PUNJAB & SIND BANK

Request for Proposal (RFP)
For
Delivery, Implementation and Management of on-premises Private Cloud Infrastructure

BID NO: PSB/HOIT/RFP/GEM___/2025-26 dated 01.08.2025

Head Office IT Department
2nd Floor,
Plot No. 151, Sector 44
Institutional Area, Gurugram -122003

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Key Information

Particulars	Details
RFP Number and Date	**PSB/HOIT/RFP/GEM___/2025-26 dated 01.08.2025**
Tender Title	Request for Proposal (RFP) For Delivery, implementation and Management of on-premises Private Cloud Infrastructure
Tender document / Participation Fee (Non Refundable)*	Rs. 10,000 + 18% GST (Non-refundable) should be submitted online only in favour of Punjab & Sind Bank before last date of bid submission in the following account: IFSC Code: PSIB0009004 Bank: Punjab & Sind Bank, Account No. 90045040070003 (14 digits) Punjab and Sind Bank IT (GST No. 06AAACP1206G2Z0) Proof of NEFT to be submitted at the time of physical bid submission.
Bid validity	180 days from the date of opening of the bid.
Performance Bank Guarantee	5% of total project cost.
Date of Publishing the tender on Bank's Website & GeM	**01.08.2025**
Last Date for submission of Pre-Bid Query	**07.08.2025** a) Pre bid queries should be submitted as per **Appendix-C** in MS- excel format. b) Queries must be mailed to hoit.tenders@psb.co.in only quoting tender reference number in the subject. Subject of the email should be given as "**Pre-Bid Queries for PSB/HOIT/RFP/GEM__/2025-26 dated 01/08/2025". Queries reaching afterwards will not be entertained.**
Date and Time for Pre-Bid Meeting	**08.08.2025 12:00 PM** Pre-Bid meeting will be held Online, and participants are requested to attend the meeting Online. Those who are interested in participating the Prebid meeting should share the participant details to hoit.tenders@psb.co.in Upon perusal of the same, the link / meeting id will be shared to the participant to participate in the virtual meeting.
Last Date and Time for submission of Bids	**22.08.2025 07:00 PM (For Online GeM Bid)** **(25.08.2025 04:00 PM for Offline copy of Bid)**
Date and Time of Opening of Bids	**25.08.2025 04:30 PM**

Date and Time of online Commercial Bids	To be notified later to the qualifying bidders only.
Place of Opening of Bids	Online at GeM (link will be shared) and Punjab & Sind Bank Head Office: HO IT, 2nd Floor, Plot No. 151, Sector 44, Institutional Area, Gurugram -122003.
Contact Persons for any clarifications/ Submission of Bids	Mr. Ankur - Chief Manager (IT) Mr. Pravin Karande - AGM (IT)
Contact Numbers	91-9717961264, +91-7709530444 hoit.tenders@psb.co.in
Other Details	1. Subsequent changes made based on the suggestions and clarifications as per pre-bid meeting shall be deemed to be part of the RFP document and shall be shared with all the bidders. 2. No suggestions or queries shall be entertained after pre-bid meeting. 3. This document can be downloaded from following website: https://punjabandsindbank.co.in/module/tender-list; and GeM portal (https://gem.gov.in/). Any Amendments, Modifications, Pre-Bid Replies, Clarifications & any communication etc. will be uploaded on the Bank's website (i.e. https://punjabandsindbank.co.in/module/tender-list & GeM Portal. No individual communication will be sent to the individual bidders.
EMD (Bid Security)	Rs. 2.50 Crore (INR Two Crore and Twenty-Five Lakh Only)

Please note:

1. The mode of submission of Bid document shall mandatorily be in both Online (GeM portal) and Offline.

2. The above mentioned dates are tentative dates and the Bidder acknowledges that they cannot hold the Bank responsible for any revision in these dates. The bids will be opened in the presence of bidders who choose to be present at the time of opening of bids.

