROPOSAL FOR

Selection of System Integrator for Delivery, Implementation & Management of

Private Cloud for

STOCK HOLDING CORPORATION OF INDIA LIMITED

RFP REFERENCE NUMBER: IT-03/2022-23

DATE: 28th September, 2022

Email: prit@*stockholding*.com

DISCLAIMER

The information contained in this Request for Proposal (RFP) document or information provided subsequently to bidder(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 bidder(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 ("bidders"). The purpose of this RFP is to provide the bidder(s) with information to assist the formulation of their proposals. This RFP does not claim to contain all the information each bidder may require. Each bidder 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 Organization	Stock Holding Corporation of India Limited
RFP Reference Number	IT-03/2022-23
Requirement	Request for proposal (RFP) for Selection of System Integrator for Delivery, Implementation & Management of Private Cloud Setup of Stock Holding Corporation of India Limited
Email Id for queries up to Pre-Bid Meet	prit@*stockholding*.com
Date of Issue of RFP Document	28th September, 2022
Last date and time for submission of bidder queries (by email)	10th October, 2022 5:00 PM to prit@*stockholding*.com
Date, Time and place for online Pre-bid meeting	11th October, 2022, 02.00 PM (To participate please send your request to prit@*stockholding*.com on or before 10th October, 2PM)
Last Date for Submission of Online Bid (Eligibility, Technical and Commercial)	27th October, 2022 before 4.00 PM. Bid must be submitted online at https://*stockholding*.auctiontiger.net
Date of opening online Eligibility bid	27th October, 2022 04:30 PM
Date of declaring Result of Eligibility evaluation	4th November, 2022 on StockHolding website. For any Grievances/Queries on Eligibility evaluation, bidder need to send grievances on or before 10th November 2022 by 6 PM to prit@*stockholding*.com. No Grievances/Queries will be entertained post 6 PM on 10th November 2022.
Date of opening of online Technical bid	16th November at 11:30 AM (Request will be sent only to Eligible bidders who participated in technical bid opening
Date of Technical Presentation	22nd & 23rd November, 2022 at StockHolding Mahape office (Request will be sent all bidders who participated in technical bid opening
Date of declaring Result of Technical evaluation	30th November, 2022 on StockHolding website. For any Grievances/Queries on Technical evaluation scoring, bidder need to send grievances on or before 7th December 2022 by 6 PM to prit@*stockholding*.com. No Grievances/Queries will be entertained post 6 PM on 7th December 2022.
Date of opening of online Commercial bid	15th December, 2022 11:30 AM (Request will be sent to all bidders who participated in Commercial bid opening)
Date of declaration of Final Result	23rd December, 2022 on StockHolding website
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
Earnest Money Deposit	Rs. Ten Lakhs (10,00,000/-) 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 27th October 2022. StockHolding's Bank Account No.: 004103000033442 Bank: IDBI Bank (Nariman Point

	Branch) IFSC: IBKL0000004. Please share the UTR details to us on below mentioned email address.
Performance Bank Guarantee	10% of Contract Value

This bid document is not transferable

StockHolding reserves the right to modify/update activities/ dates as per requirements of t

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Glossary

Abbreviation	Description
***StockHolding*, Company**	Stock Holding Corporation of India Limited (*StockHolding*)
Bidder/SI	Refers to the parties participating in the supply, service, implementation and manage the solution as per *StockHolding* RFP
UAT	User Acceptance Testing
Personnel/ Resources	Professionals and support staff provided by the Bidder
Project	The Bidders' delivery of the services and deliverables over the tenure of the contract
RCA	Root Cause Analysis
RFP	Request for Proposal
SDLC	Software Development Life Cycle
ST	Systems Testing including testing of Business Scenarios, Integration and reports
UT	Unit Testing
Service Provider	The bidder(s) awarded a contract resulting from this RFP.
Contract	The agreement formed between Company and the service provider as evidenced by an Agreement issued to the Company.
Contract document	The agreement, the service provider's proposal document, the RFP and such other documents as listed in the agreement, including all amendments or an addenda agreed between parties.
Must, Mandatory or Required	An absolute minimum function or capacity, which, if not satisfied in the proposal, may result in disqualification in the final evaluation.
De-identification	Process of removing from data any information from electronic media that identifies a particular individual
RFP	Request for proposal including any amendments, attachments, and/or clarifications pertaining to RFP that may be issued prior to the closing date
Should, May or is desirable	Desirable but not mandatory functions or capacities. Bidders who are able to provide these functions or capacities may be evaluated favourably than those who cannot.
Candidate, Resource	Employee of the Empanelled Bidder
QP	Quarterly payment

1. Introduction

1.1. Overview – About Stock Holding Corporation of India Limited

A fast-growing economy needs an equally robust financial ecosystem to back it. Since inception, we have evolved steadily to be a financial powerhouse offering a suite of offerings which help to ease the financial planning needs of individuals. Covering short-term savings, investments in the stock market, personal & family needs, long-term security, easy loans, retirement plans and even protection for life & valuables.

Simultaneously, we brought an entire spectrum of financial products and services to help businesses grow. By simplifying depository participation, raising capital, protecting assets and life, managing documents, imparting training and bringing exciting schemes for employees.

StockHolding, one of the largest Depository Participants (DP) and also a premier Custodian in terms of assets under custody, provides post trading and custodial services to institutional investors, mutual funds, banks, insurance companies, etc. *StockHolding* acts as a Central Record Keeping Agency (CRA) for collection of stamp duty in 21 States and Union Territories on pan India basis. It is the sole agency responsible for overall E-stamping application operations and its maintenance. *StockHolding* is one of the largest Professional Clearing Members of the country.

In Retail segment besides DP services, *StockHolding* offers stock broking services through its wholly owned subsidiary *StockHolding* Services Ltd. (SSL). *StockHolding* is also into distribution of various investment and retirement solutions viz. Fixed Deposits, Bonds & NCDs of reputed institutes and corporates, Mutual Fund Schemes, Initial Public Offers (IPOs) and National Pension System (NPS). RBI has designated *StockHolding* as one of the Agency Banks to distribute GoI Bonds in dematerialized form. *StockHolding* also offers the Government of India Sovereign Gold Bonds. *StockHolding* is also a corporate agent registered with IRDAI for distribution of insurance (Life, Health & General) products.

StockHolding has its registered office at Mumbai, main operations office at Navi Mumbai and operates through its over 200 retail branches all over India.

1.2. Background

As peoples' needs keep growing, we are ready with our enhanced efficiencies and new technology to offer world-class service that delights. *StockHolding* is aimed at becoming market leader in financial and technical services, in order to achieve the same and providing experience to its customer.

In addition to these, the Company is continually developing and deploying suitable technology solutions as part of several new projects on an on-going basis depending upon the needs of the business.

StockHolding is already having an existing setup as part of the existing DC & DR infrastructure apart from best of the class Network & security setup. *StockHolding* now intends to implement a Private Cloud setup at its DC & DR location.

1.3. Objective

The purpose of this RFP is to inform potential Bidders/ System Integrators/ reputed Institutions / Professional Firms, to assist Company in procurement, Implementation & management of a Private Cloud Infrastructure as per the Scope given in Section 3, and thereby solicit proposals for the asked deployment. Based upon the review and evaluation of proposals offered in response to this RFP, Company may at its sole discretion negotiate and enter into contracts the successful Bidder for contract duration of 5 years.

Notwithstanding any other provision herein, Bidder participation in this process is voluntary and at Bidder's sole discretion. Price will be a consideration but will not be the sole factor in Company's decision to award a contractual relationship.

Company reserves the right to accept or reject any or all bids from a specific or multiple Bidders for any reason at any time. Company also reserves the right at its sole discretion to select or reject any or all Bidder(s) in this process and will not be responsible for any direct or indirect costs incurred by the Bidders in this process.

2. Terms of the RFP

2.1 Submission of Proposal

The response to this RFP will be submitted by way of 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 bidder will be trained by e-Procurement Technologies Ltd. for this purpose, and the bidder will have to abide by the e-business rules in consultation with e-Procurement Technologies Ltd.

The bidders should submit their responses as per the formats given in this RFP in the following manner:

a. Eligibility Bid
b. Technical Bid
c. Commercial Bid

The bidder will have to upload the duly signed and scanned RFP submission with relevant document(s) along with eligibility, technical and commercial bids. All Annexure Forms will have to be filled and submitted online. The Eligibility, Technical Bid along with Commercial Bids with relative documents must be submitted online.

The online Bids (Eligibility, Technical and Commercial) should be uploaded as per the critical data sheet of this RFP by the due date and time. The responsibility to ensure this lies with the Bidder. Late tenders will not be considered. No responsibility will be taken for technical delay or not uploading of Bid documents. Bids sent by fax or e-mail will not be considered.

The bidders are requested to note that it is mandatory to have a valid digital certificate issued by any of the valid certifying authorities approved by Govt. of India to participate in the online bidding. The bidders are requested to ensure that they have the same, well in advance or if any assistance is required for the purpose, bidders can contact 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/Windows 10 or above
3. Digital certificate - Class II or III, **Signing + Encryption**. **Please note that this must be a signing AND encryption certificate**.

2.2 Due Diligence

The bidder 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 the 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 bidder'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.

2.3 Clarifications regarding RFP Document

1. 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.
2. A bidder may obtain clarification for their queries on this RFP via email to PRIT@*stockholding*.com. A pre-bid discussion would be held by the interested bidders to clarify the queries raised.
3. *StockHolding* shall not be responsible for any external agency delays.
4. *StockHolding* reserves the sole right for carrying out any amendments/modifications/changes in the bidding process including any addendum to this entire RFP.
5. During the RFP process, StockHolding reserves the right to amend / cancel / postpone / pre-pone the RFP without assigning any reasons whatsoever.
6. At any time before the deadline for submission of bids/offers, *StockHolding* may, for any reason whatsoever, whether at its initiative or in response to a clarification requested by bidders, modify this RFP Document.
7. Sub-Contracting: Sub-Contracting is not allowed for this RFP.
8. 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.
9. *StockHolding* reserves the rights 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*.
10. *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 on all the parties directly or indirectly connected with the bidding process.

2.4 Communication channels for RFP enquires and clarifications

All communications related to this RFP should be directed by email, physical communication to the following:

Procurement Team
Email: ***PRIT@stockholding.com***

If *StockHolding*, in its absolute discretion, deems that the originator of the question will gain an advantage by a response to a question, then *StockHolding* reserves the right to communicate such response to all the bid respondents

2.5 Company's Obligations

The submission and receipt of proposals does not obligate Company in any way. Company shall not be liable for any costs incurred by Bidders in the preparation, presentation or any other aspect of the proposals received by reason of this request, nor is Company obligated to negotiate separately with any sources whatsoever in any manner necessary to serve Bidder's

best interests. Company makes no representation, implied or express, that it will accept and approve any proposal submitted. Any and all Contracts which result from this RFP shall be non-exclusive, as-ordered agreements.

2.6 Contents of Bid

The Eligibility, Technical and Commercial bids shall be uploaded separately through the Auction Tiger Portal.

Bid Contents

Document Set	Name of the Document	Content
One	Eligibility Criteria Document	a) All supporting documents as mentioned in Section '8.4 Annexure 4: Compliance to Eligibility Criteria"
Two	Technical Bid	a) Covering Letter (as per Annexure 1) b) Details of Bidder's Profile (as per Annexure 3) c) Integrity Pact (as per Annexure 6) d) Reference Checks (as per Annexure 7) e) MAF (as per Annexure 10) f) Proposed Team Profile (as per Annexure 13) g) Compliance Statement (as per Annexure 15) h) Minimum On-Site Deployment Level (as per Annexure 12)) i) Compliance of 'Functional and Technical Specification' (as per Annexure 16) j) 'Technical Bill of Material' (as per Annexure 17) k) Deviations (as per Annexure 9)
Two	Commercial Bid	a) Covering Letter (as per Annexure 2) b) Summary of Commercial Bill of Material (as per Annexure 5) c) Break-up of Commercial Bill of Material as enclosed with this RFP (need to upload which Commercial Bid submission)

All Bidders are required the fill the details and upload the necessary documents as mentioned above as part of the Bid. Non-submission of above mentioned documents may leads to rejection of the Bid.

3. Requirements

3.1 RFP Context

This Request for Proposal (hereinafter referred to as "RFP") document encompassing Annexure, and subsequent Addendum and/or Corrigendum, has been issued solely to enable *StockHolding* for selection of System Integrator for Delivery, Implementation & Management of Private Cloud Setup which includes requirement gathering, delivery, implementation, configuration, integration with existing Infrastructure, training, roll out, post go live maintenance support for 5 years.

Bidding Process activities: The Bidding Process in the RFP will include the following steps:

- Issue of RFP document
- Receipt of queries from Bidders and clarification thereto
- Circulation of pre-bid response to all Bidders
- Posting of pre-bid responses on *StockHolding's* website
- Submission of RFP response by Bidders
- Evaluation of Bidders Technical & Commercial response
- Announcement of finalized Bidder through publication on corporate Website
- Contracting and Onboarding of the finalized Bidder

3.2 Scope of Work

3.2.1 Purpose

SHCL intends to on-board a System Integrator for Delivery, Implementation & Management of its planned Private Cloud Infrastructure which will be hosted in present Primary Data Centre (DC) and Disaster Recovery Centre (DR).

StockHolding, for this purpose, invites proposals for primarily undertaking inter-alia the activities mentioned in the subsequent sub-sections

No	Item Description	Qty required
1	All flash Hyper-Converged infrastructure with 3 years warranty + 4th and 5th year AMC (All flash nodes each for DC site) as per specifications.	AS per specification
2	Hybrid Hyper-Converged infrastructure with 3 years warranty + 4th and 5th year AMC (Hybrid nodes with SAS Disks for DR site) as per specifications	AS per specification
3	DR Automation	80 VMs
4	Backup software license	80 VMs at DC
5	Backup software license	20 VMs at DR
6	Backup Appliance at DC usable space without compression and de-duplication	250 TB
7	Backup Appliance at DR usable space without compression and de-duplication	125 TB
8	Tape library at DC location-FC LTO Gen8 Tape Drives and minimum of 24 slots with barcode reader	1
9	TOR (Top of the Rack) L3 Switch with 48x25 Gbps and 6x100 Gbps uplink at DC	2

10	TOR (Top of the Rack) L3 Switch with 48x25 Gbps and 6x100 Gbps uplink at DR	2
11	Management Switches 24 x 10/100/1000 Mbps RJ45 ports and additional 4 x 10G SFP+ (DC location)	2
12	Management Switches 24 x 10/100/1000 Mbps RJ45 ports and additional 4 x 10G SFP+ (DR location)	2
13	Operations Management	DC
14	Operations Management	DR
15	Software components for Private cloud setup	DC
16	Software components for Private cloud setup	DR
17	Backup server	DC
18	Backup server	DR
19	Rack	1 DC Location
20	Rack	1 DR location
21	L2 Resident Engineers and Call- Coordinator	L2 RE – 2 (DC location) Call Coordinator - (DC location)

3.2.2 Project Scope

The broad project scope includes having a single point contact for Supply, Implementation, Migration & Management of the Private Cloud to accumulate the applications of *StockHolding***.** The Private Cloud setup will be used to host the existing & new applications of *StockHolding* in the next few years. The shortlisted vendor shall provide the managed services for a period of 05 years, *StockHolding* reserves the right to extend the services based on mutually agreed terms & conditions at the end of the current contract.

The proposed solution shall be scalable, extensible, configurable, secure, and responsive and shall support integration and optimization including scale up and scale down of required services and solutions (existing legacy and acquired in future), designed for or used by *StockHolding*. *StockHolding* may procure additional compute, storage and allied software to increase the private cloud setup during the contract period based on finalized rates during the tenure of the contract. The proposed solution should be scalable as mentioned in (3.2.3) throughout the contract duration.

The broader requirements are expressed in the below –

1. Private Cloud Infrastructure for Application Hosting (DC and DR)
2. Private Cloud Managed Services including initial setup, provisioning, and on-going infrastructure management during the period of 5 years from system go-live. Private cloud setup is required to be built on Hyper Converged Infrastructure
3. Infrastructure & Solution proposed by bidder should comply the following:
   a) The products & services offered must include comprehensive on-site warranty as provided by the OEM including all software, hardware, parts, media, patches, updates and licenses.
   b) Warranty must comply with the Technical Standards, Security Requirements, Operating Procedures and Recovery Procedures
   c) No parts or/and accessories of the systems should be excluded from such warranty

d) The Bidder will be single point of contact and responsible for AMC, ATS, guarantees & warrantees for all, components, hardware, software, etc. The products and solutions proposed by the Bidder by way of this RFP should come with warranty of 3 Years for Hardware and 3 Year for Software. Thereafter, the Bidder should provide AMC/ATS for these products and solutions.

e) Hardware Warranty starts post acceptance of the hardware installation, commissioning and go-live sign off of the private cloud setup. The period of warranty is three years. The AMC hardware shall begin post completion of warranty.

f) Warranties pertaining to Software / Applications starts post go-live of the proposed software/tools in production. The period of warranty is three years. ATS for Software/ Application shall begin post Completion of Warranty.

g) Bidder is required to propose the solution which must comply the functional and technical Specifications (Section 8.16 Annexure 16) of this RFP.

h) The proposed Software and Hardware OEMs should have 24x7 support centre in India and logistics centre in Mumbai and Bengaluru (or near it).

i) The bidder shall propose direct back-to-back highest-level of OEM support 24x7x365 days for proposed products with unlimited number of incidents.

j) The bidder shall propose perpetual licenses and support/subscription services from the OEM with unlimited number of support requests, remote support, access to product updates/upgrades and 24x7 support for Severity 1 issues.

k) Installation, re-installation, OS hardening, Access management, troubleshooting, Facilities management & maintenance of the Operating System but not limited to (Linux/Windows) & deployed management applications/solutions, servers, in such a case bidder will be responsible for end-to-end Vendor/OEM management for call logging, co-ordination, escalation and resolution.

l) Bidder to ensure adherence to StockHolding existing version maintenance policy.

m) Maintain the record of versions of but not limited to OS, IOS, Firmware, Signatures, Upgrades / updates, Patches existing in the cloud infrastructure.

n) Keep track of latest versions of OS, IOS, Firmware, Signatures, Upgrades, and Patches published by OEMs. Inform StockHolding on availability of new upgrades, signatures.

o) The bidder must ensure that all components of the cloud infrastructure are updated with patches as and when they are released after due testing. Critical patches should be applied immediately

p) Study performance of hardware / software after installation of Patches, Assist StockHolding to draw the conclusion that the hardware / software is performing at its optimum level after implementation of any patch or upgrade. Bidder is required to ensure that no software or hardware reaches end of life or end of support during the entire contract period, failing which, bidder will be required to upgrade or replace the same at no additional cost to the StockHolding.

q) Bidder is required to ensure that all Licences will be in the name of StockHolding.

r) Bidder is required to ensure no end of sale announcement is published against any hardware or software component proposed as a part of the solution, BOQ

& BOM; end of sale announcement date must be before the submission date of the RFP or the date of acceptance of the purchase order issued by StockHolding or the date of signing of the MSA whichever is later.

s) Bidder is required to propose the solution with all latest release of the hardware software in respect to model, version and patches; The latest release of hardware or software would be restricted to the date on or before the submission date of the RFP or the date of acceptance of the purchase order issued by StockHolding or the date of signing of the MSA whichever is later.

3.2.3 Brief on Proposed Infrastructure

The bidder is required to design proposed solution considering the below facts –

1. The solutions should provide highest level of uptime & redundancy in terms of hardware availability, data availability, power supply, network & security.
2. The solutions should be able to work in case of single node failure meeting the service level defined in the RFP.
3. The data should be available in case of any hardware failure but not limited to nodes, switches or rack.
4. The entire cloud infrastructure should be capable of being divided into multiple logical segments where each segment should consist of compute, storage, network components and performance issue of one segment should not spill over to other segments.
5. The solution should be capable of enabling automatic Scale up and scale out, should be agnostic to underlying hardware, storage, network, and operating system.
6. The solution needs to provide the ability for IT Administrators to automatically provision the services via a Web Portal (Self Provisioning).
7. The solution should be able to add/reduce cloud resources on demand basis, through a user-friendly dashboard.
8. The solution should be able to seamlessly integrate with the StockHolding's existing infrastructure.
9. The solution should be able to seamlessly integrate with all industry standard cyber security devices and solutions.
10. The Bidder will be responsible for adequately sizing the necessary compute, memory, and storage etc., building the redundancy into the architecture to meet the service level requirements mentioned (Section 7) of the RFP document under the overall guidance of the RFP.
11. The cloud architecture should be capable of implementing diverse applications like web applications, databases, big data solution etc. with adequate provision of application-level isolation.
12. The bidders are requested to ensure proper sizing of the solution based on their overall assessments, scope of work defined in RFP and other parameters such as SLA requirements, etc.
13. The solution should be architected to run from DC site and DR site independently. In the event of a DC or DR failure, there should be provision to shift workload to the other site with all control and management mechanism available at the respective site (RPO-15 Min and RTO 1 Hour). Response time and resolution time to be referred from (Section 7) from the SLA section of the RFP.