3. If any of the above dates fall on holiday or become holiday due to regulatory or other reasons beyond control of the Bank, then the next valid date in such case will be next working of the Bank.

4. *Tender copy price is compulsory to participate in bid process. Bidders have to purchase tender document to participate in pre-bid meeting. Procurements for MSMEs will be as per the policy guidelines issued by Ministry of Micro, Small and Medium Enterprises (MSME), GOI from time to time.

5. Bidder has to deposit Tender Participation Fee online only.

6. Information for Participating through GeM:

   (i) This tender will follow e-Tendering guidelines of GeM portal under which the bidding process shall be conducted by the Bank. Bidder shall necessarily register on GeM portal for participating in the bidding. Vendors will have to abide by all terms and conditions of GeM portal for participating the bidding process.

Following activities will be conducted online through GeM:

    a.   Publish of Tender
    b.   Purchase of RFP document
    c.   Pre-Bid Query & response thereof
    d.   Corrigendum/Addendums to the RFP (If required)
    e.   Submission of Technical Bid & Commercial Bid by the Bidder
    f.   Opening of Technical Bid & Commercial Bid
    g.   Tender Evaluation
    h.   Announcement of results
    i.   Tender Award (If any)

(ii) Bidder requiring any clarification on the bidding document may notify as per GeM Guidelines and Procedure within the date/time mentioned in the RFP document.

(iii) Notification of amendments will be made available on the GeM/ Bank's website and will be binding on all bidders and no separate communication will be issued in this regard.

(iv) In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Bank, at its discretion, may extend the deadline for such reasonable period as decided by the Bank for submission of Bids.

(v) Bidders are requested to use a reliable internet connection (data cable/ broad band) to safeguard themselves. Bank is not responsible for telephone line glitch, internet response issues, hardware hangs etc., at bidder's end.

(vi) Vendors will have to abide by e-Business rules framed by the Bank in consultation with GeM portal.

(vii) Any amendments, modifications, Pre-Bid replies & any communication etc. shall be uploaded over Bank's Website and GeM Portal (i.e., https://punjabandsindbank.co.in/module/tender-list & https://gem.gov.in/) only. No individual communication will be sent to the individual bidder.

(viii) In case of any contradiction in eligibility criteria, business rules, terms & conditions or any information published over GeM portal, the RFP and consecutive corrigendum/addendum document will prevail.

7. Information on submission of bids participation in offline mode:

i) Bank expects the interested Bidders to download the copy of the complete RFP document along with all Annexures through Bank's website http://punjabandsindbank.co.in.

ii) Any other mode of submission, e.g. by courier, fax, e-mail etc. will not be accepted. Any bid received after the due date and time for receipts of bids as prescribed in the Key Information of the RFP will be rejected and returned unopened to the Bidder.

iii) The Bank expects the Bidder(s) to carefully examine all instructions, terms and conditions mentioned in this RFP document before submitting its unconditional compliance as part of the RFP. Failure to furnish all information required for submission of the RFP not substantially responsive to the RFP in every respect will be at the Bidders' risk and may result in the REJECTION of its response.

iv) A complete Bid with all supporting documents, duly sealed should be submitted, in person as well as electronically as mentioned in Bid Submission of this document, on or before the last Date and Time for bid submission at the Bank's address mentioned below:

The Assistant General Manager (IT)
Head office IT,
2nd Floor, Plot No. 151,
Sector 44, Institutional Area,
Gurugram -122003.
E-mail: hoit.tenders@psb.co.in

v) Kindly note that hard Copy of Technical Bid will be received/ accepted only after successful submission of Bid electronically.

INTRODUCTION

❖ Punjab & Sind Bank, a body corporate constituted under the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1980, one of the nationalized banks of India, has a national presence through a widespread network of 1610 branches and 28 Zonal Offices. With more than 116 years of customer services, the Bank has a large, satisfied clientele throughout the country. For enhancing customer convenience levels and overall inter-branch efficiency, the Bank has been a frontrunner in implementing various IT enabled products.