14. The cloud solution should have provision for automated VM & resource provisioning, patch management, capacity planning, proactive monitoring, automated DR movements, detailed reporting etc. as functionalities.
15. StockHolding envisages "build as you grow" capability in the proposed private cloud architecture. Hence, the solution should be hosted in a single 42u rack with redundant intelligent PDUs for initial capacity. In case of later enhancement of capacity in the same rack 2.5x power sockets to be provisioned from day 1.
16. The proposed solution should not be an appliance-based solution StockHolding should have the choice to select the underlying hardware.
17. The network components required for inter rack communication must be part of the solution proposed and to be managed by the bidder. The solution should be able to provide optical & ethernet network connectivity to integrate it to the existing infrastructure of StockHolding.
18. SAN, LAN Uplink connectivity up to the proposed rack will be provided by StockHolding while if proposed solution requires more than one rack the bidder must provision the intertrack connectivity.
19. The bidder is required to provide software licenses mentioned explicitly which are required for implementing the private cloud environment. However, the software required for running the private cloud solution including but not limited to docker, Kubernetes, backup, automatic provisioning, reporting, operating system, capacity planning, Backup, Storage etc. must be provided by bidder for the entire Solution.
20. The proposed cloud solution will be implemented in below site-
21. **Primary Data Centre (DC) Mumbai:** The DC should have the capability of logical separation for production and non-production environment with the capability of resource capping in the proposed private cloud solution
22. **Disaster Recovery (DR) Bengaluru:** The DR will be similar replica of the DC in terms of capacity (75% of DC) and features environment with similar configuration as DC
23. DC & DR should be deployed in Active-Passive mode with approximately 80-100 virtual machines with most of the workloads preferably on Linux

3.2.4 Hardware and Software Requirement

The proposed cloud will be used for hosting multiple applications during project tenure

Hardware sizing (Refer Section 7 for detailed Spec)

1. 192 Physical Core at DC and scalable up to 500 cores in Single Cluster.
2. 144 Physical Core at DR and scalable up to 500 cores in Single Cluster.
3. Memory 16 GB/Core Scalable up to 64GB/Core.
4. Storage Minimum 100 TB usable (All Flash) at DC and 75 TB usable (Hybrid-SAS Disks) at DR and scalable up to 1PB Usable.
5. The proposed solution should be capable of integration with all leading SAN and storage devices using leading industry standard FC connectivity.
6. All Requisite SFPs, TOR Switches, OOB Switches for management, shall be provisioned and provided by bidder.
7. Backup appliance to be provisioned at DC as well as DR location for DC-250TB and DR-130TB usable space on appliance without dedupe and Compression.
8. Tape library with 02 nos. tape drives (LTO8 compatible read write) to be provisioned at DC.

3.2.5 Managed Services

StockHolding is looking for an end-to-end managed services (but not limited to): Bidder shall be responsible for supply, install, implement, configure, monitor and manage the proposed private cloud solution including its underlying infrastructure as per the minimum technical specifications in (Section 7) of this RFP. Cloud Infrastructure Management services

1. Server Administration
2. Storage Administration & Management
3. Network & Security Management services
4. Backup/Restore Management services.
5. Tape Management
6. BCP Planning and Disaster Management
7. Testing planning
8. DR Drills
9. Reporting & Documentation
10. Training, knowledge sharing for *StockHolding* employees.
11. Help Desk Support

3.2.6 Post implementation onsite support

Minimum resource deployment Requirement and Scope

After implementation the Successful bidder has to ensure the availability of **2 resident engineers of L2 level,** on pay roll of the bidder for the entire duration of the contract from the date of Go Live for hours (7 am to 9 pm) at Data Center and if required at another site for all activities related to the solution on all working days of the week as well as beyond office hours or on holidays, whenever asked or needed.

1. After implementation the Successful bidder must ensure the availability of **1 Call-Coordinator** for the entire duration of the contract from the date of Go Live During Business hours (09.30AM to 6 PM)
2. The Bidder should provide **Technical Account Manager (TAM) services 100 Hours annually** throughout the contract period suggest OEM best practice, conduct timely health-check of the deployed solution and submit a report indicating compliance to reference architecture.
3. The resident engineers will be exclusively for this *StockHolding* project and cannot be shared by the bidder for any other purpose during contract period. Granting leave/ absence to the engineers posted at our site, should be with at least 2 days" prior intimation and suitable replacement should be arranged in his/her absence without fail. Penalty may attract if engineers are absent.
4. Support at another site will be provided by resident support engineers remotely from DC or visit to DR site in case of need.
5. Proactive monitoring of health of the solution, including the H/W, S/W, Operating systems, solution on various parameters such as CPU, memory, interface utilizations. Monitoring the threshold and reporting the same to the *StockHolding* on daily basis. Reporting abnormalities to the *StockHolding* as and when observed/occurred.
6. Maintaining the inventory of all nodes, VMs etc. at DC and DR (managed through Central Management Console) along with device IP address, MAC address, present location, switch IP and switch port numbers used for connectivity, type of devices connected.
7. Troubleshooting day to day issues, faced by end users, pertaining to proposed solution in coordination with *StockHolding's* Network integrator, security integrator, desktop management team or other relevant teams/vendors

8. Call logging and follow-up with the OEM or the bidder's internal support mechanism and escalation for resolution of all types of hardware, software, solution, or application related issue for the solution within the Service levels mentioned in (Section 8)
9. Configuring and monitoring backup policies but not limited to VMs, Nodes, audit logs, policies, system configurations, user database, element database and any other parameters required to run the solution.
10. At a later stage if additional resources are required, then Bidder has to provide the resources as per the commercial submitted.
11. Bidder must provide detailed resource deployment plan during implementation and facility management support during their technical bid submission. (Annexure 14)

Proposed L2 Engineers expected profile

1. Fully conversant and certified with Latest Cloud and HCI Technologies/Virtualization/Hypervisor provided in the Solution
2. Knowledge of Virtualization and Migration (P2P, P2V, V2V)
3. Knowledge of LAN, WAN, VPN and MPLS
4. Knowledge of End Point Management including AV, Malware, Patch, NAC and Deployment
5. Knowledge of Directory Services (AD, AAD, LDAP)
6. Knowledge of Installation, Configuration and Troubleshooting of Windows and Linux Operating Systems
7. Knowledge of Firewall Configuration, Changes and Troubleshooting
8. Knowledge of Software defined Storage Solutions, Backup and Replication Services (Local, SAN, Cloud)
9. Hands on experience on operating system installation, administration, troubleshooting and fine tuning of OS parameters limited to RHEL and windows.
10. Should have recent commercial experience of local and public/private cloud hosted servers with solid cloud management and automation skills.
11. Should be an OEM certified and having hands on experience (whose Virtualization Software and Backup Solution have been quoted by the vendor against this tender) Certified L2 engineer (minimum B. Tech/BE/equivalent qual.), having the above qualifications/experience.
12. Should have been an employee of the Bidder or should have been deputed to a similar of another customer (PSU/Govt. /Pvt. Banks etc.) and should have handled & managed cloud servers on proposed technology for a period of at least 3 years.

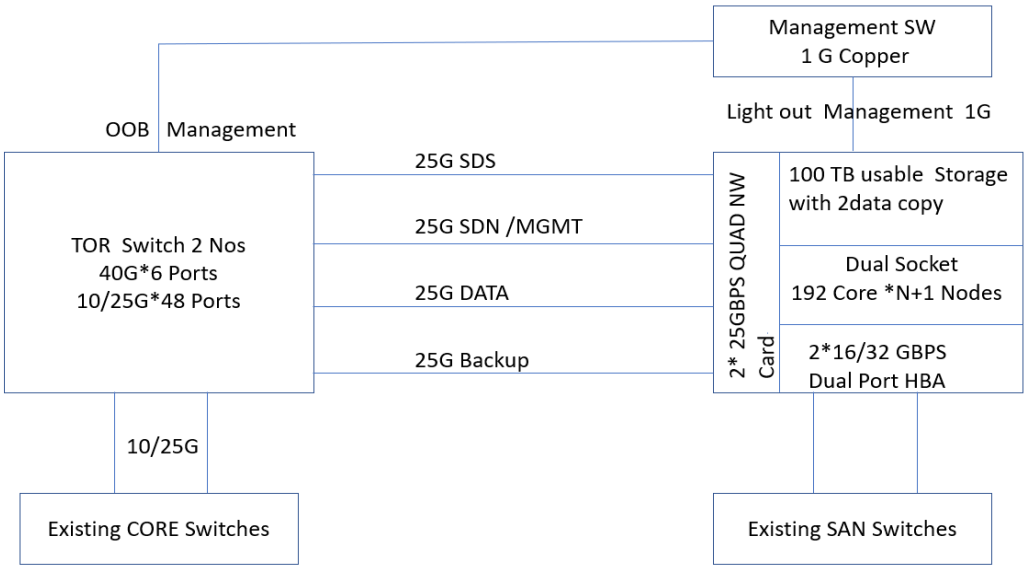
The proposed call Co-Ordinator Expected Profile

1. Bachelor's Degree in Computer Science or a related technical discipline, or the equivalent combination of education, technical training or work experience.
2. 2-5 yrs. of previous experience in IT helpdesk
3. Adhere to established Service Level Agreements and ensure to follow up on the ticket in a timely manner
4. Diagnose, prioritize, incidents reported by the users via telephone, chat, email or walk-ins
5. Identify and escalate tickets requiring urgent attention and action
6. Should be able to Generate and publish periodic MIS reports and Ad-hoc reports as required.

3.2.7 Responsibility Matrix

No.	Cloud Infra	Activity Owner
1	Solution Design including (HLD, LLD and configuration) for infrastructure	BIDDER/OEM
2	Documentation for delivered hardware, software, license and necessary installation to be provided to *StockHolding*	BIDDER/OEM/Software vendor
3	Provide Datacentre infra (Rack space, Power, cooling, cabling path) at DC and DR. Connectivity between DC, DR and other sites.	*StockHolding*
4	• Provide IP range for management data, application and backup. • Provide Licences for guest operating systems, Databases, Application, Hardening parameters	*StockHolding*
5	Supply of hardware components including servers/nodes, network switches, Storage, Racks, PDU, cables, connectors, SFP's.	BIDDER/OEM
6	Acclimatization, Rack mounting, power on of hardware	BIDDER/OEM
7	Run POST on hardware	BIDDER/OEM
8	Configure management network.	BIDDER/OEM
9	Supply management software and its Licences related to cloud management	BIDDER/OEM
10	OS installation and management software installation including IP configuration.	BIDDER/OEM
11	Hypervisor configuration VM creation and configuration as per the requirement	BIDDER/OEM
12	Warranty / AMC of hardware including rack and PDU.	OEM
13	Transit Insurance and extended insurance of hardware - till installation and acceptance.	BIDDER
14	Hardening of Network and OS. of all devices and VMs	BIDDER
15	Physical connectivity between existing infra and private cloud including cables (Fibre/Copper), connectors, Jack panels LIU to be installed at both the ends *StockHolding* end and private cloud end include supply and installation.	BIDDER/OEM
16	Failover, HA testing of cloud infrastructure.	BIDDER/OEM
17	Integration of the private cloud with existing infra.	BIDDER/OEM
18	Management, Maintenance and Support of all supplied hardware and software components.	BIDDER/OEM
19	Conformity / compliance in case of identification of any non-compliance identified by *StockHolding* during installation	*StockHolding*

3.3 Guiding principle on Architecture



3.4 Project Timeline

The Bidder is required to adhere to the project timelines mentioned below:

No.	Service Area	Target (T)
1	Team Mobilization, Preparation of Project / Implementation / Migration Plan, Kick-off meeting, acceptance of SLA etc. /Site readiness acceptance	T+ 2 weeks
2	Delivery of material as mentioned in BOQ Hardware, Software & Licenses.	T+ 20 weeks
3	Solution Configuration, Implementation at all sites	(Divided for sub activities)
3.1	Hardware Installation, Configuration, Creating zones and Clusters across 2 sites	T+22 weeks
3.2	Implement Software Defined Compute and Storage across 2 sites	T + 28 weeks
3.3	Implement Software Defined Network and Security across 2 sites	T+ 32 weeks
3.4	Implement Operations Management and Automation across sites	T+ 36 weeks
3.5	Stage-wise acceptance test	After each stage of implementation
4	Final Acceptance Test and Stabilization - Go Live	T+ 40 weeks
5	Ongoing Operations Management	The Bidder will provide the ongoing operations support till the tenure of the contract

a) T refers to date of PO acceptance or 15 days from date of PO issuance, whichever is earlier
b) In case bidder fails to submit the acceptance within 15 days, then PO will be deemed accepted and bidder would be required to ensure the adherence to the terms of the RFP and PO issued to the bidder.

c) The Bidder should note that the installation of proposed solution must not impact the functioning of the StockHolding's existing infrastructure

3.5 General Information

1. If the bidder provides any incorrect/wrong information during the bidding process, then StockHolding would have all rights to take necessary and appropriate action against the bidder, to recover the damage.
2. Resources proposed by the Selected Bidder as part of project would have to be approved and interviewed (if required) before getting them on-board. *StockHolding* is not obligated to share the reason of rejection in case of rejection of a candidate.
3. The Selected Bidder is expected to provide laptops to the onboarded resources which will be formatted and hardened as per IT and Information Security policy of *StockHolding* to provide remote access. This is an exceptional activity conducted by *StockHolding* in the event of ongoing COVID-19 or any other pandemic situation and a provision of Work from Home privilege. This should not be constituted as a means of not coming to Onsite location of *StockHolding* under normal circumstances or when required by *StockHolding* and the selected Bidder is expected to depute their approved personnel at onsite location by default. The administrative control of the vendor's laptops lies in the hands of *StockHolding*.
4. Whether remote access or working from StockHolding premises, laptops must be provided by the Selected Bidder.
5. *StockHolding* expects that the selected Bidder has conducted Background Checks on the proposed / selected resources before they get onboarded. In case of new resources joining the Bidder organization, the Bidder explicitly agree to complete the background verification within 2 months of the resources / personnel onboarding to *StockHolding*.
6. *StockHolding* has the right to audit Selected Bidder about Background checks on the selected resource. In case there is lapse on the BG checks, *StockHolding* reserves the right to take penal action on the Selected Bidder including but not limited to termination of the bidder.

3.6 Contract Duration

1. Selected Bidder shall enter a five (5) year maintenance contract with *StockHolding* in addition to the implementation period of the proposed solution.
2. Post end of 5-year maintenance period, *StockHolding* and selected bidder might choose to extend the contract as per terms & conditions (including commercials) mutually decided between *StockHolding* and the selected Bidder at that point in time.
3. Either party may choose to not extend the contract after end of 5-year maintenance period. In the event *StockHolding* and the selected bidder decides to extend the contract, a new contract agreement will be signed post discussions with the Selected Bidder on the mutually agreed terms and conditions.

3.7 Contract Documentation

1. Selected Bidder shall adhere to the annexures and other documentation such as Non-Disclosure Agreement (NDA) or any other documents from time to time for successfully and continuous on-boarding.
2. Post selection of Bidder, StockHolding will issue a Letter of Intent (LoI) to selected Bidder and after completion of successful POC, selected Bidder will have to enter into a Master Services Agreement (MSA) with *StockHolding* or StockHolding will issue a Purchase Order (PO) to selected Bidder.

3.8 Invoicing and Payment Terms

1. The Invoice shall contain the billing description clearly along with value and all taxes added as applicable.
2. The bidder shall raise any invoices only after signoff for the related deliverables/Services.
3. *StockHolding* shall make the payments as per Terms and Conditions outlined in the Master Service Agreement (MSA) and/or Purchase Order to be contracted with the Selected Bidder.
4. No Advance payment will be made to the selected bidder against Purchase Order..
5. The payment to the selected Service bidder shall be made in Indian rupees.
6. The commercial bid submitted by the Bidder must be in conformity with the payment terms proposed in this RFP. Any deviation from the proposed payment terms would not be accepted. In case of delays or defaults on the part of the Bidder, *StockHolding* shall have the right to withhold payment of the effected product and/or service due to the Bidder or withhold the payment of the disputed amount. Such withholding of payment shall not amount to a default on the part of *StockHolding*.
7. *StockHolding* will release payment within 30 days of receipt of Invoice and along with all other required documents for all undisputed cases. In case of any disputed amount, the payment will be released within 30 days of resolution of the dispute.
8. Taxes & levies: Applicable taxes payable at actual as per prevailing rate of taxes as per Government notification. Applicable deduction if any may / will be recovered (deducted) from the payment(s)
9. *StockHolding* will not pay any out-of-pocket expense.
10. The component wise payment will be as mentioned below:

3.9 Hardware deployment and Implementation Payment Terms

Sr. #	Activity	Timeline	Payment Term
1	Supply of Hardware and software as per BOQ	As per Project Timeline mentioned in Section 3.4	50%
2	Installation of Servers, Configuration, and Implementation of Software	As per Project Timeline mentioned in Section 3.4	25%
3	Acceptance / Go-live	After 30 days of Acceptance / Go-Live	Balance 25% against submission of Bank Guarantee.
4	Hardware AMC	Post 3 Year warranty.	4th Year and 5th year annually in advance.
5	Software ATS	Yearly post warranty	Yearly advance from 2nd Year.
6	Support & Subscription Renewal of Licenses	Yearly basis	100% payment on renewal of Licenses / support.
7	Onsite Resource Deployment	Quarterly basis	Quarterly (based on the attendance of the deployed resources at *StockHolding*)

StockHolding shall pay each undisputed invoice raised in accordance with this RFP and subsequent agreement, within thirty (30) Days after its receipt unless otherwise mutually agreed

to in writing, provided that such invoice is dated after such amount have become due and payable under this RFP and subsequent agreement.

Any objection / dispute to the amounts invoiced in the bill or any other component of the bill shall be raised by *StockHolding* within 21 days from the date of receipt of the invoice, only in exceptional circumstances will *StockHolding* raise a dispute beyond 21 days. The Bidder is required to provide the clarification on the disputes within 14 days of dispute being highlighted by the *StockHolding*. In case of Disagreement/dispute between *StockHolding* and the bidder exists even after receiving the clarifications such disputed can be dealt as per contract provisions. Upon settlement of disputes with respect to any disputed invoice(s), the *StockHolding* will make payment within thirty (30) Days of the settlement of such disputes.

All out of pocket expenses, traveling, boarding and lodging expenses for the entire Term of this RFP and subsequent agreement is included in the amounts and the Bidder shall not be entitled to charge any additional costs on account of any items or services or by way of any out-of-pocket expenses, including travel, boarding and lodging etc.

3.10 Cancellation of Contract

The *StockHolding* reserves the right to terminate the order/ contract of the selected bidder by giving 3 months of notice and recover expenditure incurred by the *StockHolding* on the following circumstances:

1. The selected bidder commits a material breach of any of the terms and conditions of the contract.
2. The bidder goes into liquidation voluntarily or otherwise.
3. An attachment is levied or continues to be levied for 7 days upon effects of the bid.
4. Termination if progress regarding the execution of contract by the bidder is not as per SLA, Timelines, scope of the RFP or if any material breach of contract.
5. Deduction on account of liquidated damages exceeds 10% of the total contract price.
6. If the Bidder breaches or violates any Security / Data / Privacy Related information / activity.
7. If the Bidder becomes bankrupt or otherwise insolvent, provided that such termination shall not prejudice or affect any right of action or remedy which has accrued or shall accrue thereafter to the StockHolding.

After the award of the contract, if the selected bidder does not perform as per the SLA, terms, conditions and timelines as mentioned in RFP or delays execution of the contract, the *StockHolding* shall give a 30 days cure period. Thereafter, if the selected bidder does not perform as per the SLA, terms, conditions and timelines as mentioned in RFP or delays execution of the contract, the *StockHolding* reserves the right to get the balance contract executed by another party of its choice. In this event, the selected bidder is bound to make good the additional expenditure, which the *StockHolding* incurs to carry out the bidding process and if any, here, escalation of biding price for the execution of the balance of the contract to be borne by Bidder. However, this cost is capped to 5% of the contract value. This clause is applicable if for any reason the contract or a part of the Contract is cancelled.

The *StockHolding* reserves the right to recover any dues payable by the selected bidder from any amount outstanding to the credit of the selected bidder, including the pending bills and/or invoking Bank Guarantee, if any, under this contract.

In case of termination, payments due till the date of termination only would be paid. Balance payment for remaining Agreement Term will not be paid to the bidder.

4. Evaluation Methodology and Criteria

4.1 Objective of the Evaluation Process

1. The objective of the evaluation process is to evaluate the bids to select an effective and right fit solution at a competitive price. The evaluation by *StockHolding* will be undertaken by an Internal Committee formed by *StockHolding*. *StockHolding* may consider recommendations made by External Experts/ Consultants on the evaluation. The decision of the committee shall be final. The decision of the committee shall be final.
2. The *StockHolding* will scrutinize the offers to determine whether they are complete, whether any errors have been made in the offer, whether required technical documentation has been furnished, whether the documents have been properly signed, and whether items are quoted as per the schedule. The *StockHolding* plans to, at its discretion, waive any minor non- conformity or any minor deficiency in an offer. This shall be binding on all Bidders and the *StockHolding* reserves the right for such waivers and the *StockHolding* decision in the matter will be final.
3. Each recipient acknowledges and accepts that *StockHolding* may, in its sole and absolute discretion, apply whatever criteria it deems appropriate in the selection of solution, not limited to those selection criteria set out in this RFP document.
4. Through this RFP, *StockHolding* aims to select a bidder/ system integrator who would undertake the supply, implementation and maintenance of the required solution. The bidder shall be entrusted with end-to-end responsibility for the execution of the project under the scope of this RFP.
5. The objective of the evaluation process is to evaluate the bids to select an effective and best fit solution at a competitive price. The evaluation will be undertaken by an Internal Committee formed by *StockHolding*. The *StockHolding* may consider recommendations made by External Experts/Consultants on the evaluation.
6. The issuance of RFP document is merely an invitation to offer and must not be construed as any agreement or contract or arrangement nor would it be construed as any investigation or review carried out by a Recipient. The Recipient unconditionally acknowledges by submitting its response to this RFP document that it has not relied on any idea, information, statement, representation, or warranty given in this RFP document.
7. *StockHolding* may call for any clarifications/additional particulars required, if any, on the technical/ commercial bids submitted. The bidder has to submit the clarifications/ additional particulars in writing within the specified date and time. The bidder's offer may be disqualified, if the clarifications/ additional particulars sought are not submitted within the specified date and time. *StockHolding* reserves the right to call for presentation/s, product walkthroughs, on the features of the solution offered etc., from the bidders based on the technical bids submitted by them. *StockHolding* also reserves the right to conduct Reference Site Visits at the bidder's *StockHolding* sites. Based upon the final technical scoring, short listing would be made of the eligible bidders for final commercial bid opening & evaluation.
8. Through this Request for Proposal, *StockHolding* aims to select a Bidder/ application provider who would undertake the designing and implementation of the required solution. The Bidder shall be entrusted with end-to-end responsibility for the execution of the project under the scope of this RFP. The Bidder is expected to commit for the delivery of services with performance levels set out in this RFP with a Service Level Agreement.

4.2 Normalization of Bids

StockHolding will go through a process of technical evaluation and normalization of the bids to the extent possible and feasible to ensure that bidders are on the same technical ground.

After the normalization process, if *StockHolding* feels that such normalization has a bearing on the commercial bid; *StockHolding* may at its discretion ask all the technically shortlisted bidders to resubmit the updated technical and commercial bids for scrutiny. *StockHolding* can repeat this normalization process at every stage of technical evaluation till *StockHolding* is reasonably satisfied. The bidders agree that they have no reservation or objection to the normalization process and all the technically short listed bidders will, by responding to this RFP, agree to participate in the normalization process and extend their co-operation to *StockHolding* during this process. The bidders, by submitting the response to this RFP, agree to the process and conditions of the normalization process. Any non-compliance to the normalization process may result in disqualification of the concerned bidder.

StockHolding may drop any solution or hardware during normalization period prior to finalization of order or delay its procurement at *StockHolding*'s sole discretion. For delayed implementation of an application cost of FM warranty & ATS etc. will be calculated on pro-rata basis for the remaining contract period of SI.

StockHolding may call for any clarifications/ additional particulars required, if any, on the technical/ commercial bids submitted. The bidder has to submit the clarifications/ additional particulars in writing within the specified date and time. The bidder's offer may be disqualified, if the clarifications/ additional particulars sought are not submitted within the specified date and time. *StockHolding* reserves the right to call for presentation(s), product walkthroughs, on the features of the solution offered etc., from the bidders based on the technical bids submitted by them. *StockHolding* also reserves the right to conduct reference site visits at the bidder's client sites. Based upon the final technical scoring, short listing would be made of the eligible bidders for final commercial bid evaluation.

4.3 Evaluation Process

First the 'Eligibility Criteria bid document' will be evaluated and only those bidders who qualify the requirements will be eligible for 'Technical bid'.

In the second stage, for only those bidders who meets the 'Eligibility Criteria', technical bids will be evaluated, and a technical score would be arrived at.

In third stage, only those bidders, who have qualified in the technical evaluation, shall be invited for commercial evaluation.

Preliminary Examination of Offers: -
StockHolding will scrutinize the offers to determine their completeness (including signatures from the relevant personnel), errors, omissions in the technical & commercial offers of respective bidders. *StockHolding* plans to, at its sole discretion, waive any minor non-conformity or any minor deficiency in an offer. *StockHolding* reserves the right for such waivers and the *StockHolding*'s decision in the matter will be final.

Eligibility Criteria: -
The bidder meeting the Eligibility Criteria as per Annexure 4 will be considered for technical evaluation. Any credential/supporting detail mentioned in "A**nnexure 4 – Compliance to Eligibility Criteria**" and not accompanied by relevant proof documents will not be considered for evaluation. All credential letters should be appropriately bound, labelled and segregated in the respective areas. There is no restriction on the number of credentials a bidder can provide.

Technical Bid Evaluation Criteria: -

The Technical bids of only those bidders shall be evaluated who have satisfied the eligibility criteria bid. *StockHolding* may seek clarifications from the any or each bidder as a part of technical evaluation. All clarifications received by within stipulated time shall be considered for evaluation. In case a clarification is not received within the stipulated time, the respective technical parameter would be treated as non-compliant and decision to qualify the bidder shall be accordingly taken by the bidder.

The proposal submitted by the bidders shall, therefore, be evaluated on the following criteria:

Parameter	Maximum Score
Functional and Technical Requirements Evaluation the score will be evenly distributed between the Sections viz Hypervisor, Software defined storage, Software defined network, Management, DR Automation, Advanced Infra monitoring, and Backup	15
Bidder's capability & experience	30
Size of Private Cloud Deployed in India	25
Technical Presentation and Solution acceptability *	30
Total	**100**

*Bidder is required to present relevant experience, showcase solution capability and deployment architecture, management of the solution demonstration service and support, SLA management; bidder shall be notified over email communication channel post eligibility criteria evaluation and successful compliance.

Bidder should ensure that any critical noncompliance against Annexure 16-Functional & Technical Specifications may lead to disqualification.

Bidders scoring a minimum score of 70% i.e., an overall score of 70 marks or more will be declared technically qualified

Detailed Technical Evaluation Parameters:

S. No.	Technical Evaluation	Evaluation Approach
1	Compliance to Annexure 16 – Functional & Technical requirements and other technical requirements	The Bidder is required to submit the compliance to Annexure 16- Functional & Technical requirements and other technical requirements. **(Maximum Marks 15)** Note: • Deviations and non-conformance to requirements in the RFP shall be penalized • Unreasonable scope limitations which defeat the purpose of this RFP shall lead to reduction in scores or even possibility of disqualification of the bidder. This will be at the sole discretion of the *StockHolding* • All Technical specification of proposed hardware should be compliant with 100% score • The total marks of the annexure will be scaled down on a scale of 25 marks.
2	Bidder's capability and experience	The Bidder should have Private Cloud implementation in Government/PSU/ BFSI Institution in India **(Maximum 30Marks)** • >= 5 Private Cloud implementation in

S. No.	Technical Evaluation	Evaluation Approach
		Government /PSU/ BFSI in India of which 2 must in BFSI in India. **(30 marks)** • >= 3 Private Cloud implementation Government /PSU/ BFSI in India of which 2 must in BFSI in India. **(25 marks)** • 2 Private Cloud implementation in BFSI in India. **(20 marks)** The bidder should have prior experience of implementation of IT infrastructure at the DC and DRC including management and maintenance of such infrastructure. Bidder is required to provide past deployment details and also share the relevant supporting document i.e. Relevant credential letters or Purchase Order with *StockHolding*. Credentials from clients in form of Purchase Orders / Contract Agreement / Credential Letters etc. is required to be provided.
3	Size of Private Cloud Deployed in India	Bidder should have at least one project with physical core count of Private Cloud nodes. **(Maximum Marks 25)** • Core Count in DC only of Private Cloud deployed in India > =2000 **(25 Marks)** • Core Count in DC only of Private Cloud deployed in India >=1000 & <2000 **(20 Marks)** • Core Count in DC only of Private Cloud deployed in India >=500 & <1000 **(15Marks)** • Core Count Below 500: **(0 Marks)**
4	Technical Presentation & Product Demonstration	All eligible bidders will be required to make presentations to supplement their bids, showcase overall solution proposed. *StockHolding* will schedule presentations and the time and location will be communicated to the bidders. Failure of a bidder to complete a scheduled presentation to *StockHolding* may result in rejection of the proposal. Bidder is also expected to demonstrate the product's capability and applicability to *StockHolding* as per the RFP requirements. *StockHolding* will schedule the product demonstration and the time and location shall be communicated to the bidders. **Maximum Marks 30** • **Technical Presentation- 15 marks** • **Product Demonstration15 marks**

Note: StockHolding will publish the Technical Evaluation Result on company website. Bidder(s) are required to submit their queries/grievances on Technical evaluation scoring (if any) to PRIT@stockholding.com on or before 7th December 2022. No queries/grievances will be entertained after the said deadline.

4.4 Commercial Bid Evaluation

It may be noted that commercial bids will be subjected to following evaluation process.

Only those bidders meeting the eligibility criteria will be considered for further stages of evaluation, furthermore only those bidders scoring 70% (70 marks out of 100) or above in the technical evaluation will be short-listed for commercial evaluation.

The Commercial offers of only those Bidders, who are short-listed after technical evaluation, would be opened. The format for quoting commercial bid set out in Annexure 5- "Commercial Bill of Material". The commercial offer should consist of comprehensive Cost for required solution. Bidder must provide detailed cost breakdown, for each and every category mentioned in the commercial bid. StockHolding will determine whether the Commercial Bids are complete, unqualified and unconditional. The technically qualified bidders will be required to participate in the commercial bid opening. Omissions, if any, in costing any item shall not entitle the Bidder to be compensated and the liability to fulfil its obligations as per the Scope of the RFP within the total quoted price shall be that of the Bidder.

<u>Commercial Bid Evaluation Considerations</u>
Commercial bid valuation shall be considered as below in case of any kind of discrepancy:

1. If there is a discrepancy between words and figures, the amount in words shall prevail
2. If there is a discrepancy between percentage and amount, the amount calculated as per the stipulated percentage basis shall prevail
3. Where there is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by the quantity, the unit rate will govern unless, in the opinion of *StockHolding*, there is an obvious error such as a misplacement of a decimal point, in which case the line-item total will prevail
4. Where there is a discrepancy between the amount mentioned in the bid and the line-item total present in the schedule of prices, the amount obtained on totalling the line items in the Bill of Materials will prevail
5. The amount stated in the correction form, adjusted in accordance with the above procedure, shall be considered as binding, unless it causes the overall price to rise, in which case the bid price shall prevail
6. If there is a discrepancy in the total, the correct total shall be arrived at by *StockHolding*
7. In case the bidder does not accept the correction of the errors as stated above, the bid shall be rejected.
8. At the sole discretion and determination of *StockHolding*, *StockHolding* may add any other relevant criteria for evaluating the proposals received in response to this RFP.
9. During the process of technical/commercial evaluation, if *StockHolding* decides to withdraw any collateral item offered in the proposal, the commercial value of that item will be reduced from the commercial offer of all the bidders and TCO will be recalculated accordingly.
10. *StockHolding* may, at its sole discretion, decide to seek more information from the respondents in order to normalize the bids. However, respondents will be notified separately, if such normalization exercise as part of the technical evaluation is resorted to.
11. *StockHolding* shall not incur any liability to the affected bidder on account of such rejection.
12. The commercials will be calculated till two decimal points only. If the third decimal point is greater than .005 the same shall be scaled up else, it shall be scaled down to arrive at two decimal points. *StockHolding* will make similar treatment for 4th or subsequent decimal point to finally arrive at two decimal points only.

4.5 Evaluation Mechanism

StockHolding will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined H1, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily

Final Evaluation – Weighted Techno-Commercial Evaluation (H1)
The score(s) will be calculated for all technically qualified bidders using the formula:-

$$S = (0.2 \text{ x } C_{minimum} / C_{quoted}) + (0.8 \text{ x } T_{obtained} / T_{highest})$$

(Minimum Commercial Quote/Quoted Price) x20% + (Technical Score/Highest Technical Score) x 80%

(Technical will carry 80% weightage and Commercial will carry weightage of 20%)

Highest scores so obtained using the above method shall be declared H-1.

In case of tie-up in Techno-Commercial evaluation score, the bidder scoring highest technical score will be declared H-1 bidder.

Bidder whose is declared H1 may be called for negotiation before awarding the contract.

StockHolding reserves the right to float the RFP again. *StockHolding* shall not incur any liability to the bidder(s) on account of reissue of RFP. SHCIL shall not be obliged to inform the bidder(s) of the grounds for SHCIL's rejection. SHCIL reserves the right to modify any items of the scope of the RFP. The RFP may be reissued on account of following –

a) If none of the bidders qualify in the technical bid evaluation.
b) If only one bidder qualifies in the technical bid evaluation.
c) If selected bidder fails to execute the System Integration Agreement within the time limit stipulated. Any decision in this regard by *StockHolding* shall be final, conclusive, and binding on the bidders.

4.6 User acceptance and Proof of Concept

1. *StockHolding* will issue a Letter of Intent to the H1 bidder, and the bidder must complete the POC within 04 weeks of issuing the **Letter of Intent.**
2. After completion of successful POC, Stock holding will issue a Purchase order.
3. H1 Bidder must perform a Proof of concept with the proposed solution may be limited to minimum of 20% of the production deliverables; bidder must prepare an environment to showcase all the features and functionalities as mentioned in Annexure 16.
4. In case of not obtaining satisfactory result during the POC activity Stock Holding will have the explicit rights to reject the solution vis-a-vis bidder with cancellation of the Provisional Purchase Order and go ahead with another round of POC with H2 Bidder.
5. Stock holding shall perform this activity with maximum of Top 3 bidders, post conclusion of the Commercial Bid Opening before scrapping the RFP.

4.7 Key Guidelines

1. Bidder's proposal should strictly conform to the specifications.

2. Proposals not conforming to the specifications will be rejected subject to *Stockholding's* discretion. Any incomplete or ambiguous terms / conditions / quotes may result in disqualification of the offer at *StockHolding*'s discretion. The Bidder has to offer specific remarks for technical requirements and clearly confirm compliance. Any comments on technical requirements should be clearly informed in Remarks column.
3. Comments on other terms prescribed by the *StockHolding* are to be provided in a separate section in Technical Bid. The *StockHolding* is not bound to evaluate the Comments mentioned at any other section of the bid.
4. For supplementary information a separate sheet should be used.
5. All pages should be numbered (like 1/xxx, 2/xxx where xxx is last page number of Bid document) and signed under the company seal.
6. Technical Bid documents are to be properly hard bound.
7. *StockHolding* reserves the right to reject any or all proposals. Similarly, it reserves the right not to include any vendor in the final short-list.

5. Instructions to Bidders

5.1 General Terms & Conditions

1. Integrity Pact: The successful bidder will have to submit a signed and stamped copy of the Integrity Pact by the authorized signatory of the successful bidder.
2. Non-Disclosure Agreement (NDA): The successful bidder(s) will sign a Non-Disclosure Agreement (NDA) with *StockHolding*.
3. By submitting the bid, the Bidder represents and acknowledges to *StockHolding* that it possesses the necessary experience, expertise and ability to undertake and fulfill its obligations under all phases involved in the performance of the provisions of this RFP.
4. *StockHolding* will enter into the agreement with the selected Bidder.
5. *StockHolding* may, at its discretion, waive any minor non-conformity or any minor deficiency in an offer.
6. Bidder shall 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 under any laws including the Copyright Act, 1957 or Information Technology Act 2000 (including its subsequent amendments) in respect of all the software or other systems supplied by them to *StockHolding* from whatsoever source. However, (i) Bidder has sole control of the defense and all related settlement negotiations (ii) *StockHolding* provides Bidder with the assistance, information and authority reasonably necessary to perform the above and (iii) *StockHolding* does not make any statements or comments or representations about the claim without the prior written consent of Bidder, except where *StockHolding* is required by any authority/regulator to make a comment/ statement/ representation. Indemnity would be limited to court or arbitration awarded damages and shall exclude indirect, consequential and incidental damages. However, indemnity would cover damages, loss or liabilities suffered by *StockHolding* arising out of claims made by its customers and/or regulatory authorities due to the failure of Bidder to perform its obligations.
7. No Commitment to accept lowest or any other bid:
   - *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 own evaluation of the offers received, or on the basis of stability, capabilities, track records, reputation among users and other similar credentials of a bidder.
   - When *StockHolding* makes any such rejection, *StockHolding* will not be bound to give any reason and/or justification in this regard to the bidder.
8. Right to alter RFP:
   - *StockHolding* reserves the right to issue addendum(s) or corrigendum(s) to this RFP and any such addendums or corrigendum/s shall be considered as integral part of this RFP.
   - *StockHolding* reserves the right to alter the RFP terms and conditions at any time before submission of the bids.
   - *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 bidders.

5.2 Information Confidentiality

1. *StockHolding* makes no representation or warranty and shall incur no liability, whatsoever, under any law, statute, rules or regulations on any claim the potential

Bidder may make in case of failure to understand the requirement and respond to the RFP.

2. *StockHolding* may, in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information given in the RFP and specify additional user requirements or cancel the RFP at any time without assigning any reason thereof and without any notice. The Bidder acknowledges that any such revised or amended document is received subject to the same terms and conditions as this original and subject to the same confidentiality undertaking.
3. It is the Bidder's responsibility to:

a. Properly understand and examine the RFP;
b. Examine all other information available based on reasonable inquiry relevant to the risks, contingencies and circumstances affecting its response; and
c. Satisfy itself as to the completeness, correctness and sufficiency of its response.

4. Information relating to the examination, clarification, evaluation and recommendation to the Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising *StockHolding* in relation to, or matters arising out of, or concerning the Bidding Process.

5.3 Costs Borne by Bidder

All costs and expenses incurred by Bidder in any way associated with the development, preparation, and submission of their responses to the RFP, including but not limited to attendance at meetings, discussions, presentations, demonstrations, site visit, referral checks etc. and providing any additional information required by the *StockHolding*, will be borne entirely and exclusively by the Bidder.

5.4 Bidder Obligation to Inform Itself

The Bidder shall apply its own care and conduct its own investigation and analysis regarding any information contained in the RFP document and the meaning and impact of that information.

5.5 Evaluation of Offers

Each Bidder acknowledges and accepts that the *StockHolding* may, in its sole and absolute discretion, apply whatever criteria it deems appropriate in the selection of Bidder, not limited to those selection criteria set out in this RFP document. The issuance of RFP document is merely an invitation to offer and shall not be construed as any agreement or contract or arrangement and shall not be construed as any investigation or review carried out by a Bidder.

5.6 Clarification

1. If Bidders have queries, they may raise them in the format provided as per Annexure 8 – Pre-Bid Query format.
2. Verbal clarifications and information given by *StockHolding* or its employees or representatives shall not in any way or manner be binding on *StockHolding*.
3. Each Bidder should notify *StockHolding* of any error, fault, omission, or discrepancy found in this RFP document but not later than last date of receiving clarifications.

5.7 Disqualification

1. Any form of canvassing/lobbying/influence will result in disqualification at the sole discretion of the *StockHolding*.
2. Bid is not submitted in accordance with the Tender.

3. During validity of the proposal, or its extended period, if any, the bidder increases his quoted prices.
4. The bidder qualifies the proposal with his own conditions and/ or deviates from the terms of the RFP.
5. Bid is received in incomplete form.
6. Bid is received after due date and time.
7. Bid is not accompanied by all requisite documents.
8. Information submitted in technical bid is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the contract (no matter at what stage) or during the tenure of the contract including the extension period if any.
9. Technical Bid contains the Commercial Proposal or any price related information, in either explicit or implicit form.
10. In case any one party submits multiple proposals or if common interests are found in two or more bidders, the bidders are likely to be disqualified, unless additional proposals/bidders are withdrawn upon notice immediately.

5.8 Validity of Bids

The bids shall be valid for a period of not less than 180 days (6 months) from the Bid submission date. The validity of bids shall be extended by mutual consent of the respective Bidders and *StockHolding*.

6. Other Terms and Conditions

Following the receipt of responses to the RFP, Stock Holding Corporation of India Limited will evaluate and select a suitable Service provider(s) in accordance with the evaluation methodology set above with whom it will negotiate and enter into an Agreement for establishing the private cloud setup. Please find below certain broad principles based on which the Agreement will be concluded. Do note that these key principles are indicative of *Stockholding*'s expectations and should in no manner be deemed to be exhaustive by the Bidder but should be used as an 'at minimum' basis for evaluating the nature of rights and remedies expected by *StockHolding* pursuant to the Agreement.