❖ The Bank intends to select vendor for delivery, installation, commissioning and maintenance of Bank's on-premises Private Cloud Infrastructure for 5 years post implementation of project.

   For this purpose, The Bank invites bids as per the specifications as indicated in Technical Specifications and Scope of work (Chapter-2) mentioned in the RFP document. These prices shall remain valid for all orders placed with the selected vendor for the entire contract period and duly accepted by the vendor. The interested bidders are requested to send your Technical and Price proposal as per the enclosed formats. The methodology for submission of the proposals is enumerated in Chapter-1 (Instruction to the bidders). Terms and Conditions of Contract (TCC) are given in Chapter-3.

❖ This request for proposal document ('RFP document' or RFP) has been prepared solely for the purpose of enabling Punjab and Sind Bank (hereinafter referred to as the 'BANK') to select a Vendor(s) / service provider for delivery, implementation and management of on-premises Private cloud infrastructure.

❖ This invitation of Bids is limited to vendor(s) having presence in India or their Authorized Representative in India, provided firms fulfill the minimum qualification criteria.

❖ The successful bidders would be selected, prices would be finalized through this RFP process and an agreement would be entered into with the successful bidder/s.

DISCLAIMER

➢ The information contained in this Request for Proposal (RFP document) or any information provided subsequently to Bidder(s) whether verbally or in documentary form by or on behalf of the Bank, 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. <u>This document shall not be transferred, reproduced or otherwise used for purposes other than for which it is specifically issued.</u>

➢ This RFP is neither an agreement nor an offer and is only an invitation by the Bank to the interested parties for submission of bids. No contractual obligation whatsoever shall arise from the RFP process until a formal contract is executed by the duly authorized signatory of the Bank and the Bidder. The purpose of this RFP is to provide the Bidder(s) with information to assist in 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 is free to check the accuracy, reliability, and completeness of the information in this RFP and obtain independent advice, wherever necessary. Bank may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP.

➢ The bank reserves the right to reject any or all Request for Proposals received in response to this RFP document at any stage without assigning any reason whatsoever. The decision of Punjab & Sind Bank shall be final, conclusive, and binding on all the parties.

➢ This RFP Document may not be appropriate for all persons, and it is not possible for the Bank Representatives, their employees, or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP Document.

➢ The Bank, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Applicant or Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form or arising in any way for participation in this bidding process.

CHAPTER 1 - INSTRUCTIONS TO BIDDERS

1.1 Cost of Tender
The tender document may also be downloaded from the Bank's official website **https://punjabandsindbank.co.in**. The bidder downloading the tender document from the website is required to submit a non-refundable fee **online** as mentioned in **Key-Information** in favor of **PUNJAB & SIND BANK**, (Bank a/c details given in Key Information) before the last date and time of submission of bid, failing which the bid of the concerned Bidder will be rejected. It may be noted that the amount will not be refunded to any prospective bidder under any circumstances including cancellation of RFP. The soft copy will also be available on Bank's Website and GeM Portal (i.e., https://punjabandsindbank.co.in/module/tender-list & https://gem.gov.in/) only.

1.2 Language of the Bid
The bid as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Bank shall be in English language only.

1.3 Bid Currency & Price Structure
Prices shall be expressed in the Indian Rupees only. The bidder must quote price exclusive of all applicable GST. The cost will not depend on any variation in the dollar exchange rate/change in tax structure.