6.1 General

1. *StockHolding* will enter into the Agreement with the finalized & Selected Bidder only.
2. Bidder will perform its obligations under this RFP as an independent bidder, to perform any of the deliverables or services. Neither this RFP nor the Bidder's performance of obligations under this RFP will create an association, partnership, joint venture, or relationship of principal and agent, master and servant, or employer and employee, between *StockHolding* and the Bidder or its employees, and the Bidder will not have the right, power or authority (whether expressed or implied) to enter into or assume or delegate any duty or obligation on behalf of *StockHolding*.
3. All remuneration, claims, wages, insurance, dues etc. of such employees, etc. of the Bidder will be paid by Bidder alone and *StockHolding* will not have any direct or indirect liability or obligation, to pay any charges, claims or wages of any of Bidder's employees. The Bidder will hold *StockHolding*/ its successors, permitted assignees and administrators, associate, representative and its directors and officials/employees, fully indemnified and harmless from and against any or all losses or liability, claims, actions, damages, cost, expense, demands, liability, penalty or proceedings, if any, that may arise from whatsoever nature caused to *StockHolding* through the action of the Bidders or its employees, personnel etc. by whatever name it is called or known.
4. The Bidder's authorized representative will be the Point of Contact for *StockHolding* and will report the status of the project on a weekly/fortnightly/monthly basis at sole discretion of *StockHolding*. The Bidder will ensure that the Services delivered to *StockHolding* including all components are of the most recent or current version and shall incorporate all latest improvements.
5. The Bidder will comply as per Non- Disclosure Agreement as applicable on the assignment with the non-disclosure requirements of any specific development/configuration done for *StockHolding* during the period of the Agreement and *StockHolding* will have the rights to claim the intellectual property for such development/configuration. Unless contrary to the specific agreement to be entered into between *StockHolding* and the Bidder, the RFP shall be the constitutional & governing document for arrangement between *StockHolding* and the Bidder. The Agreement between *StockHolding* and Bidder shall be in addition to the terms and conditions of RFP and the terms and conditions of RFP shall always prevail over the Agreement for any interpretation as may be required.

6.2 Indemnity

The Bidder shall indemnify *StockHolding*, and always keep indemnified and hold *StockHolding* and its, personnel, officers, directors, representatives (hereinafter collectively referred to as "Personnel") harmless from and against all losses, liabilities, claims, error, actions, costs and expenses (including attorneys' fees) relating to, resulting directly or indirectly from or in any way arising out of any claim, suit or proceeding brought against *StockHolding* because of:

1. *StockHolding*'s authorized/bona fide use of the deliverables and/or the services provided by the Bidder under the Agreement;
2. An act or omission of the Bidder, its employees, personnel and officers in the performance of the obligations of the Bidder under the Agreement;
3. Claims made by Consultants who are deployed by the Bidder, against *StockHolding*;
4. Breach of any of the terms of the Agreement or breach of any representation or false representation or inaccurate statement or assurance or covenant or warranty of the Bidder under the Agreement;
5. Any or all deliverables or services infringing any patent, trademarks, copyrights etc. or such other statutory infringements under any laws including the Copyright Act, 1957 or Information Technology Act, 2000 (including its subsequent amendments) in respect of all the software or other systems supplied by them to *StockHolding* from whatsoever source. However, for all such claims, (i) the Bidder will have sole control of the defence and all related settlement negotiations (ii) *StockHolding* will provide the Bidder with assistance, information and authority reasonably necessary to perform the above and (iii) *StockHolding* will not make any statements or comments or representations about the claim without the prior written consent of the Bidder, except where *StockHolding* is required by any authority/regulator to make a comment/ statement/ representation.;
6. Breach of confidentiality obligations of the Bidder contained in the Agreement; and/or
7. Fraud, Negligence or wilful misconduct attributable to the Bidder, its Consultants.
8. The Bidder will, at its own cost and expenses defend or settle any claim against *StockHolding* that the deliverables and services delivered or provided infringe a patent, utility model, industrial design, copyright, trade secret, mask work or trade mark in the country where the deliverables and services are used, sold or received, provided :

8.1. *StockHolding* will inform the Bidder of all known breaches and claims and the Bidder will be required to remedy the breaches, defend, manage, negotiate or settle such claims. The written demand by *StockHolding* as to the loss / damages mentioned above will be final, conclusive and binding on the Bidder and Bidder will be liable to pay on demand the actual amount of such loss / damages caused to *StockHolding* including but not limited and all costs and expenses, including, without limitation, reasonable attorneys' fees and court costs. In respect of demands levied by *StockHolding* on the Bidder towards breaches, claims, etc. *StockHolding* will provide the Bidder with details of such demand levied by *StockHolding*. Bidder shall compensate *StockHolding* for such financial loss, direct and remote, suffered by *StockHolding*, if Bidder fails to fix bugs, provide the modifications/enhancements/configuration as required by *StockHolding* as per the terms and conditions of the RFP and Agreement.

6.3 Liability

1. *StockHolding* will be entitled to damages from the Bidder, if the Bidder breaches any of the terms, conditions or obligations of the RFP or Agreement, or any other contractual obligations.
2. In circumstances where the Bidder indemnifies *StockHolding* against any claims of infringement of any intellectual property rights, the Bidder will, its own expense, and in addition to any other remedies that may be available to *StockHolding*, promptly:
   a) Procure an unrestricted right for *StockHolding* to continue using and receiving the same; or
   b) Make or procure on *StockHolding*'s behalf such alterations, modifications, adjustments or substitutions to all or any parts of the same so that it becomes non-infringing without affecting the relevant part of deliverables or services or prejudice their compliance with their terms of the specifications or requirements; or

c) Substitute a non-infringing version of the infringing item of at least functional equivalence conforming to applicable requirements.
d) If the Bidder is unable to provide any of the forgoing alternatives, *StockHolding* may at its own option terminate the Agreement.

6.4 Resolution and Disputes

Resolution and Disputes: *StockHolding* and the Bidder will make every effort to resolve amicably, by direct informal negotiation between the respective project managers of *StockHolding* and the Bidder, any disagreement or dispute arising between them under or in connection with the Agreement. If *StockHolding* project manager and Bidder project manager are unable to resolve the dispute after thirty days from the commencement of such informal negotiations, they shall immediately forward the dispute to the senior authorized personnel designated by the Bidder and *StockHolding* respectively. If, after thirty days from the commencement of such negotiations between the designated authorized personnel of the parties, *StockHolding* and the Bidder are not able to resolve amicably a contract dispute; either Party may require that the dispute be referred to formal arbitration. All questions, claims, disputes or differences arising under and out of, or in connection with the contract or carrying out of the work whether during the progress of the work or after the completion and whether before or after the determination, abandonment or breach of the contract will be referred to arbitration by a sole Arbitrator acceptable to both parties. The award of the Arbitral will be final and binding on the parties. The Arbitration and Reconciliation Act 1996 or any statutory modification thereof will apply to the arbitration proceedings and the venue of the arbitration will be Mumbai. Language of arbitration proceedings will be in English language. Work under the contract will be continued by the Bidder during the arbitration proceedings unless otherwise directed in writing by *StockHolding*, or the matter is such that the work cannot possibly be continued until the decision of the arbitrator is obtained. Save as those which are otherwise explicitly provided in the contract, no payment due, or payable by *StockHolding* to the Bidder will be withheld on account of the on-going arbitration proceedings, if any, unless it is the subject matter, or one of the subject matters thereof. If a notice is to be sent to either of the Parties following the signing of the Agreement it will be in writing and shall be by postage prepaid registered post with acknowledgement due or by a reputed courier service, in the manner as elected by the Party giving such notice. All notices will deemed to have been validly given on (i) the expiry of five days after posting if sent by registered post with A.D., or (iii) the business date of receipt, if sent by courier. The RFP and the Agreement will be governed and construed in accordance with the laws of India. The courts of Mumbai alone and no other courts shall be entitled to entertain and try any dispute or matter relating to or arising out of the RFP and Agreement.

6.5 Information Ownership

Information Ownership: All information processed, stored, or transmitted by the Bidder equipment will belong to *StockHolding*. By having the responsibility to maintain the equipment, the Bidder does not acquire implicit access rights to the information or rights to redistribute the information. The Bidder understands that civil, criminal, or administrative penalties may apply for failure to protect the information appropriately.

6.6 Force Majeure

Neither the COMPANY nor the CONTRACTOR shall be responsible for any failure to fulfil any term or condition of the CONTRACT if and to the extent that fulfilment has been delayed or temporarily prevented by a Force Majeure occurrence, defined as "Force Majeure". For purposes of this clause, “Force Majeure” mean an event beyond the control of the Parties and which prevents a Party from complying with any of its obligations under this Contract, including but not limited to: acts of God not confined to the premises of the Party claiming the Force Majeure, flood, drought,

lightning or fire, earthquakes, strike, lock-outs beyond its control, labour disturbance not caused at the instance of the Party claiming Force Majeure, acts of government or other competent authority, war, terrorist activities, military operations, riots, epidemics, civil commotions etc.

The Party seeking to rely on Force Majeure shall promptly, within 5 days, notify the other Party of the occurrence of a Force Majeure event as a condition precedent to the availability of this defence with particulars detailed in writing to the other Party and shall demonstrate that it has taken and is taking all reasonable measures to mitigate the events of Force Majeure. And, all Parties will endeavour to agree on an alternate mode of performance in order to ensure the continuity of service and implementation of the obligations of a party under the Contract and to minimize any adverse consequences of Force Majeure. Each PARTY shall bear its own cost in relation to the force majeure occurrence.
However, any failure or lapse on the part of the CONTRACTOR to mitigate the damage that may be caused due to the above-mentioned events or the failure to provide adequate disaster management/recovery or any failure in setting up a contingency mechanism would not constitute force Majeure, as set out above.

If the duration of delay exceeds ninety (90) consecutive or one hundred eighty (180) cumulative days, StockHolding and the CONTRACTOR shall hold consultations with each other in an endeavour to find a solution to the problem.

6.7 Period of Contract

The term of the Agreement will be for 5 years from the go-live date of the proposed solution. The renewal of any arrangement after the expiration of term of Agreement shall be done by executing fresh agreement between the Bidder and *StockHolding*.

6.8 Limitation of Liability

The aggregate liability of the bidder in connection with this contract, the services provided by the bidder for the specific scope of work document, regardless of the form or nature of the action giving rise to such liability (whether in contract, tort or otherwise) and including any and all liabilities shall be the actual limited to the extent of the total contractual value.

6.9 Effects of Termination

Notwithstanding the termination of the contract in whole or in respect of any part of the services for any reason, the Agreement will continue to remain in force to the extent necessary to give effect to those provisions which expressly or implicitly have effect after termination where *StockHolding* terminates any part of the project, the parties will continue to perform their respective obligations under the Agreement in connection with that portion of the project that has not been terminated.

6.10 Data Privacy and Security Safeguards

The selected bidder's employees shall not publish or disclose in any manner, without the *Stockholding*'s prior written consent, the details of any security safeguards designed, developed, or implemented by the selected bidder under this contract or existing at any *StockHolding* location. It is expected that the Empanelled Bidder's employees shall be adequately trained on Data Privacy and Data Theft Prevention Procedures. In the event of the bidder's employee breaching or deviating the Data Privacy and Security or any other policies of *StockHolding* shall be liable for appropriate action as decided by *StockHolding*.

6.11 Other

1. Compliance with Applicable Laws: The Bidder will warrant and ensure that the services are compliant with all applicable laws including but not limited to applicable legislation, circulars, guidelines, notifications, code of conduct, policies or orders issued by any regulatory authority, the Government of India or the Ministry of Finance. The Bidder will undertake to observe, adhere to, abide by, comply with and notify *StockHolding* about all laws in force or as are or as made applicable in future, pertaining to or applicable to them, their business, their employees or their obligations towards them, for all purposes of the Agreement and will indemnify, keep indemnified, hold harmless, defend and protect *StockHolding*, its employees, officers, staff, personnel, representatives and agents against all claims, demands and consequences that may arise from any failure or omission on its part to do so.
2. Compliance in obtaining approvals/permissions/Licenses: The Bidder will promptly and timely obtain all such consents, permissions, approvals, Licenses, etc., as may be necessary or required for any of the purposes of this engagement or for the conduct of their own business under any applicable law, and shall keep the same valid and in force during the term of the project, and in the event of any failure or omission to do so, will indemnify, keep indemnified, hold harmless, defend, protect and fully compensate *StockHolding*, its employees, officers, staff, personnel, representatives, and agents from and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to conform or comply with the above and all other statutory obligations arising there from; and *StockHolding* will give notice of any such claim or demand of liability within reasonable time to the Bidder.
3. The Bidder will not be absolved from its responsibility of complying with the statutory obligations as specified above. The indemnity will be limited to court or arbitration awarded damage; damages, loss or liabilities suffered by *StockHolding* arising out of claims of its customers or regulatory authorities; and will exclude indirect, consequential and incidental damages. Bidder shall abide and comply with IT Security Policy or any other policy framed by *StockHolding* from time to time as may be notified to Bidder in advance during the term of this arrangement.
4. Assignment: The Bidder agrees that the Bidder will not be entitled to assign any or all of its rights and/or obligations under the RFP and Agreement to any entity including the Bidder's affiliate without the prior written consent of *StockHolding*. If *StockHolding* undergoes a merger, amalgamation, takeover, consolidation, reconstruction, change of ownership, etc., the RFP and the Agreement will be considered to have been assigned to the new entity and such an act will not affect the rights of *StockHolding* and the Bidder under the RFP and Agreement.
5. Insurance: The Bidder will procure insurance coverage to include comprehensive general liability insurance, errors and omissions insurance, data protection liability, intellectual property infringement, third party accident insurance, all risk property insurance and in general all such insurance as will be necessary to adequately cover the risks associated with the implementation, solution or the services provided by the Bidder under the RFP or Agreement. Such insurance will be valid until such time they are delivered, installed, commissioned and accepted by *StockHolding*. The insurance coverage, post the acceptance through the period of the contract will be independently done by *StockHolding*. The Bidder will cause its insurers to issue certificates of insurance evidencing that the coverage and policy endorsements required under the RFP and Agreements are maintained in force and that not less than thirty (30) days' written notice will be given to *StockHolding* prior to any modification, cancellation, or non-

renewal of the policies. The Bidder will provide copies of the insurance to *StockHolding*. The insurers selected by Bidder will be of good standing and authorized to conduct business in all jurisdictions in which the RFP and Agreement is to be performed. In the case of loss or damage or other event that requires notice or other action under the terms of any insurance coverage, the Bidder will solely be responsible to take such action. The Bidder will provide *StockHolding* with contemporaneous notice and with any other information that *StockHolding* may request regarding such event. *StockHolding* will provide, at the Bidder's expense, reasonable assistance and cooperation, with respect to any insurance claim. The Bidder will not hold *StockHolding* responsible for rejection of the insurance claims of the Bidder by the insurer.

6. The Bidder's obligation to maintain insurance coverage hereunder will be in addition to, and not in lieu of, the Bidder's other obligations hereunder, and Bidder's liability to *StockHolding* will not be limited to the amount of coverage required hereunder.
7. Inspection of Records: All Bidder records with respect to any matters covered by this RFP will be made available to *StockHolding* or its designees, including its statutory regulators, at any time during normal business hours, as often as *StockHolding* deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data. The said records will be subject to examination. *StockHolding* will execute a confidentiality agreement with the Bidder, provided that the auditors will be permitted to submit their findings to *StockHolding*, which will be used by *StockHolding*. The cost of the audit will be borne by *StockHolding*. The scope of such audit will be limited to the service levels being covered under the RFP and Agreement; provided that financial information will be excluded from such inspection, which will be subject to the requirements of statutory and regulatory authorities. The Bidder's records and sites managed for *StockHolding* will also be subject to regulatory/*StockHolding* inspection.
8. Publicity: The Bidder will not make any press releases or statements of any kind including advertising using the name, brand of *StockHolding* or any service marks or trademarks of *StockHolding* regarding the contract or the transactions contemplated hereunder without the explicit written permission of *StockHolding*. The Bidder will not, use *StockHolding*'s name as a reference, without the express, prior, written permission of *StockHolding*, and in accordance with the limitations imposed in connection with providing such consent. *StockHolding* agrees that it will not use the Bidder's trade or service marks without the Bidder's prior written consent.
9. Monitoring and Audit Compliance with best security practices will be monitored by periodic cyber security audits performed by or on behalf of *StockHolding*. The periodicity of these audits will be decided at the discretion of *StockHolding*. These audits may include, but are not limited to, a review of: access and authorization procedures, physical security controls, backup and recovery procedures, security controls and program change controls. To the extent that *StockHolding* deems it necessary to carry out a program of inspection and audit to safeguard against threats and hazards to the confidentiality, integrity, and availability of data, Bidder will allow *StockHolding*'s representatives, access to its facilities, installations, technical Consultants, operations, documentation, records, databases and personnel. The Bidder will provide *StockHolding* access to various monitoring and performance measurement systems (both manual and automated). *StockHolding* will have the right to get the monitoring and performance measurement systems (both manual and automated) audited without prior approval/notice to the Bidder.
10. Waiver: No failure or delay on the part of either Party relating to the exercise of any right, power, privilege or remedy provided under the RFP, Agreement or contract with

the other party will operate as a waiver of such right, power, privilege or remedy or as a waiver of any preceding or succeeding breach by the other Party nor will any single or partial exercise of any right, power, privilege or remedy preclude any other or further exercise of such or any other right, power, privilege or remedy provided in the RFP or Agreement. All rights, powers, privileges and remedies are several, cumulative and not exclusive of each other or of any other rights or remedies otherwise available to either Party at law or in equity.

11. Further Assurance: The Bidder will, at the request of *StockHolding* and without further consideration, execute and deliver such other documents and take other actions as *StockHolding* may request in order for *StockHolding* to be able to use the solution more effectively.
12. Violation of Terms: *StockHolding* clarifies that *StockHolding* will be entitled to an injunction, restraining order, right for recovery, specific performance or such other equitable relief as a court of competent jurisdiction may deem necessary or appropriate to restrain the Bidder from committing any violation or enforce the performance of the covenants, obligations and representations contained in the RFP or Agreement. The injunctive remedies are cumulative and are in addition to any other rights and remedies *StockHolding* may have at law or in equity, including without limitation a right for recovery of any amounts and related costs and a right for damages.
13. Inspection & Audit: *StockHolding* and its authorized representatives reserve the right to visit any of the Bidder's premises without prior notice to ensure that data provided by *StockHolding* is not misused. The Bidder will co-operate with the authorized representative/s. *StockHolding* shall also be entitled at its sole discretion to carry out the audit of the services provided by the bidder contemplated in this RFP. The Bidder shall be required to co-operate and provide all the details and documents required for such purpose.
14. Addition/ Deletion of Qualified Offerings: Both Parties agree that the intent of the RFP is to establish an initial set of service offerings. *StockHolding* recognizes that, as the use of these services expands additional services and/or service categories may be needed. In addition, *StockHolding* recognizes that from time to time, services that are provided as part of the Bidder services will be upgraded or replaced as the technology evolves. Replacement of services that meet or exceed the minimum proposal requirements may be added with the prior approval of *StockHolding*. The Bidder agrees that the price for incremental offering will not exceed the original proposed cost and *StockHolding* reserves the right to re-negotiate the price. *StockHolding* reserves the right to order as much as so desired, at the unit rates provided for TCO calculations. *StockHolding* will be under no obligation to honour requests to add service categories or amend the Agreement. *StockHolding* will have regular reviews of the Bidder services and *StockHolding* requirements, to allow an exchange of requirements and opportunities.
15. All quantities mentioned in the RFP are indicative. The quantities of hardware/software to be procured under the RFP can be varied by *StockHolding*.
16. Set Off: *StockHolding* shall be entitled to set off all or any other losses suffered or incurred or to be incurred from the amount due and payable to Bidder. This shall be in addition to all other remedies available in law to *StockHolding*.
17. Penalty: *StockHolding* shall be entitled to impose penalty for breach of time lines, breach or loss resulting from errors in respect of Service or damage due to Software or any non-compliance in respect of service under RFP or Agreement.
18. *StockHolding* shall be entitled to deduct the amount of the penalty from the invoices of the Bidder. This remedy will be in addition to all other remedies available to

StockHolding for recovery of the penalty amount. *StockHolding* shall also be entitled to recover the amount of penalty from any other payment due to Bidder. The penalty contemplated in this clause shall be in additional to all other losses, claims, damages etc. as may be suffered or incurred by *StockHolding*.

19. Information Ownership: All information processed, stored, or transmitted by the Bidder equipment will belong to *StockHolding*. By having the responsibility to maintain the equipment, the Bidder does not acquire implicit access rights to the information or rights to redistribute the information. The Bidder understands that civil, criminal, or administrative penalties may apply for failure to protect the information appropriately.
20. Sensitive Information: The Bidder will protect all sensitive personal data information, as defined under Rule 3 of Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011, received by it pursuant to the Agreement in accordance with Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011. Any information considered sensitive will be protected by the Bidder from unauthorized disclosure, modification or access.
21. The Bidder may support or have access to the sensitive information found on *StockHolding*'s system, including but not limited to Information subject to special statutory protection, legal actions, disciplinary actions, complaints, IT security, pending cases, civil and criminal investigations, etc.
22. Privacy and Security Safeguards: Bidder will ensure that the solution complies with the various security policies and guidelines as provided by *StockHolding* to the Bidder from time to time in advance and in writing. The Bidder will ensure that at all times, when delivering the deliverables and providing the services, uses appropriate procedures and care to avoid loss or corruption of data. However, in the event that any loss or damage to *StockHolding*'s data occurs as a result of the Bidder's failure to perform its responsibilities under the Agreement, the Bidder will, at *StockHolding*'s request, correct or cause to be corrected any loss or damage to *StockHolding*'s data. Further, the cost of any corrective action in relation to data loss of any nature will be borne by the Bidder, if such loss or damage was caused by any act or omission of the any of the Bidder's personnel. The Bidder will not publish or disclose in any manner, without *StockHolding*'s prior written consent, the details of any security safeguards designed, developed, or implemented by the Bidder under the Agreement or existing at any *StockHolding* location. The Bidder will develop procedures and implementation plans to ensure that IT Consultants leaving the control of the assigned user (such as being reassigned, removed for repair, replaced, or upgraded) are cleared of all *StockHolding* data and sensitive application software. The Bidder will also ensure that all who are involved in providing such security safeguards or part of it will not publish or disclose in any manner, without *StockHolding*'s prior written consent, the details of any security safeguards designed, developed, or implemented by the Bidder under the Agreement or existing at any *StockHolding* location.
23. *StockHolding* will not be held liable for and is absolved of any responsibility or claim/litigation arising out of the use of any third party software or modules supplied by the Bidder. In any event, *StockHolding*'s aggregate liability for any losses or claims arising out of or in connection with the Agreements, whether under the Agreement, tort or otherwise, including for negligence will not exceed the aggregate of the payment received by the Bidder under the Agreements for the 3 (three) months preceding the date on which a claim against *StockHolding* is raised. In no event will *StockHolding* be liable for any indirect, incidental or consequential damages or liability, under or in

connection with or arising out of this RFP and subsequent agreement or the software delivered hereunder, howsoever such liability may arise, provided that the claims against customers, users and service providers of *StockHolding* will be considered as a direct claim.

24. Confidentiality: The Bidder shall be required to sign a confidentiality & Non-Disclosure Agreement (NDA) agreement in relation to any information relating to *StockHolding* or its customers, partners etc.. The Bidder will keep confidential all information (written or oral) concerning all facts of the business of *StockHolding*, which has been obtained or understood during the course of the assignment.
25. Technological Advancements: The Bidder will take reasonable and suitable action, taking into account economic circumstances, at mutually agreed increase/decrease in charges, and the service levels, to provide the services to *StockHolding* at a technological level that will enable *StockHolding* to take advantage of technological advancement in the industry from time to time.
26. Intellectual Property Rights: The Bidder shall have necessary rights to provide the services upon the terms and conditions contained in this RFP. The Parties agree and acknowledge that save as expressly provided in this RFP or the Agreement, all intellectual property rights in relation to the software and documentation and any adaptations, translations and derivative works thereof whether protectable as a copyright, trade mark, patent, trade secret design or otherwise, provided as part of the deliverables, developed code, configurations or the solution by the Bidder to *StockHolding* under the Agreement shall be assigned to *StockHolding* at no additional cost, whether or not the same constitutes third party intellectual property, or pre-existing intellectual property of the Bidder. The Bidder will ensure that it has sufficient rights, title and interest in the deliverables to ensure such assignment during the term of this project and, if applicable, during the Reverse Transition Period, *StockHolding* will grant the Bidder a right to use at no cost or charge the software Licensed to *StockHolding*, solely for the purpose of providing the services. Configuration done on the application to meet *StockHolding* requirements will be solely owned by *StockHolding.*
27. NDA: The successful bidder will sign a Non-Disclosure Agreement (NDA) with Stock Holding Corporation of India Limited.

6.12 Earnest Money Deposit

Rs.10,00,000/- (Indian Rupees Ten 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 27th October 2022. StockHolding's Bank Account No.: 004103000033442 Bank: IDBI Bank (Nariman Point Branch) IFSC: IBKL0000004 StockHolding will not pay any interest on the EMD.

The EMD made by the bidder will be forfeited if:

1. The bidder withdraws his tender before processing of the same.
2. The bidder withdraws his tender after processing but before acceptance of the PO issued by *StockHolding*.
3. The selected bidder withdraws his tender before furnishing an unconditional and irrevocable Performance Bank Guarantee.
4. The bidder violates any of the provisions of the terms and conditions of this tender specification.

The EMD will be refunded to:

The Successful Bidder, only after furnishing an unconditional and irrevocable Performance Bank Guarantee (PBG) for 10% of the total project cost for entire duration of the contract including claim period of 3 (Three) months, validity starting from its date of issuance. The PBG shall be submitted within 15 days of the PO acceptance by the Bidder.

1. If there are more than 3 qualified bidders post final evaluation and since StockHolding intends to go with the POC with only the top 3 bidders, the EMD for remaining bidders will be returned within 30 days of Commercial Bid Opening through NEFT mode.
2. EMD for the remaining bidders who are in the top 3 will be returned post issuance of PO to the eventual selected bidder post POC.

6.13 Performance Bank Guarantee

1. As mentioned above, the Successful Bidder will furnish an unconditional and irrevocable Performance Bank Guarantee (PBG) for 10 % of the total project cost for entire duration of the contract including claim period of 6 (six) months, validity starting from its date of issuance. The PBG shall be submitted within 30 days of the PO acceptance by the Bidder.
2. The PBG shall be denominated in Indian Rupees. All charges whatsoever such as premium; commission etc. with respect to the PBG shall be borne by the Successful Bidder.
3. The PBG so applicable must be duly accompanied by a forwarding letter issued by the issuing bank on the printed letterhead of the issuing bank. Such forwarding letter shall state that the PBG has been signed by the lawfully constituted authority legally competent to sign and execute such legal instruments. The executor (BG issuing Bank Authorities) is required to mention the Power of Attorney number and date of execution in his / her favour with authorization to sign the documents.
4. Each page of the PBG must bear the signature and seal of the BG issuing Bank and PBG number.
5. In the event of the Successful Bidder commits a material breach of the terms and conditions of the contract, *Stockholding* shall provide a cure period of 30 days and thereafter invoke the PBG, if the bidder is unable to service the contract for whatever reason.
6. In the event of delays by Successful Bidder in implementation of project beyond the schedules given in the RFP, *StockHolding* shall provide a cure period of 30 days and thereafter invoke the PBG, if required.
7. Notwithstanding and without prejudice to any rights whatsoever of *StockHolding* under the contract in the matter, the proceeds of the PBG shall be payable to the *StockHolding* as compensation by the Successful Bidder for its failure to complete its obligations under the contract. *StockHolding* shall notify the Successful Bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the Successful Bidder is in default.
8. The *STOCKHOLDING* shall also be entitled to make recoveries from the Successful Bidder's bills, Performance Bank Guarantee, or any other amount due to him, the equivalent value of any payment made to him by *StockHolding* due to inadvertence, error, collusion, misconstruction or misstatement.
9. The PBG may be discharged / returned by the *StockHolding* upon being satisfied that there has been due performance of the obligations of the Successful Bidder under the contract. However, no interest shall be payable on the PBG.

7. Service Levels and Penalty

7.1 Service Level

Definition for Operational SLAs

For maintaining the highest standard of operational requirements, the SLA definitions and terms are herein specified in this contract which shall have the meanings set-forth below these also imply for any component /platform/DC and DRC failure.

1. "**Incident**" refers to any event / occurrence of abnormalities in the functioning of the any of the components of the proposed solution that may lead to disruption from or a behaviour other than the normal or expected operations. Should there be an incident due to the underlying hardware, the Bidder must be able to lead any incident calls with OEM technical support and provide any inputs required for restoration within the above defined timelines. *StockHolding* has the discretion to define the incident severity, which are as below:
    a) **Critical**: In case multiple subsystems are down threatening business continuity and multiple users are affected, it shall be considered as a Critical incident. Any Critical incidents observed on any component of the proposed solution, the expected resolution / functional workaround to be provided within **two (2) hours**. Should it be a workaround the actual permanent solution to be provided within eight **(8)** hours.
    For example: More than one node down, more than 2 Disk failure, Cluster failure NIC issue, Critical patch updates.
    b) **High**: In case any of the subsystem is down causing high impact on business operations and few clients are affected, it shall be considered as a High Severity incident. For any High impacts the Bidder to ensure a resolution / work around be available within **four (4) hours** and a permanent solution within 16 hours.
    For example: redundant component failure, OS corruption, Disk failure, issues known through alert, regular patch updates.
    c) **Low**: The incidents would be termed as low, which does not have any significant impact on the business or functionality
    For example: bug fixes, patch updates, BIOS updates, VM tool update
        i. A minor problem or question that does not affect the business operations
        ii. An error in software product Documentation that has no significant effect on operations
        iii. A suggestion for new features or enhancement
    For any Low type of impact, a workaround within **2-3 business days** is expected with a permanent resolution within five **(5) business days.**
2. "**Support**" shall mean the 24x7 coverage to ensure system and functional availability involving monitoring, attempts to troubleshoot, provide workaround or resolution to incidents or Trouble Tickets or alerts raised through monitoring systems or Fault Reporting by users, handle patch updates, upgrades, and related enquiries during this contract
3. "**Availability**" shall mean the time for which the services offered are available for conducting operations from the equipment / total solution hosted in *StockHolding*
4. Service Levels are calculated based on the "**Business Utility**" of the solution were
    Business Utility (BU) is calculated in percentage as –
    BU (%) = ((BOH – BDT) / BOH)*100
    Where: BOH= Business Operation Hours - and - BDT= Business Downtime
5. **Business Operation Hours**" for the *StockHolding* would be 24x7 minus the planned downtime which can be taken only with prior notice to *StockHolding* and with mutual

consent of *StockHolding* and the bidder. vi. "**Business Downtime**" is the actual duration for which the Software Defined Data Centre solution is not able to service the *StockHolding*, due to failure of solution or any component of infrastructure thereof as defined by *StockHolding* in the RFP and agreed by the Bidder. The "Business Downtime" would be calculated on monthly basis and for all performance appraisals, and the downtime would form part of core measurement for assessment/ escalation/ penalty, etc. vii. "**Response time**" is defined as the time between receipt of the incident by support team and its logging / generation of ticket on the system. Response time to be **15 mins** for all category of incidents.

6. "**Resolution Time**" shall mean the time taken (after the incident has been reported to the support team) until its original functionality is restored by fixing the root cause. The severity parameters have been defined above.
    1. "**Workaround Time**" shall mean the time taken (after the incident has been reported to the support team) until the equivalent functionality is restored but without fixing the cause but using other options.
    2. **Planned Downtime**: Planned downtime shall mean any time when any of the subsystems/Total solution are unavailable because of Urgent Maintenance activities and any other scheduled maintenance or upgrade activities that may or may not be periodic. The planned downtime must be notified to the *StockHolding* at least 48 hours in advance
    3. **Urgent Maintenance** activities are maintenance activities that cannot be postponed until the next available or convenient maintenance window, and may include but not limited to restarting applications, rebooting servers, applying patches or fixes, reconfiguring, reloading data etc.

NOTE: For the purpose of this RFP, Penalty due to Liquidated damages and/or Service level (SLA) shall be limited to maximum 10% of the contract value.

7.2 Performance Tracking and Reporting

1. *StockHolding* requires the Bidder to provide reports on "Business Downtime" and a log of all issues that have been raised and Closed/Pending Closure by the Bidder. The frequency of the report would be Weekly, Monthly, Quarterly and Yearly
2. Bidder must be able to generate reports of the incident response, workaround, and their resolution time as per *StockHolding*'s requirements.
3. To ensure solution availability during DR operations and otherwise, bidder will have to shift or arrange all the resources at respective sites. Bidder will have to bear all the expenses like travelling, lodging, boarding, etc. Planned DR drills may run up to two weeks. In case of contingency, the period may be more. iv. The solution related minimum service expectation as a percentage of "Business Utility" is of **99.95%** to be calculated on **Quarterly** basis

7.3 Review of SLA

1. *StockHolding* shall review the SLA based on performance and (if necessary) may revise them based on mutual agreement.
2. Any dispute arising out of SLA penalties, SLA review, etc. should be amicably resolved by Governance Team consisting of senior officials of Bidder and *StockHolding*.

7.4 Liquidated damages & Penalties

StockHolding shall levy penalties /liquidated damages for late delivery of hardware & solution implementation as under:

1. A penalty of 0.5% of undelivered portion per week for first two weeks, 1% of undelivered portion per week for every subsequent week subject to a maximum of 10% of the Purchase Order Value
2. The total amount of Liquidated Damages shall not exceed ten percent (10%) of the Contract Price.
   StockHolding expects that the Bidder shall be bound by the Service Levels described in this document for – Delivery, Project Implementation, On-site Support Services, etc. at all sites.

7.5 Penalties during Project Implementation

No.	Service Area	Target	Penalty
1	Final Acceptance Test and Stabilization - Go Live	**T+40 weeks**	A penalty of 0.5% of implementation cost of the PO value for every two weeks of delay, subject to a maximum of 10% of the Purchase Order Value.
2	Change Request with timeline	The change request is to be implemented within the mutually agreed timeline.	A *penalty of 0.5% of the CR Value (in case of commercial CR) per week for first two weeks, 1% per week for every subsequent week subject to a maximum of 10% of Quarterly charge (if this is BAU activity) or Project cost (if this is any new activity not covered in the RFP). *The Penalty levy will start from the T+3 days, T is agreed date of delivery, 3 days are buffer day for delivery, testing and pre-production activities.

7.6 Penalty for breach in SLA during Operations

Bidder has to guarantee minimum uptime of 99.95% and should be ready to execute service level agreement for the same as per below uptime. Bank will calculate uptime on quarterly basis for Private Cloud infrastructure as per below details

Level of Uptime Quarterly	Quarterly Hours	Penalty Charges
99.95	65 Min	NIL
	2Hours	0.5% of the Quarterly Pay-out
	3Hours	1 % of the Quarterly Pay-out
	4Hours	3 % of the Quarterly Pay-out
	5Hours	5 % of the Quarterly Pay-out
	Above 5 Hours	10% of the Quarterly Pay-out

Note: The **response time** for all Types of Help Desk services incidents **shall be within 15 min**.

****Note: Should there be any concern on SLAs, the parameters for major and minor deterioration in performance and/or availability of such functionalities will be mutually agreed during implementation and should be in-line with industry best practices.**

Maximum penalty recoverable for breach of Technical SLA terms will be 10% of License cost.

If there is continuous breach in service level and maximum penalty of 10% is reached for any two quarters in a financial year, *StockHolding* reserves the right to terminate the order and forfeit any or all bank guarantees submitted to the *StockHolding*.
The bidder has to provide detailed report containing the SLA calculation as per format prescribed by *StockHolding* from time to time.
Without prejudice to *StockHolding*'s other rights under the Applicable Law, *StockHolding* may recover the penalty as defined in the clause, if any, from the amount payable by *StockHolding* to bidder as per the Contract.

7.7 Penalty for Resource unavailability during Operations

If no resources are available onsite during business day at any point of time 1% of the quarterly operational payment will be deducted per day up to a maximum of 10%.

Service Area	Absent man days Per Quarter	Penalty
Default in man days	7	0.5 % of the quarterly operational payment
	8	1 % of the quarterly operational payment
	9	2 % of the quarterly operational payment
	10	5 % of the quarterly operational payment
	11	5 % of the quarterly operational payment

8. ANNEXURES

8.1 Annexure 1: Covering Letter – Technical Proposal

ACCEPTANCE LETTER

(To be given on Company Letter Head)

RFP Reference No: IT-03/2022-23
Date:

To:
The Chief Information Officer,
Stock Holding Corporation of India Limited
Plot No P-51, TTC industrial Area, MIDC, Mahape
Navi Mumbai – 400710

Dear Sir,

Re: Request for Proposal for Selection of System Integrator for Delivery, Implementation & Management of Private Cloud Setup

Having examined the RFP (RFP No: IT-03/2022-23 dated 28th September 2022) including all annexure, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to deliver solution & services in conformity with the said RFP, subsequent Addendums and in accordance with our proposal and total cost / consultancy fees indicated in the Commercial Bid and made part of this bid.

We undertake, if our bid is accepted, to deliver services and complete the project in accordance with the scheduled time lines.

If our bid is accepted, we will provide the guarantee of a Bank in a sum equivalent to 3% of the contract price for the due performance of the Contract in the form prescribed by *StockHolding*.

We agree to abide by this bid for the period of 180 days from the date fixed for Technical bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this Proposal, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988". We understand that you are not bound to accept the lowest or any Proposal you may receive.

Dated this ..... day of ..... 20.....

(Signature)

(in the capacity of)

Duly authorized to sign Proposal for and on behalf of

8.2 Annexure 2: Covering Letter – Commercial Proposal

ACCEPTANCE LETTER

(To be given on Company Letter Head)

Date:

To,
StockHolding Corporation of India Limited,
301, Centre Point,
Dr. Babasaheb Ambedkar Road,
Parel, Mumbai-400 012.

Sub: Acceptance of Terms & Conditions

RFP Reference No. : IT-03/2022-23

Re: Request for Proposal for Selection of System Integrator for Delivery, Implementation & Management of Private Cloud Setup

Dear Sir,

1. I/We hereby certify that I/We have read the entire terms and conditions of the Technical and the Commercial Bid documents (including all documents like annexure(s), schedule(s), etc.) which form part of the contract agreement and I/We hereby agree to abide by the terms/conditions/clauses contained therein.
2. The corrigendum(s) issued from time to time by you have also been taken into consideration, while submitting this acceptance letter.
3. I/We hereby unconditionally accept all the conditions of above-mentioned document(s)/ corrigendum(s) in its totality / entirety.
4. I/We certify that all information furnished by us is true & correct and in the event that the information is found to be incorrect /untrue or found violated, then you shall without giving any notice or reason therefore or summarily reject the Application or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full security deposit / earnest money deposit absolutely.

Yours faithfully,

(Signature of the Bidder with Office Seal)

Signature of Accepting officer

8.3 Annexure 3: Details of Bidder's Profile

(To be submitted along with Technical bid on Company letterhead)

Details filled in this form must be accompanied by sufficient documentary evidence, to verify the correctness of the information.

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 attach annexures for all states)		
6	Addresses of Firm/Company		
	a) Head Office		
	b) Local Office in Mumbai(if any)		
7	Authorized Contact person		
	a) Name and Designation		
	b) Telephone number		
	c) E-mail ID.		
8	**Financial parameters**		
	Business Results (last three years)	Annual Turnover (Rs. in Crores)	Operating Profit (Rs. in Crores)
	2019-20		
	2020-21		
	2021-22		
	(Only Company figures need to be mentioned not to include group/subsidiary Company figures)	(Mention the above Amount in INR only)	

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

Dated this..... Day of 2022

(Signature)

(In the capacity of)

8.4 Annexure 4: Compliance to Eligibility Criteria

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

Eligibility Criteria Documents to be submitted online

No	Criteria	Compliance (Yes/No)	Details of Proof Attached
	General		
1	The bidder must be a Government Organization / PSU / PSE or a Public / Private Limited Company or a partnership firm incorporated in India and operating in India for at least 5 years as on date of the RFP		Certificate of Incorporation and other Documentary evidence to be attached
2	The Bidder should have following accreditations / certifications: ISO 27001, ISO 20000 and ISO 9001		Copy of the relevant certificates Should furnish.
3	The Bidder should have not be blacklisted/barred/disqualified by any Public Sector Bank / PSU / GOI department/Ministry in India as on date of submission of Bid		Self-declaration by competent authority of the bidder
4	The bidder should have an Average yearly turnover of INR 250 Cr each of the 3 financial years (2019-2020 & 2020-2021 2021-2022) exclusively from their Indian operations		Audited Balance Sheet and Profit and Loss Account Statement for last three years.
5	The bidder should have a positive net worth company in at least 2 of the 3 financial years 2019-2020 & 2020-2021 2021-2022) from the Indian operations.		Audited Balance Sheet and Profit and Loss Account Statement for last three years. Certificate from the statutory auditor to be provided.
6	The bidder should have highest level of partnership with proposed OEM for the proposed solution		Partnership Certificate
7	The Bidder should have Private Cloud implementation in Government/PSU/ BFSI Institution in India		Credentials from clients in form of Purchase Orders / Contract Agreement / Credential Letters etc. is required to be provided for reference
8	At least two Remote Support Center/NOC/Service Center should be available in different geographical locations for uninterrupted elevated support and one of them should be in Mumbai.		Self -declaration to be provided on Bidder letter Head
9	The vendor should bid directly without any consortium and no third party outsourcing is allowed		Self -declaration to be provided on Bidder letter Head

10	The Bidder should be OEM or Original Solution Developer (OSD) or their authorized partners or Service Provider (SP) or System Integrator (SI) of OEM/OSD in India with authorisation to Supply & Setup the proposed Solution in accordance to this RFP requirements. i.e. OEM or its SI can participate but both cannot participate in the RFP.		MAF to be provided

Dated this..... Day of 2022

(Signature)

(In the capacity of)

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

8.5 Annexure 5: Summary of Commercial Bill of Material

No	Items	Year 1 Cost (INR)	Year 2 Cost (INR)	Year 3 Cost (INR)	Year 4 Cost (INR)	Year 5 Cost (INR)	Total Amount for 5 years (in INR)
a	Software Cost						
b	Hardware Cost						
c	OS & Peripheral						
d	Installation & Commissioning Cost						
e	Implementation Cost						
f	Hardware AMC						
g	Software ATS						
h	FM Manpower Cost						
i	Training Cost						
Grand Total - TCO							

**All the prices quoted by the bidder shall be exclusive of taxes.

Total Cost in Words:

For detailed cost split, please refer and fill the attachment as enclosed with RFP document.

Dated this..... Day of 2022

(Signature)

(In the capacity of)

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

8.6 Annexure 6: Integrity Pact

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

(_____ Name of the Department / Office) RFP REF No. IT-03/2022-23 for_____

This pre-bid pre-contract Integrity Pact (Agreement) (hereinafter called the Integrity Pact) (IP) is made on _____ day of the _____, between, on one hand, Stock Holding Corporation of India Limited ., a company incorporated under Companies Act, 1956, with its Registered Office at 301, Centre Point Building, Dr. B 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)represented by Shri _____ (i.e. bidders hereinafter called the **`Counter Party'**) which expression shall mean and include , unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

AND WHEREAS the PRINCIPAL/Owner values full compliance with all relevant laws of the land, rules, regulations economic use of resources and of fairness/transparency in its relation with Bidder(s) /Contractor(s)/Counter Party(ies).

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

1. 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 Bidder(s)/Counter Party(ies) with equity and reason. The Principal / Owner will, in particular, before and

during the Tender (RFP) Process, provide to all Bidder(s) / Counter Party (ies) the same information and will not provide to any Bidder(s)/Counter Party (ies) confidential / additional information through which the Bidder(s)/Counter Party (ies) could obtain an advantage in relation to the Tender (RFP) Process or the Contract execution.
c) 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/Bidders

1. 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) / Bidders 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. Bidder / Counter Party shall disclose the name and address of agents and representatives, if any, handling the procurement / service contract.
5. Bidder / 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 Bidder / Counter Party has to further confirm and declare to the Principal / *StockHolding* that the Bidder / 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 Bidder / 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.
7. The Bidder / 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 Bidder / 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 Bidder / Counter Party shall not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
10. The Bidder 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 Bidder / Counter Party also Undertakes to exercise due and adequate care lest any such information is divulged.
11. The Bidder / 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 Bidder / 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 Bidder / Counter Party or any employee of the Bidder or any person acting on behalf of the Bidder / 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 Bidder's / Counter Party firm, the same shall be disclosed by the Bidder / 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 Bidder / 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 Bidder / 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 Bidder / Counter Party exclusion from the Tender (RFP) Process.
17. The Bidder / Counter Party agrees that if it makes incorrect statement on this subject, Bidder / 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 Bidder(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 Bidder / Counter Party / Contractor from the Tender (RFP) Process or terminate the Contract, if already executed or exclude the Bidder / 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 Bidder / 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 Bidder / Counter Party / Contractor as deemed fit by the Principal / Owner / *StockHolding*.
4. The Bidder / 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 Bidder / Contractor(s) / Counter Party:-

1. Forfeiture of EMD / Security Deposit : If the Principal / *StockHolding* / Owner has disqualified the Bidder(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 Bidder / Contractor / Counter Party.
2. Criminal Liability: If the Principal / Owner / *StockHolding* obtains knowledge of conduct of a Bidder / Counter Party / Contractor, or of an employee of a representative or an associate of a Bidder / 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.

IV. Equal Treatment of all Bidders/Contractors / Subcontractors / Counter Parties

1. The Bidder(s) / Contractor(s) / Counter Party (ies) undertake (s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder / Contractor / Counter-Party shall be responsible for any violation(s) of the principles laid down in this Agreement / Pact by any of its sub-contractors / sub-vendors.
2. The Principal / *StockHolding* / Owner will enter into Pacts on identical terms as this one with all Bidders / Counterparties and Contractors.
3. The Principal / *StockHolding* / Owner will disqualify Bidders / Counter Parties / Contractors who do not submit, the duly signed Pact, between the Principal / Owner / *StockHolding* and the Bidder/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, *StockHolding* Ltd.
3. The Bidder(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) / Bidder / Counter Party. The Counter Party / Bidder / 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 Bidder(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* Corporation of India 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 / Bidder, 12 months after the completion of work under the Contract, or till continuation of defect liability period, whichever is more and for all other Bidders, 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 the *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 signed and executed this Integrity Pact (IP) at the place and date first above mentioned in the presence of the following witnesses:-

---

(For and on behalf of Principal / Owner / *StockHolding*)

(For and on behalf of Bidder / Counter Party / Contractor)

WITNESSES:

1._____ (Signature, name and address)

2._____ (Signature, name and address)

Note: In case of Purchase Orders wherein formal agreements are not signed references to witnesses may be deleted from the past part of the Agreement.

8.7 Annexure 7: Reference Checks

At least 3 References should be provided which should be in the last 5 years preceding to the year starting FY2021-22

No	Attributes	Details
1	Name of the Contact Person	
2	Designation	
3	Company Name	
5	Address of the Company	
6	Contact Details	
7	Services provided to the company	

Dated this..... Day of 2022

(Signature)

(In the capacity of)

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

List of Clients for Reference

RFP: IT-03/2022-23 dated 28th September 2022

No.	Name and Complete Postal Address of the Customer	Name, Designation, Telephone, Fax, email address of the contact person	Nature and description of the business during last 3 years	Satisfactory Letter from customer to be enclosed or Purchase order to be enclosed

8.8 Annexure 8: Pre-Bid Query Format

No	Section & Clause Ref. No./Annexure No	Page No/ Pt. No	RFP text	Query	Response to query (to be left blank by Bidder)

*This is not a Mandatory Document

8.9 Annexure 9: Deviations

No	Page No	RFP Section No.	Point as stated in the RFP document	Comment/ Suggestion/ Deviation Detailed Explanation about deviation, if not complied

Any deviations highlighted which are purely in the Functional and Technical Specifications (Annexure 16) as mentioned in the RFP will be considered at the sole discretion of StockHolding. Any other deviations will not be considered and may lead to rejection of Bid.

8.10 Annexure 10: Manufacturer's Authorisation Form

Note: This authorization letter should be printed on the letterhead of all the original equipment manufacturer (OEM) and should be signed by a competent person having the power of attorney to bind the manufacturer.

RFP Reference No. IT-03/2022-23 dated 28th September 2022

Date:__/__/2022

To,
StockHolding Corporation of India Limited,
301, Centre Point,
Dr. Babasaheb Ambedkar Road,
Parel, Mumbai-400 012.

Dear Sir,

Sub: **RFP No.: IT-03/2022-23 dated 28th September 2022**

We who are established and reputable manufacturers/ producers of _____ having factories/ development facilities at (address of factory/ facility) do hereby authorize M/s _____ (Name and address of the bidder) to submit a Bid, and sign the contract with you against the above Bid Invitation.

We hereby extend our full guarantee and warranty for the Solution, Products and services offered by the above firm against this Bid Invitation.

We also undertake to provide any or all of the following materials, notifications, and information pertaining to the Products manufactured or distributed by the Bidder:

- Such Products as the *StockHolding* may opt to purchase from the Bidder, provided, that this option shall not relieve the Bidder of any warranty obligations under the Contract; and

In the event of termination of production of such Products:

- Advance notification to *StockHolding* of the pending termination, in sufficient time to permit the *StockHolding* to procure needed requirements; and
- Following such termination, furnishing at no cost to *StockHolding*, the blueprints, design documents, operations manuals, standards, source codes and specifications of the Products, if requested.

We duly authorize the said firm to act on our behalf in fulfilling all installations, Technical support and maintenance obligations required by the contract.

We further certify that,in case the authorized distributor/ system integrator is not able to meet its obligations as per contract during contract period, we, as the OEM, shall perform the said obligations with regard to their items by ourselves or through alternate & acceptable service provider.

Place:

Date:

Seal and signature of the OEM

8.11 Annexure 11: Non-Disclosure Agreement

MUTUAL NON-DISCLOSURE AGREEMENT

This Non-Disclosure Agreement (hereinafter "Agreement") is executed on this _____ day of _____, 2022 by and between

Stock Holding Corporation of India Limited, a company incorporated under the Companies Act, 1956 and having its registered office at 301, Centre Point, Dr. Babasaheb Ambedkar Road, Parel, Mumbai 400012 (hereinafter referred to as "StockHolding" which expression shall mean and include its successors and assigns), of the One Part;

And

(Company Name) a company incorporated under the Companies Act, 1956 and having its registered office / corporate office at (Complete address) (hereinafter referred to as "Company Name" which expression shall mean and include its successors and assigns), of the Other Part.

(StockHolding and (Company Name) are individually referred to as 'Party' and collectively as 'Parties'.)

The Party disclosing Confidential Information under this Agreement shall be referred to as Disclosing Party and the Party receiving Confidential Information shall be referred to as Receiving Party.

Purpose: Whereas, the Parties wish to explore possible business opportunity, during which either Party will be required to disclose certain Confidential Information to the other.

Confidential Information and Exclusions: Confidential Information shall mean and include (a) any information received by the Receiving Party which is identified by Disclosing Party as confidential or otherwise; (b) all information including technical, data security , cyber security business, financial and marketing information, data, analysis, compilations, notes, extracts, materials, reports, drawings, designs, specifications, graphs, layouts, plans, charts, studies, memoranda or other documents, know-how, ideas, concepts, strategies, trade secrets, product or services, results obtained by using confidential information, prototype, client or vendor list, projects, employees, employees skills and salaries, future business plans disclosed by Disclosing Party whether orally or as embodied in tangible materials. Confidential Information shall however exclude any information which a) is in the public domain; (b) was known to the Party of such disclosure or becomes known to the Party without breach of any confidentiality agreement; (c) is independently developed by the Party without use of Confidential Information disclosed herein; (d) is disclosed pursuant judicial order or requirement of the governmental agency or by operation of law, provided that the recipient party gives disclosing party a written notice of any such requirement within ten (10) days after the learning of any such requirement, and takes all reasonable measure to avoid disclosure under such requirement.

Confidentiality Obligations: The Receiving Party shall, at all times maintain confidentiality and prevent disclosure of Confidential Information of Disclosing party with at least the same degree of care as it uses to protect its own confidential information but in no event with less than reasonable care. The Receiving Party shall keep the Confidential Information and Confidential Materials and any copies thereof secure and in such a way so as to prevent unauthorized access by any third party. The Receiving Party agrees not to disclose, transmit, reproduce or make available any such Confidential Information to any third parties and shall restrict disclosure of Confidential Information only to a limited group of Recipient's directors, concerned officers, employees, attorneys or professional advisors who need to have access to the Confidential Information for the purposes of maintaining and supporting the services and each of whom shall be informed by Receiving Party of the confidential nature of Confidential Information and agree to observe the same terms and conditions set forth herein as if specifically named a Party hereto. The Receiving Party shall not, unless otherwise agreed herein, use any such Confidential Information and Confidential Materials for its own benefit or the benefit of

others or do anything prejudicial to the interests of the Disclosing Party or its customers or their projects. The Receiving Party shall not use the Confidential Information in any way to create a derivative work out of it or reverse engineer or use for any commercial purpose or for any purpose detrimental to the Disclosing Party. The Receiving Party shall not make copies of Confidential Information unless the same are reasonably necessary. The Receiving Party shall immediately notify Disclosing Party in the event of any unauthorized use or disclosure of the Confidential Information and reasonably support Disclosing Party in taking necessary remedial action.

No Warranty: All Confidential Information is provided 'as is.' Neither Party makes any warranty, express, implied or otherwise, regarding its accuracy, completeness or performance.

No License: Each Party recognizes that nothing in this Agreement is construed as granting it any proprietary rights, by license or otherwise, to any Confidential Information or to any intellectual property rights based on such Confidential Information.

Return:

The Receiving Party who receives the Confidential Information and Confidential Materials agrees that on receipt of a written demand from the Disclosing Party:

Immediately return all written Confidential Information, Confidential Materials and all copies thereof provided to, or produced by it or its advisers, as the case may be, which is in Receiving Party's possession or under its custody and control; (SUCH RETURN OF DOCUMENTS SHOULD BE DONE BY SIGNING A LETTER).

To the extent practicable, immediately destroy all analyses, compilations, notes, studies, memoranda or other documents prepared by it or its advisers to the extent that the same contain, reflect or derive from Confidential Information relating to the Disclosing Party;

So far as it is practicable to do so immediately expunge any Confidential Information relating to the Disclosing Party or its projects from any computer, word processor or other device in its possession or under its custody and control; and

To the extent practicable, immediately furnish a certificate signed by its director or other responsible representative confirming that to the best of his/her knowledge, information and belief, having made all proper enquiries the requirements of this paragraph have been fully complied with.

Receiving party will attempt to maintain, to the best possible extent, physical and logical segregation of the Confidential Information of the data of the Receiving party from data of any third party.

Term: The term of this Agreement shall be ____ (___) years from _____ (the Effective Date). Either Party may terminate this Agreement by giving a thirty (30) days written notice to the other. The confidentiality obligations stated in this Agreement shall survive for a period of three (3) years from the date of termination or expiration of this Agreement.

Remedies: The Confidential Information and Confidential Materials and all copies thereof, in whatsoever form shall at all times remain the property of the Disclosing Party and its disclosure hereunder shall not confer on the Receiving Party any rights whatsoever beyond those contained in this document.

The Parties acknowledge and agree that the Disclosing Party will suffer substantial and irreparable damage, not readily ascertainable or compensable in monetary terms, in the event of any breach of any provision of this Agreement by the Receiving Party. The Receiving Party therefore agrees that, in the event of any such breach, the Disclosing Party shall be entitled, without limitation of any other remedies otherwise available to it, to obtain an injunction or other form of equitable relief from any court of competent jurisdiction.

Governing Law and Jurisdiction: This Agreement may be governed and construed in accordance with the laws of India and shall be subject to the jurisdiction of courts in Mumbai, India.

Miscellaneous: This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior commitments/ understanding in this regard and may not be amended or modified except by a writing signed by a duly authorized representative of the respective Parties. This Agreement may be executed in several counterparts (physical or electronic form), each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may not be assigned or transferred except by a mutual written consent of both the Parties.

For Stock Holding Corporation of India Limited	For (Company Name)
Name:	Name:
Title:	Title:
In the Presence of	
Name:	Name:
Title:	Title:

8.12 Annexure 12: Minimum On-Site Deployment Level

RFP Reference No.: IT-03/2022-23 dated 28th September 2022

Bidder shall at minimum deploy the resources as per the minimum deployment level.

Bidder should independently arrive at the sizing and deployment plan to meet the RFP requirements (As per scope of work and SLAs) adhering the minimum deployment level. Bidder shall deploy resources at no extra cost if the proposed deployment do not meet the RFP requirements and SLAs

- Bidder to propose the resource matrix as apart of bid submission procedure.
- The Successful bidder would be required to comply with the statutory obligations and Labor Regulations/ Rules.
- Onsite support will be considered after implementation Sign off.
- Onsite Support person mandatory (NO Remote access will be provided)
- Only respective OEM Certified personnel to work in project and operations phase

No	Resource	Location of the Resource	Minimum no. of Resources Per Shift	Total Number of shifts	Resource Count	Service Window
1						
2						
3						

The L3 support for Hardware & software components has to be provided by OEM directly.

8.13 Annexure 13: Proposed Team Profile

A. Experience of the L2 Engineer

S.no	Name of the resource	Number of years of experience	Name of organizations where the resource has worked in the past	Scope of Work involved of the project	Client Contact Details, including name, designation, contact number & email id.	Profile attached (Yes/No)

**Add separate rows for each client*

8.14 Annexure 14: Land Border Undertaking

RFP Reference No: **IT-03/2022-23 dated 28th September 2022**

Date:

To:
The Chief Information Officer,
Stock Holding Corporation of India Limited
Plot No P-51, TTC industrial Area, MIDC, Mahape
Navi Mumbai – 400710

Dear Sir,

Re: Request for Proposal for Selection of System Integrator for Delivery, Implementation & Management of Private Cloud Setup

We hereby certify that we have read the clauses contained in O.M. No. 6/18/2019-PPD, dated 23.07.2020 order (Public Procurement No. 1), order (Public Procurement No. 2) dated 23.07.2020 and order (Public Procurement No. 3) dated 24.07.2020 regarding restrictions on procurement from a bidder of a country which shares a land border with India. We further certify that we and our OEM are not from such a country or if from a country, has been registered with competent authority. We certify that we and our OEM fulfil all the requirements in this regard and are eligible to participate in this RFP.

Dated this ..... day of ..... 20.....

(Signature)

(in the capacity of)

Duly authorized to sign Proposal for and on behalf of

8.15 Annexure 15: Compliance Statement

RFP Reference No: **IT-03/2022-23 dated 28th September 2022**

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. No.	Item / Clause of the RFP	Compliance (Yes / 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	Force Majeure	
8	Integrity Pact	
9	Bid Formats (Technical & Commercial Bid)	
10	Annexures in the RFP	
11	Functional and Technical Specifications (Annexure 16) Please include all the sub-sections separately	

Date:

Signature with seal

Name & Designation

8.16 Annexure 16: Functional and Technical Specifications

8.16.1 General Specifications

No.	General Specifications	Compliance (Yes/No)
1	Proposed solution must be based on converged IT infrastructure platform that integrates storage, compute, networking, hypervisor, real- time deduplication, compression, and optimization along with powerful data management, data protection, and disaster recovery capabilities in a standard x86 server building block.	
2	Proposed solution must be Hardware Agnostic to provide flexibility of choosing hardware from any server manufacturer and have an OEM provided server compatibility list to choose from also flexible to customize the server hardware as per requirement	
3	The solution shall provide a purpose-built hypervisor with minimal footprint that installs directly on the bare metal x86 server	
4	The solution shall provide a single console for management of the platform to conduct activities for tight integration Virtual Machine workflows such as on-boarding/managing hosts, virtual machines, storage and networks	
5	The solution shall provide the ability to use flash devices on the host as a 'read & write cache' to improve performance for read & write sensitive workloads	
6	The solution should be able to work on latest x86 server hardware available from all the leading vendors in the industry and should not be restricted to a particular vendor/make/model	
7	The solution shall provide the ability to expand virtual disks (boot and non-boot disks) without downtime and provide options for locating new virtual disks for existing workloads on different tiers of storage for both Windows and Linux workloads	
8	Virtualization management software should have integrated Physical Host and Virtual Machine performance monitoring.	
9	Management console should reside on existing virtualized host.	
10	Proposed solution should be compatible with leading disaster recovery automation solutions	
11	Capability to migrate the virtualization infrastructure to DR site.	
12	The solution shall provide integration with the proposed data center automation solution to enable automated delivery of complete environments including computer, networking & security.	
13	The proposed hypervisor solution must be ready for containers, Kubernetes and dockers deployment.	
14	The Solution should be capable to provide enterprise data services such as compression, de-duplication completely in software.	
15	The solution should have enterprise file storage services feature	
16	The solution must support to run container-based workload.	
17	Proposed solution must provide granular VM-Centric controls for managing storage service levels and Automated self-rebalancing capabilities to align with defined Storage service levels.	
18	The solution should compulsorily manage from a single control plane and movement of virtual machines should be seamless and non-disruptive once the Storage cluster is extended.	
19	Proposed solution should support non-disruptive scale-up and scale-out to grow capacity and performance whenever required	

20	The solution must support migration of Virtual machines across multiple disaster recovery sites, so that key virtual machines can be recovered in times of disaster. All software licenses for enabling the above must be part of overall solution.	
21	The solution must be capable of creating instant clones and snaps for VMs so as not to impact production workloads.	
22	The solution should deliver zero data loss in case of disk, host or network failure. Minimum 1 node failure must be considered while configuring the cluster.	
23	The proposed solution must be capable of replicating & moving the virtual machines across the new nodes at the software defined storage level. Scenarios - 1. Move a virtual machine from one host to another host or cluster. 2. Relocate the configuration file of a virtual machine and its virtual disks while the virtual machine is powered on. Such Hot Migration may support following Scenarios – a) Change Compute resources only b) Change storage only c) Change both compute resource and storage d) Migrate to another virtual switch e) Migrate to another data center f) Migrate to another Management Server system Mention Partial Compliance if all scenarios are not available.	
24	The solution should have the capability to deliver capacity management, analytics and modelling, with granularity to analyze metrics collected which will help for future capacity planning and help in troubleshooting the infrastructure as well as VMs related issues.	
25	The solution should be able to support different generation of Intel processors in the same cluster for investment protection over the life of the proposed solution.	
26	The solution shall provide hyper-converged infrastructure that allows delivery of enterprise-class storage services using latest x86 server infrastructures without dependence on a separate Storage Area Network & associated component such as SAN Switches & HBAs.	
27	Storage solution must be capable to extend storage to additional Virtual machines not hosted on the storage cluster	
28	Proposed Solution must be capable to deduplicate, Compress & Optimize ALL data inline, in real-time, across all storage tiers within the HCI Cluster. All handled with fine data granularity of 4KB or 8KB data blocks.	
29	Solution should be with and without hardware assisted data deduplication and compression.	
30	Proposed solution must be capable to support multiple points of failure across multiple nodes, with no loss of function or data.	
31	During a single component failure (of any type) production services are not affected / degraded in anyway	
32	Must be able to sustain minimum of simultaneous 1-HDD failure in each node of a cluster along with single node failure in the cluster without data loss or if the solution does not support 1 disk failure at a time from all nodes then vendor has to give RF3 Redundant Factor 3 to ensure that in case of the Disk Failure in more than 2 node then the 3rd copy should be available.	
33	Proposed solution must be high-resilient to sustain one node failure in the cluster - N+1 HA	

34	Global dedupe, compression and optimization with minimum impact to production workloads and guaranteed CPU and RAM available to production applications.	
35	Offered Hyper-converge platform shall support individual VM-centric policy- based backup, recovery and DR.	
36	Offered Hyper-converged solution shall provide the complete flexibility for Cloning specific VMs	
37	Offered Hyper-converged solution shall provide the complete flexibility for VM- level backup instead of forcing protection at the datastore or protection domain level	
38	The ability to carry simultaneous out bi- directional replication between two data centers	
39	The Hypervisor should support Configuration and Management of the Switching features from same Console.	
40	The software licenses must be hardware agnostic and must work with compatible hardware of any make.	

8.16.2 Hypervisor Platform Specifications

No.	Hypervisor Platform Specifications	Compliance (Yes/No)
1	The solution shall provide a purpose-built hypervisor that installs directly on the bare metal x86 server hardware with no dependence on a general-purpose OS for reliability and security. This hypervisor should have inbuilt support for software defined storage and software defined network capabilities without having to use any additional components or virtual machines	
2	The solution shall provide a highly available administrative console for management of the virtual data-center platform to conduct activities such as on-boarding/managing/updating hosts, virtual machines, storage and networks	
3	The solution shall provide the ability to create new virtual machines from scratch or based on templates / blueprints (created from fully configured virtual machines)	
4	The solution shall provide the ability to boot from iSCSI, FCoE, Fibre Channel SAN, locally attached USB storage and network PXE boot	
5	Virtualization software shall allow heterogeneous support for guest Operating systems like - Windows client, Windows Server, Linux (at least Red Hat, SUSE, Ubuntu, CentOS and Oracle Linux, Solaris X86). The respective Windows & Linux Guest OS must certify the underlying Hypervisor.	
6	The solution shall provide the ability to rapidly on-board new hosts by automatically deploying reference configurations including networking settings	
7	The solution shall intelligently place and balance virtual machines on appropriate available storage tier based on SLA, performance and availability requirements	
8	The solution shall provide a built-in convertor to migrate physical Windows and Linux workloads to virtual workloads	
9	Proactive High availability capability that utilizes server health information and migrates VMs from degraded hosts before problem occurs	
10	The solution shall provide automated live migrations for initial placement and balancing of available resources with rules to define affinity and/or anti-affinity for workloads (e.g. 2 VMs providing availability for each other should always be placed on different hosts)	
11	The solution shall enable consolidation of VMs on fewer hosts and automatically power down unused capacity to reduce power/cooling requirements. It shall also leverage	

	deep process power state of the CPU at the host level to further optimize power & cooling requirements	
12	The solution shall provide the ability to hot-add CPU and memory and hot-plug disks and NICs (provided the same is supported by the guest operating system)	
13	The solution shall provide built-in replication capability which will enable efficient array-agnostic replication of virtual machine data over the LAN or WAN. This replication should simplify management enabling replication at the virtual machine level and enabling RPOs as low as 5 minutes.	
14	The solution shall provide I/O prioritization for virtual workloads to ensure that business critical VMs are not affected due to congestion by other VMs on the same host	
15	The solution shall provide configurations at VM level that can be tuned to help reduce latency. When the Latency sensitivity is set to high the hypervisor will try to reduce latency in the virtual machine by reserving memory, dedicating CPU cores and disabling network features that are prone to high latency	
16	The solution shall provide the ability to expand virtual disks (boot and non-boot disks) without downtime and provide options for locating new virtual disks for existing workloads on different tiers of storage for both Windows and Linux workloads	
17	The solution shall provide a highly available platform with built-in clustering capability leveraging both network & storage communication for cluster heartbeats. Failure of the management network shall not result in downtime for the workloads.	
18	The solution shall provide zero downtime host patching with maintenance mode to move running workloads to other hosts on the platform with a consistent audit trail of the patching process	
19	The solution shall provide a centralized interface from which virtual machine access switching for the entire data centre can be configured, monitored and administered	
20	The proposed solutions should be able to integrate with NAS, FC, FCoE and iSCSI SAN and infrastructure from leading vendors leveraging high performance shared storage to centralize virtual machine file storage for greater manageability, flexibility and availability.	
21	Virtualization software should support live Virtual Machine migration between different generations of CPUs in the same cluster and without the need for shared storage option.	
22	The solution must support an option to securely boot workloads using the UEFI (Unified Extensible Firmware Interface) when available in hardware to ensure that only signed drivers & OS loaders are loaded while booting	
23	The solution shall support configurations of 802.1q VLANs which are compatible with standard VLAN implementations from other vendors	
24	Virtualization software should have the ability to live migrate VM files from one storage array to another without any VM downtime. Support this migration from one storage protocol to another (ex. FC, NFS, iSCSI, DAS)	
25	Virtualization software shall allow taking point-in-time snapshots of the virtual machines to be able to revert to an older state if required	
26	Virtualization software should have the ability to thin provision disks to avoid allocating all storage space upfront. Full monitoring capabilities and alerts to prevent from accidentally running out of physical storage space should be there.	
27	The solution should provide special integration with Storage API's providing integration with supported third-party data protection, multi-pathing and disk array solutions.	

28	Virtualization software shall have High Availability capabilities for the virtual machines in the sense if in case one server fails all the Virtual machines running on that server shall be able to migrate to another physical server running same virtualization software. The feature should be independent of Operating System Clustering and should work with FC/ iSCSI SAN and NAS shared storage. This high availability feature should also be extended to and aware of the applications running inside of the virtual machines.	
29	Virtualization software should have the provision to provide zero downtime, zero data loss and continuous availability for the applications running in virtual machines in the event of physical host failure, without the cost and complexity of traditional hardware or software clustering solutions.	
30	Virtualization software should provide integration of 3rd party endpoint security to secure the virtual machines with offloaded antivirus, antimalware solutions without the need for agents inside the virtual machines.	
31	Virtualization software should provide VM-level encryption protects unauthorized data access both at-rest and in-motion	
32	The solution shall support AES-128 and AES-256 encryption (in conjunction with any KMIP 1.1 compliant KMS server) of the workloads when at rest on storage without modifying the Guest OS	
33	Hypervisor should have capability similar of Virtual Volumes which enables abstraction for external storage (SAN and NAS) devices making them Virtualization aware.	
34	The hypervisor should support HCI and Non-HCI (Server + FC SAN Storage) architecture	
35	It should allow dynamic adjustment of the teaming algorithm so that the load is always balanced across a team of physical adapters on a Virtual Switch	
36	Solution must provide native and embedded support for creating Kubernetes clusters on the hypervisor using a single management user interface for managing both virtual machines and Kubernetes clusters for containerized applications	
37	Licenses proposed for Software Defined Compute (SDC) /Hypervisor Platform should be perpetual in nature	
38	In Favor of better optimization, Virtualization Solution should provide maximum Density of VMs per host. Bidders can share the inputs in remarks.	

8.16.3 Software Defined Storage Specifications

No	Software Defined Storage Specifications	Compliance (Yes/No)
1	The proposed SDS should be embedded within the hypervisor kernel itself	
2	The proposed SDS solution should be a purely software-based solution and should not be dependent on any hardware make and model. SHCIL should be able to run SDS solution on any compatible x86 hardware of choice.	
3	The proposed solution must support latest x86 server based on latest Intel Cascade Lake processor generation or beyond from Day 1. The proposed solution should support mixing of SDS nodes from different hardware vendors in the same cluster. SDS nodes means the nodes which contribute to all 3 viz. compute, memory and capacity/storage	
4	The hardware vendor has to ensure that the hardware i.e., Rack servers being proposed as part of the solution are certified / tested by Software Defined Storage OEM. Supporting document of the hardware / drives / individual components being compatible with the Software Defined Storage needs to be provided	

5	The proposed SDS software Licenses should not have any dependence on the underlying hardware. Also, SDS Licenses should be transferrable to hardware from any vendor in case of hardware EOL & EOS or nonavailability. Adding of Memory or Disks should not incur any additional software Licenses	
6	The solution should provide a single unified management console for end-to-end life cycle management of the entire environment including virtualized platform as well as SDS environment	
7	The proposed solution should support both All Flash and hybrid configuration with the same software License from day one	
8	The SDS solution shall allow delivery of enterprise-class storage services without dependence on a separate Storage Area Network (SAN) & associated component such as SAN Switches & HBAs	
9	The proposed solution should be capable to connect to FC SAN for VM migration and reusing existing Storage natively using FC HBA also support for Direct attached JBODs	
10	The SDS solution should support data at rest encryption for all nodes and all the drives without any need of specialized disks. Licenses and software for the same should be considered for all the drives from day 1.	
11	Proposed solution should protect up to 1 Node failure scenario in the cluster. The solution should also be capable of protecting 3 nodes failure scenario	
	The nodes should be capable to connect over 10G/25G IP connectivity. There should be no dependency on any proprietary or specialized interconnects. The bidder should provision compatible TOR switch with redundancy to ensure connectivity of all nodes via TOR.	
12	The proposed solution should provide framework to set storage and data policies like erasure coding, mirroring, fault tolerance, capacity reservation, cache reservation, IOPs on a per-VM & per virtual disk basis and should also allow changes to these policies on the fly without restart of virtual machines.	
13	The enabling and disabling of storage services like deduplication, compression, encryption, erasure coding should be easily available in GUI.	
14	The solution shall provide scale-up (by adding disks), scale-out (by adding nodes) and Scale-down (removal of node from cluster) architecture with no disruption to the workloads already running on the platform	
15	The solution should support checksum of data to ensure data integrity & to enable automatic detection and resolution of silent disk errors	
16	The SDS solution should be capable of Cloud Native Storage integration natively to create Persistent Volumes using SDS File Share	
17	The proposed solution should be 100% Software defined and without any dependency on proprietary hardware	
18	The Management Console for Storage should provide policy driven approach, should have UI, CLI as well as APK/SDK. The Management Console should be able to manage SDS, third party supported Storages, NFS and Virtual File Systems. Policies should be applied per VM.	

8.16.4 Software Defined Network and Security Specifications

No	Software Defined Network and Security Specifications	Compliance (Yes/No)

1	The SDN solution should offer to deploy virtualized network functions (like switching, routing, firewalling, and load-balancing), administrators can build virtual networks for Virtual Machines with the need for complex VLANs, ACLs or hardware configuration syntax on underlay physical network	
2	The SDN solution should offer distributed switching for the virtual workloads in overlay fashion	
3	The Solution should offer a centrally managed distributed stateful firewall to provide micro-segmentation for the environment and this firewall should be integrated within the hypervisor.	
4	The solution should support micro-segmentation for east west traffic of virtual machines, offering security policy on VNIC of the virtual machines	
5	The Solution should support security policies for virtual machines and can be defined based on grouping construct with dynamic or static membership criteria based on VM name, tags, logical switch, logical port, IP Sets, computer OS Name, computer name, Active Directory	
6	The security policies in the virtualization layer must be tied to the application, which means whenever any application is moved from one virtualized server to another, even between different VLANs, the security policies should follow the application and there should be no need to redefine the security policies for the application at the new location. Also, when the application is deleted, all the security policies related to the application should also be removed	
7	The solution should support distributed context aware firewall which provides visibility into the application layer and should be able to block the application irrespective of the port it is using	
8	The SDN solution should provide logical Layer 2 overlay extensions across a routed (Layer 3) fabric within and across data center boundaries and supports network overlays	
9	The distributed firewall should be embedded in-kernel of the hypervisor host architecture and should provide 15 Gbps or better performance per host	
10	The solution should provide a stateful firewall with capability of defining security policies on constructs such as IP address, VM names, and tags, active directory groups, Security tags etc.	
11	The solution should offer Layer-2 VPN allowing you to extend your data center by allowing virtual machines to retain network connectivity across geographical boundaries.	
12	The solution should provide inbuilt L2VPN and L3VPN to allow for secure extension to multiple small ROBO sites.	
13	The proposed SDN solution Licenses should not have any dependence on the underlying hardware and the Licenses should be transferrable to any hardware from any vendor in case of current hardware is EOL & EOS	
14	The Solution should support declarative API framework to provide outcome driven config option to reduce number of configuration steps by allowing a user to describe desired end-goal.	
15	It is desirable that The Network Virtualization and Security solution should support Bare Metal Workloads, Virtual workloads outside the cluster as we may have Bare Metal Database servers in future.	
16	The Software defined Network and Security solution should make it easy to segregate traffic based on the type of service, necessary for numerous reasons: • Compliance • Security • Performance	

	Bidder will have to elaborate the details in Proposed solution	
17	The SDN Solution should provide Layer 2 bridging (stretch networks) a) Layer 3 routing b) Advanced network services – VPN, NAT, SSL c) Service insertion d) Load balancing services	
18	The Bidder shall propose SASE framework as an extension to the SDN solution. SHCIL should have options to select the components as and when needed.	

8.16.5 Platform Management

No.	Platform Management	Compliance (Yes/No)
1	Virtualization management software console shall provide a single view of all virtual machines, allow monitoring of system availability and performance and automated notifications with email alerts.	
2	The virtualization management software should provide the core administration interface as a single Web based interface. This interface should be flexible and robust and should simplify the hypervisor control through shortcut navigation, custom tagging, enhanced scalability, and the ability to manage from anywhere with Google Chrome, Internet Explorer or Firefox-enabled devices.	
3	The management software should provide means to perform quick, as-needed deployment of additional hypervisor hosts. This automatic deployment should be able to push out update images, eliminating patching and the need to schedule patch windows.	
4	The virtualization should have capability to simplify host deployment and compliance by creating virtual machines from configuration templates.	
5	Power, storage related, and OS cluster related information has to initiate from the relevant sources and can be integrated through RESTful APIs.	
6	Virtualization management software console shall provide reports for performance and utilization of Virtual Machines. It shall co-exist and integrate with leading systems management vendors.	
7	Virtualization management software console shall provide capability to monitor and analyze virtual machines, and server utilization and availability with detailed performance graphs.	
8	Virtualization management software console shall allow to Move a powered off virtual machine from one physical server to another by dragging and dropping the virtual machine icon. Virtualization management software console should allow cloning of both powered on and powered off virtual machines.	
9	Virtualization management software console shall maintain a record of significant configuration changes and the administrator who initiated them.	
10	Virtualization management software console shall provide the Manageability of the complete inventory of virtual machines, and physical servers with greater visibility into object relationships.	
11	Virtualization management software should provide a global search function to access the entire inventory of multiple instances of virtualization management server, including virtual machines, hosts, data stores and networks, anywhere from within Virtualization management server.	

12	Virtualization management software should support user role and permission assignment (RBAC).	
13	Virtualization management software should allow you to deploy and export virtual machines, virtual appliances in Open Virtual Machine Format (OVF).	
14	Virtualization management software should allow reliable and non-disruptive migrations for Physical/ Virtual machines running Windows and Linux operating systems to virtual environment.	
15	Virtualization management software should include provision for automated host patch management with no VM downtime.	
16	Virtualization management software should be able to integrate into existing standard EMS systems.	
17	The management solution for hypervisor should provide Single-Sign-On capability which should simplify administration by allowing users to log in once to access all instances or layers of management without the need for further authentication.	

8.16.6 DR Automation

No	DR Automation	Compliance (Yes/No)
1	The solution should be able to Create and manage recovery plans directly from Virtualization Manager Console and able to automatically discover and display virtual machines protected by either host-based replication or storage-based replication	
2	The solution should be able to Map virtual machines to appropriate resources on the failover site **a.** The solution should provide option to customize the shutdown of low-priority virtual machines at the failover site to get more resources or proper utilization of resources **b.** The solution should provide option to recover multiple sites into a single shared recovery site **c.** The solution should be able to automatically stop replication between sites and promotion of replicated storage for recovery **d.** The solution should provide technology so that live migration of virtual machine disks would be supported between different storages and would support of distributed resource scheduling of storage	
3	The solution should support the extension of recovery plans with custom scripts and able to Control access to recovery plans with role-based access control	
4	The solution should be able to receive automatic alerts about possible site failure	
5	The solution should be able to initiate recovery plan execution from virtualization manager with a single click and able to support automated boot of protected virtual machines with pre-specified boot sequence	
6	The solution should be able to manage and monitor execution of recovery plans from virtualization manager and support automated reconfiguration of virtual machine IP addresses at failover site	
7	The solution should be able to automate failback to original production site using original recovery plan and able to automatically re-protect virtual machines by reversing replication to the original site	
8	The solution should be able to support default Host based replication method and Automate execution of recovery testing	

9	The solution should be able to use storage snapshot to perform recovery tests without losing replicated data and provide multiple point-in-time recovery which will allow reversion to earlier known states	
10	The solution should be able to connect virtual machines to an existing isolated network to avoid impacting production applications while doing a testing	
11	The solution should be able to automate cleanup of testing environments after completing tests	
12	The solution should be able to store, view and export results of test and failover execution from virtualization manager	
13	The solution should be able to automate planned migrations with graceful shutdown of protected virtual machines at the original site thus ensuring zero data loss and application-consistent migrations	
14	The solution should be able to ensure complete replication of virtual machine data in an application-consistent state, prior to initiating migration	
15	The solution should be able to perform data sync to force complete replication of powered-off virtual machines to the failover site	
16	It should be able to support true hypervisor-based replication for virtualization platform	
17	It should be able to manage replication directly through virtualization manager, at a granular virtual-machine level	
18	The solution should provide storage-agnostic replication that supports use of low-end storage, including direct-attached storage and provides host-based replication which will replicate only changed blocks to increase network efficiency	
19	The solution should provide support for broad choice of compatible storage arrays and replication products from all major vendors and able to leverage iSCSI, Fiber Channel or NFS-based storage replication solutions	
20	The solution should be capable to provide no limitation to the number of protected virtual machines.	

8.16.7 Advanced Infra Monitoring Specs

No.	Specifications	Compliance (Yes/No)
1	The solution shall provide unified management of performance, capacity and compliance for the proposed platform via a role-based web interface	
2	The solution shall support "agentless" and "agent-based" monitoring of guest workload operating system and applications	
3	The solution shall be available as "ready to deploy", preferably pre-packaged as software appliance	
4	The solution shall have built-in high-availability and data replication across its peer instances. In case of any node outage, other HA nodes should be able to take over for seamless HA for the operations management layer itself	
5	The solution shall provide the ability to identify and report on oversized, under-sized, idle and powered-off virtual workloads such that the environment can be right-sized, and resources can be reclaimed	

6	The solution shall provide predictive analytics capabilities to understand baselines and model capacity and demand for accurate forecasting of infrastructure requirements. The platform should be able collect and analyze utilization metrics at sub-5-minute intervals to provide accurate forecasting	
7	The solution shall provide alerts with symptoms and recommended actions for known problems with the ability to add custom alerts (with symptoms and recommended actions)	
8	The solution shall have out of the box reporting features for current capacity usage, potential optimizations, physical resource availability, available headroom for expansion and system compliance to security/operational guidelines	
9	The solution should give explanations and recommended solutions to performance, capacity and configuration problems. It should be possible to associate workflows with alerts to automatically initiate corrective measures at critical thresholds. The solution should provide advanced trouble shooting capabilities leveraging AI/ML technologies which would provide troubleshooting evidence consisting of events, property changes and metric abnormalities.	
10	Should have Integrated Compliance & Configuration to track and remediate configuration breaches manually or automatically to stay compliant. Should be able to create custom benchmarks	
11	The solution shall support service discovery & application dependency mapping for workloads hosted on the virtual platform. The solution shall pre-emptively rebalance workloads in advance of upcoming demands and spikes, eliminating resource contention before it happens thus ensuring that workloads get the resources that they always need	
12	The solution should allow connecting to data-center ecosystem components e.g., operating systems, applications, storage arrays, firewalls, network devices, etc., providing a single location to collect, store, and analyze logs at scale. The solution should deliver a single interface for heterogeneous and highly scalable log management of both physical and virtual components with intuitive, actionable dashboards, sophisticated analytics and broad third-party extensibility, providing deep operational visibility and faster troubleshooting	
13	The solution provides the cost of a virtual machine and utilization of shared resources to help better manage demand, budget, Capex/OpEx across various projects/departments using the shared cloud infrastructure. The solution should be able to analyze/report on cost/spend by Account, User, Deployment, Cloud Provider, LOB, Instance type, Tags	
14	The solution should provide visibility and monitoring for third- party data-center ecosystem components such as compute, networking, storage, security, applications, containers, latest Kubernetes versions, databases and multi-cloud services from AWS, Azure, and GCP. A comprehensive list of supported systems shall be submitted as part of the bid.	

8.16.8 Backup Software

No	Features Description for Backup Storage	Compliance (Yes/No)
1	Backup Software license of 100 TB front end data. Required Capacity Licenses/ VM base licenses/ Socket based license for Software Total Virtual machines to be consider are 100 VM's. 80 VM's at DC and 20 VM's at DR	

2	The bidder should also supply backup physical server one at DC site along with purpose built backup solution. The backup server must have minimum 4x10 Gbps port Fibre with SFP's. The bidder should supply necessary operating system. licenses supported for the backup server/media server	
3	Backup software proposed should be in Gartner's leader quadrant of Gartner Magic Quadrant report of any last 2 years for Data Protection / Backup Software	
4	Disk to Disk to Tape Backup solution with Two month backup data to be kept on disk for easy retrieval	
5	All required licenses for support the proposed Tape Library should be provided as per specifications.	
6	The software should support backup for table level restores for Oracle / MSSQL	
7	Should support online backup and granular recovery of database platforms like Oracle, MS SQL, MySQL, PostgreSql, Sybase etc. Should support file and block based backup for Windows File System, UNIX/Linux File Systems, Microsoft SQL Server, MySQL	
8	Should be able to de-duplicate data across backup and backup data sets to reduce storage footprint (using software / hardware based de-duplication).	
9	Should be able to integrate with native backup interfaces of Hyper Converged Solutions in future agentless and/or image level backup of VMs	
10	The proposed solution must support both disk to disk backup and disk to tape backup at the same time.	
11	Proposed solution should have central administration Console.	
12	Should have in-built calendar based scheduling system and also support check-point restart able backups for file systems. It should support various level of backups including full, incremental, differential, synthetic and virtual synthetic backups	
13	Should be able to protect data by backing it up to another disk target and tape target. All necessary licenses for achieving the functionality should be provided	
14	Should have the ability to auto discover VMs from a VM cluster	
15	Should be able to filter out the unwanted VMs from backup jobs (configurable)	
16	Must support Agentless file recovery from VM images	
17	The proposed solution should have inbuilt feature for extensive alerting and reporting with pre- configured and customizable formats. The proposed solution must have capability to do trend analysis for capacity planning of backup environment not limiting to Backup Application/Clients, Virtual Environment, Replication etc.	
18	As a backup tool all audit trails must be logged for tracking any changes on backup server	
19	The Proposed backup solution must support Instant recovery of VM from disk and seamless recovery from Tape.	
20	Simultaneous multi VM backup and recovery support	
21	Solution should support encryption of data while stored in Disk or Tape. Necessary licenses and hardware/software as required must be provided	
22	Should have role-based access control for users to perform specific actions	
23	Should be able to integrate with active directory for ease of user creation and assigning permissions for administration	
24	Proposed Solution should have support for 256 Bit AES Encryption	
25	Must support mounting of VM from backup set for verification and user access without having the need for restore to complete	

26	Full VM restore / Partial VM restore support. It should capable of backup and restoration of individual file, Folders and mount points.	
27	The proposed backup solution should provide search capability from a web portal to allow search for a single file from complete backup	
28	Automated Data Verification while backing up the data and subsequently on media (disk and Tape) to ensure availability of data for successful restores should be supported	
29	Should support Image level backups of Vmware	
30	Support for Online Application Aware backups and granular recovery using image level backup (for quick backup and restore) of VMs in Hyper-V, VMware, RHEV, Openstack and OVM.	
31	Support for Change block tracking in Hyper-V and VMware hypervisors	
32	Support for Administrative Consoles which will allow VM administrators to configure, backup and recover their VMs on their own in a multi-tenant infrastructure	
33	The Backup solution should support DB logs backup from VM.	
34	Solution must support Vmware, HyperV, KVM, Openstack, Xen	
35	Solution must be TCP/IP based, supporting deployment with no requirements proprietary network infrastructure.	
36	Solution must provide support against ransomware protection with Air-Gap Copy	
37	Solution must support inline deduplication, enabled at a granular per-virtual disk level, but supporting aggregate deduplication efficiency ("global" deduplication).	
38	Solution must support encryption of deduplicated data sets, with no loss in space savings	
39	Should be able to protect big data applications like, Cassandra / Hadoop	
40	Should be able to support Windows / Linux / Solaris / AIX File Systems	

8.16.9 Features Description for Backup and Backup Appliance

No	Compliance	Compliance (Yes/No)
1	Offered Disk to disk backup device shall be Modular design to allow configuration, add capacity increase performance.	
2	Offered appliance shall be certified to work with at-least 3 Backup application vendor ISV like HPE Zerto, Veeam, Commvault etc.	
3	Proposed device shall be Proposed with Minimum of 250 TB of usable space, scalable to more than 700TB at DC and minimum 125 TB usable space at DR location	
4	Offered device shall also be scalable to at-least 550TB usable in native mode (Without de-duplication and compression) and additional 1PB of native usable capacity using storage on the cloud like AWS, Azure or on object storage.	
5	Vendor shall not use any additional staging device in-between while moving the data from Disk based backup device to public cloud or object storage.	
6	Offered device shall have separate dedicated drives for Operating System of appliance and shall not participate in data backup.	
7	Vendor shall configure at-least 24TB space on SSD for data caching operation. This space shall be additional to above raw capacity asked in the RFP.	
8	Offered device shall be protected with hardware raid 6 from the factory so that no raid configuration is required in field for data drives.	
9	Offered device shall support emulation of both VTL and NAS target like NFS and CIFS.	

10	Offered device shall have capability to do complete copy of data sets from on premise disk backup storage to Cloud storage instead of data tiering.	
11	Offered device shall have the ability to configure at-least combination of 128 tape Libraries & NAS targets along with 1,000,000 or more Cartridge slots in the single appliance.	
12	Offered device shall have capability to deliver selective restore from disk Library itself.	
13	Offered Device shall integrate with proposed backup infrastructure in the following aspects : a) Compatibility with the proposed backup server / media servers. b) Compatibility with proposed tape library and tape drives. c) Compatibility with proposed backup software	
14	Offered device shall have intelligence to understand both source based and target based de-duplication and shall be integrated with all well-known backup ISVs. At-least 3 ISVs shall be supported.	
15	Offered device shall support receiving non duplicated data from remote locations or branch office directly from the application servers / Client servers in low bandwidth mode without using any backup or replication based device at remote location / Branch office.	
16	Offered device shall have Minimum of 4 x 10/25Gbps SFP IP ports & 4 x 32Gbps ports. License and SFP for all ports shall be offered and configured.	
17	Offered Appliance Fiber channel ports shall support connectivity of servers either directly or via SAN switches while supporting the both source and Target based de-duplication.	
18	Offered disk based backup device shall also support encryption functionality.	
19	Offered disk based backup device shall also support Secure erase feature for protecting against unauthorized recovery of deleted data.	
20	Offered disk based backup appliance shall support VLAN tagging. Offered IP ports of same type shall also support Port bonding in Adaptive Load balancing as well as in Active-backup mode.	
21	Offered device shall support rated write performance of at-least 60TB per hour.	
22	Bidder must supply required Fibre and Network patch cables as per the solution requirement.	

8.16.10 Tape Library

No	Specification	Compliance (Yes/No)
1	Offered Tape Library shall support Native data capacity of 288TB (uncompressed) expandable to 720TB (2.5:1 compressed) using LTO-8 technology.	
2	Tape Library shall provide web based remote monitoring capability.	
3	The Tape Library unit shall be configured with Two FC LTO Gen8 Tape Drives and minimum of 24 slots with barcode reader.	
4	Tape Drive Architecture in the Library shall conform to the INCITS/T10 SCSI-3 standard or newer standards.	
5	Offered LTO-8 drive in the Library shall conform to the Data rate matching technique for higher reliability.	

6	Offered LTO -8 drive in the library shall offer optional WORM support and embedded AES 256 bit Encryption support.	
7	Offered Library shall be provided with a hardware device like USB key, separate appliance etc. to keep all the encrypted keys in a redundant fashion.	
8	Offered LTO-8 drive shall have native speed of 300MB/sec.	
9	Offered LTO-8 drive shall also support LTO-7 – Type M media so that native cartridge capacity of LTO-7 cartridge can be increased to 9TB.	
10	Tape Library shall provide Fiber connectivity to SAN Environment.	
11	For optimal Performance. Tape Library shall provide 8Gbps Native FC interface connectivity to SAN switches.	
12	Tape library shall support removable magazine and mail slot.	
13	Tape Library shall be supplied with software which can predict and prevent failures through early warning and shall also suggest the required service action.	
14	Offered Software shall also have the capability to determine when to retire the tape cartridges and what compression ratio is being achieved.	

8.16.11 Rack Server Specifications

No	Item	Particulars	Compliance (Yes/ No)
Note: Bidders have to ensure 100% Compliance to the below mentioned specifications			
1	HCI Node	HCI node, your offer (Make & Model) Without Overhead	
2	CPU	2 x Third Generation Intel Xeon-Gold 6348 Processor	
		· Clock speed - 2.60 GHz and above	
		· Cores per processor - 28 cores or above	
		· Cache - 20 Mb cache or above	
3	Memory	At least 16 GB DDR4 per Core	
4	Chipset	Latest server class chipset compatible with proposed processor	
5	Ports	5 or more USB 3.0 ports 1x 1Gbps dedicated remote management port	
6	Power supply & Fans	Redundant hot swap power supply units.	
7		Redundant hot swap fans.	
8	Server Management Features	Hardware should support remote server management	
	Network Ports	Min. 8 x25 Gbps ports	
9	FC HBA 2 cards for redundancy	Min. 2 ports x16 GB (Two cards)	
10	Storage capacity across all nodes at DC without dedupe and compression in the cluster	a) DC: 100TB Usable Software Defined storage all flash sustaining one node failure to be distributed evenly across all nodes. b) DR: 75 TB Usable Software Defined Storage Hybrid (25% Flash 75%SAS Disk10KRPM) solution at DR	

		Sustaining one node failure to be distributed evenly across all nodes.	
11	Total Usable Core	a) At DC >=192 Cores without overhead with sustaining one node failure. b) At DR >=144 Cores usable without overhead sustaining one node failure.	
12	Security	1. UEFI Secure Boot and Secure Start support	
		2. Immutable Silicon Root of Trust	
		3. Tamper-free updates - components digitally signed and verified.	
		4. For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from booting up unless the firmware matches the fingerprint. This feature should be immutable	
		5. Should maintain repository for firmware and drivers recipes to aid rollback or patching of compromised firmware. Should also store Factory Recovery recipe preloaded to rollback to factory tested secured firmware	
		6. Secure Recovery - recover critical firmware to known good state on detection of compromised FW	
		7. Secure erase of NAND for decommissioning.	
		8. TPM (Trusted Platform Module)	
		9. Chassis Intrusion detection option	
13	Management	The Dashboard minimum should display a health summary of the following:	
		• Server Profiles	
		• Server Hardware	
		• Appliance alerts	
		The Systems Management software should provide Role-based access control	
		Management software should support integration with popular virtualization platform management software like Vmware vCenter & vRealize Operations, and Microsoft System Center & Admin Center	
		Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD.	
		Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components.	
		Should have dashboard for firmware baselines while performing minimum required firmware checks and highlighting out-of-compliance devices for updates with the selected firmware baseline	

14	Additional Points	The solution should have out of the box security compliance methodology in solution to ensure highly secure environment. It should have at least two certifications from bodies such as NIST, FIPS140-2, EAL2 CCC-Common Criteria Certified, DISA-approved STIG or equivalent.	
15	Additional Points	The vendor must provide all hardware and software with full features and licenses for the solution from day 1.	

8.16.12 Tor Switches

No	Switch Specification	Compliance Yes/No
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 On or after 2018 and it should not have a declared "end of the sale" as on date and must be supported (both Hardware as well as Software) by 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:	
	Minimum 48 ports support 1/10/25 Gbps SFP ports for host connectivity and 6*100G ports for Fabric/Spine connectivity. The proposed switch should support native 25G and should be populated with 48*10G Multimode fibre trans receivers for downlink connectivity & 6*100G ports with multimode 100G Transceivers, for uplink connectivity.	
2.2	The Switch should support intelligent buffer management with a minimum buffer of 40MB.	
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.)	
3	**Performance Requirement**	
3.1	Switch should re-converge all dynamic routing protocol at the time of routing update changes i.e. Graceful restart for fast re-convergence of routing protocols (OSPF, IS-IS, BGP)	
3.2	Switch should support minimum 1000 VRF instances with route leaking functionality	

3.3	The switch should support 400k IPv4 LPM routes	
3.4	The Switch should support intelligent buffer management with a minimum buffer of 40MB.	
3.5	The switch should support 8K multicast routes	
3.6	Switch should support minimum 3 Tbps of switching capacity	
4	**Network Virtualization Features**	
4.1	Switch should support Network Virtualisation using Virtual Over Lay Network using VXLAN	
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 90K 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) to 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 Route Type 2, Type 4 and Route Type 5 for the overlay control plane	
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 defined 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 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.	
11	OEM should provide public references for all of the above specifications / features mentioned.	

8.16.13 24 Port L2 Stackable Access Switch Technical Specifications

No.	SPECIFICATION / FEATURE	Compliance Yes/No
1.	**ARCHITECTURE / PERFORMANCE**	
1.1	Switch should be 1U and rack mountable in standard 19" rack.	
1.2	The switch supports a minimum switching capacity (data rate, full duplex) of at least 128 Gbps or more.	
1.3	The switch supports a minimum forwarding capacity (data rate, full duplex) of 92 Mpps or more.	
1.4	The switch supports a minimum of 24 x 10/100/1000 Mbps RJ45 ports and additional 4 x 10G SFP+ from day one.	
1.5	The switch supports a minimum 4 X 10GB SFP/SFP+ uplink ports, however, the ports should be licensed and activated from day one.	
1.6	The switch should supports the following optics: 1000 SX, 1000 LX, 1000LH, 10GE SR, 10GE LR, 10GE ER.	
1.7	The switch supports a minimum of 16,000 MAC addresses.	
1.8	The switch supports sFlow or NetFlow-Lite from day one.	

1.9	The switch supports IPv4 and IPv6 switching from day 1.	
2.	**LAYER2 FEATURES**	
2.1	The switch supports a minimum of 1,000 VLANs.	
2.2	The switch supports VLAN Trunking Protocol (VTP) or Multiple VLAN Registration Protocol (MVRP) or GARP VLAN Registration Protocol (GVRP) that support dynamic VLANs configuration across all switches.	
2.3	The switch supports IEEE 802.1Q and 1K VLANs simultaneously.	
2.4	The switch should support Dynamic VLAN assignment.	
2.5	The switch supports a maximum jumbo frame size of 9K bytes.	
2.6	The switch supports IEEE 802.1s/w Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP) for rapid spanning-tree convergence independent of spanning-tree timers and also offers the benefit of Layer 2 load balancing and distributed processing.	
2.7	The switch supports per-VLAN Rapid Spanning Tree (PVRST+) / RPVST+ for allowing rapid spanning-tree re-convergence on a per-VLAN spanning-tree basis, without requiring the implementation of spanning-tree instances.	
3	**SECURITY**	
3.1	· The switch supports IEEE 802.1x Authentication, Authorization and Accounting · The Switch supports MAC-based authentication Authenticates the client with the RADIUS server based on the client's MAC address. · The switch supports industry-standard method of user authentication that uses an IEEE 802.1X supplicant on the client in conjunction with a RADIUS/TACACS+ server.	
3.2	Access control lists (ACLs)	
	IP Layer 2 traffic filtering; support global ACL, VLAN ACL, port ACL, and IPv6 ACL.	
3.3	The switch supports following security features: · Secure Shell (SSHv2) · Port Security · MAC Address lockout · Switch management logon security	
3.4	The switch supports Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) protocol snooping.	
3.5	The switch supports Bridge Protocol Data Unit (BPDU) Guard Restrict shuts down Spanning Tree Port Fast-enabled interfaces when BPDUs are received to avoid accidental topology loops.	
3.6	The switch supports Spanning Tree Root Guard Restrict (STRG)/Source-port filtering that prevents edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes.	
3.7	The switch supports multilevel security on console access to prevent unauthorized users from altering the switch configuration.	
3.8	The switch supports Identity-driven ACL/dACL/Role based access and automatic VLAN assignment based on their identities.	
3.9	The switch supports port-based ACLs for Layer 2 interfaces that allow security policies to be applied on individual switch ports.	
4	**Quality of Service (QoS)**	
4.1	The switch supports Traffic prioritization (IEEE 802.1p) to allow real-time traffic classification into eight priority levels mapped to eight queues.	
4.2	The switch supports up to eight egress/ingress queues per port and strict priority queuing so that the highest priority packets are serviced ahead of all other traffic.	

4.3	The switch supports ACL Flow-based rate limiting / rate limiting and minimum up to 8 aggregate or individual policies per port.	
4.4	The switch supports rate limiting that is provided based on source and destination IP, Layer 4 TCP/UDP information, or any combination of these fields, using QoS ACLs (IP ACLs) etc.	
4.5	The switch supports Class of Service (CoS) to sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ.	
4.6	The switch supports Priority Queue Management using Weighted Round Robin (WRR) or Weighted Deficit Round Robin (WDRR) or Deficit Weighted Round Robin (DWRR) or Shaped Round Robin (SRR) or ip-precedence.	
5	**SWITCH STACKINGS**	
5.1	The switch supports Switch and Operating System Software that offers true stacking, with all switches in a stack acting as a single switch unit.	
5.2	The switch supports a stack that provides a unified data plane, unified configuration, and single IP address for switch management.	
5.3	The switch supports close loop stacking with a minimum throughput of 40 Gbps or more.	
5.4	The switch supports a minimum stacking density of 8 switches.	
5.5	The switch supports true stacking that should offer higher availability through simplified management as well as cross-stack features including Ether Channel/LACP or SPAN.	
5.6	The switch supports Real-time state synchronization across the stack, Automatic failover from master to standby stack switch.	
5.7	The switch should have stacking modules/ports if any, cables accessories and any required hardware or software with switch from day 1.	
7.	**OPERATIONAL SIMPLICITY**	
7.1	The switch supports auto negotiation on all ports automatically selecting half- or full-duplex transmission mode to optimize bandwidth.	
7.2	The switch supports Link Aggregation Control Protocol (LACP) allowing the creation of Ethernet channelling with devices that conform to IEEE 802.3ad.	
7.3	The switch supports automatic media-dependent interface crossover (MDIX) that automatically adjusts transmit and receive pairs if an incorrect cable type (crossover or straight-through) is installed.	
7.4	The switch supports Unidirectional Link Detection Protocol (UDLD)	
7.5	The switch supports Proxy Address Resolution Protocol (ARP)	
7.6	The switch supports per-port broadcast, multicast, and unicast storm control, preventing faulty end stations from degrading overall systems performance.	
7.7	The switch supports Remote Switch Port Analyser (RSPAN) OR Encapsulated Remote Switch Port Analyser (ERSPAN) or Mirroring that allows administrators to remotely monitor ports in a Layer 2 switch network from any other switch in the same network.	
7.8	The switch supports Network Timing Protocol (NTP) that provides an accurate and consistent timestamp to all intranet switches.	
7.9	The switch supports SNMPv1, v2, and v3	
7.10	The switch supports LLDP, LLDP-MED	
7.11	The switch supports syslog server, Embedded Secure Web, Secure FTP, TFTP, Embedded Web, Management, Industry-standard Command Line Interface (CLI). SSHv2.	
7.12	The switch should allow assignment of descriptive names to ports.	

7.13	The switch should have 1 dual-personality RJ-45 or USB micro serial console port.	
8	**SOFTWARE-DEFINED NETWORK**	
8.1	The switch supports OpenFlow or equivalent technologies or REST	
8.2	The switch should support Netconf/Restconf/REST API and Telemetry from day 1.	
9.	**REGULATORY COMPLIANCE / CERTIFICATIONS**	
9.1	Safety Certifications:	
	· IEC 60950-1 · UL 60950-1 · EN 60950-1 · FCC Part 15 or 15B (CFR47) Class A · CISPR 32 Class A	
9.2	The switch complies with Environmental Regulatory standards RoHS.	
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	All relevant licenses for all the above features and scale should be quoted along with switch	
10.4	5 years OEM onsite warranty and support. OEM should provide 24X7X4 support	
10.5	Network switch model should have not been declared as End of Sale. The switching solution for this bid/tender/RFP should be from single OEM including distribution switch, optics and other required accessories.	
11	**Multi-Mode 10G SFP+ module Technical Specifications**	
11.1	SFP should support Multi Mode with 10Gig Data rate	
11.2	SFP should support maximum distance of 400M using OM4 Fibre	
11.3	SFP should support wavelength of 850nm	
11.4	SFP should be from the switching OEM only	

8.17 Annexure 17: Technical Bill of Material (BoM)

8.17.1 Hardware Bill of Material

Component		Description	
Data Centre Hardware (DC)			
Production Hardware	**Quantity**	**Make & Model**	**Specification**
Compute			
Storage			
SAN Switch			
TOR Switch			
Out of the band switch			
Cabling			
Disaster Recovery Environment (DRC)			
Compute			
Storage			
SAN Switch			
TOR Switch			
Out of the band switch			
Cabling			

8.17.2 Software Bill of Material

Component		Description	
Production Environment			
For Data Centre (DC)			
Software (License)	**Quantity**	**Make & Model**	**Specification**
Hypervisor Platform			
Software Defined Storage			
Software Defined Network and Security			
Platform Management			
DR Automation			
Advanced Infra Monitoring			
Backup Management			
Disaster Recovery Environment (DRC)			
Hypervisor Platform			
Software Defined Storage			
Software Defined Network and Security			
Platform Management			
DR Automation			
Advanced Infra Monitoring			
Backup Management			

8.17.3 Infrastructure & Communication Bill of Material

Component		Description	
For Data Centre (DC)			
Component	**Quantity**	**Make & Model**	**Specification**
Compute			
Storage			
SAN Switch			
TOR Switch			
Out of the band switch			
Disaster Recovery Environment (DRC)			
Compute			
Storage			
SAN Switch			
TOR Switch			
Out of the band switch			

8.17.4 Operating System & Peripheral Bill of Material

Component		Description	
Production License for OS, Middleware, Application server software & other tool			
For Data Centre (DC)			
Component	**Quantity**	**Make & Model**	**Specification**
Hypervisor Platform			
Software Defined Storage			
Software Defined Network and Security			
Platform Management			
DR Automation			
Advanced Infra Monitoring			
Cabling Splicing			
Disaster Recovery Environment (DRC)			
Hypervisor Platform			
Software Defined Storage			
Software Defined Network and Security			
Platform Management			
DR Automation			
Advanced Infra Monitoring			
Cabling Splicing			