1.4 Bid System Offer
a. The Bid Proposal being submitted would be binding on the Bidder. As such it is necessary that authorized personnel of the firm or organization sign the Bid. The designated personnel should be authorized by a senior official of the Organization having such authority to do so. The same person or a different person should be authorized who should have authority to quote. The Xerox copy of necessary Original Resolutions/ Authority/ Power of Attorney having authority to authorize the person to submit Bid Documents, on behalf of the Company shall be enclosed. The proposal must be accompanied with an undertaking letter duly signed by the designated personnel providing a Bid commitment. The letter should also indicate the complete name and designation of the designated personnel.

b. The bidder shall submit his response to the present tender with the price which will contain the pricing information.

c. Any effort by a Bidder to influence the Bank in evaluation of his bid, bid comparison or contract award decision would result in the rejection of the said bid. The Bank's decision in this case would be final and without prejudice and will be binding on all parties.

d. The Bank reserves the right to accept or not to accept any bid or to reject a particular bid at its sole discretion without assigning any reason whatsoever.

e. **Bid documents shall be submitted in a Single sealed envelope, proof of online payment towards document cost of RFP, EMD/Bid Security Declaration and other required documents as mentioned in the tender and a sealed envelope containing Price**, duly super-scribing the envelope with the reference of this RFP, due date, name of the Bidder with contact details, Offer reference number etc. Bid documents should be duly filed and all the pages of Bid including Brochures should be made in an organized, structured, and neat manner. Brochures / leaflets etc. should not be submitted in loose form. All the pages from the beginning of the submitted Bid Documents should be serially number numbered with the Bidder's seal duly affixed with the Signature of the Authorized Signatory on each page. Documentary proof, wherever required, in terms of the RFP shall be enclosed.

f. The Bids containing erasures or alterations will not be considered. There should be no handwritten material, corrections or alterations in the Bids. All details must be filled in.

1.5 Two Bid System:
This is two bid system which has following 2 parts:

Part A- Technical cum Eligibility Proposal: Indicating the response to the Pre-Qualification Criteria, Scope of Work and other terms & conditions. The format for submission of Technical Proposal is as per Appendix-A.

Part B-Commercial Bid: Furnishing all relevant information as required as per Bill of Material as per Annexure- IX. The format for submission of Commercial bid is as per Appendix-B.

1.6 Preparation of Bids:

Part A – Technical cum Eligibility Proposal

- Before submitting the bid, the bidders should ensure that they conform to the Pre-Qualification Criteria as stated in RFP. Only after satisfying themselves of the Pre-Qualification Criteria, the Offer should be submitted.

- Technical cum eligibility Proposal should be submitted as per the format in Appendix-A. Relevant technical details and documentation should be provided along with Technical Proposal.

- It is mandatory to provide the compliance to the scope required by the bank.

- The offer may not be evaluated and may be rejected by the Bank without any further reference in case of non-adherence to the format or partial submission of technical information as per the format given in the offer.

- The Bank shall not allow / permit changes in the technical/functional requirements once it is submitted.

- The relevant solution information, brand, and solution offered, printed product brochure, technical/functional specification sheets etc. should be submitted along with the Offer. Failure to submit this information along with the offer may result in disqualification.

- The Technical Proposal should be complete in all respects and contain all the information sought for. Masked Bill of Material must be attached in Technical Offer and should not contain any price information. The Part A - Technical cum Eligibility Proposal should be complete and should cover all products and services. Technical Proposal without masked Bill of Materials will be liable for rejection. Masked Bill of Material which is not as per instruction will make Bid liable for rejection. Masked bill of material should be a replica of actual Bill of Material except that it should not contain any price information (with Prices masked). It should not provide any price information like, unit price, tax percentage, tax amount etc.

Part B - Commercial Bid

- Commercial Bid should be submitted as per instruction in Appendix-B.

- Commercial Bid shall be submitted as per Bill of Material and other terms and conditions of RFP on prices. The Commercial Bid should give all relevant price information as per **Annexure-IX**. Any deviations from the Bill of Material / non submission of prices as per the format shall make the bid liable for rejection.
- The bidder must quote the best competitive price in the commercial bid.
- The bid must be made in an organized and structured manner.

*Note: All Claims made by the Bidder will have to be backed by documentary evidence. The bidder is expected to examine all instructions, forms, terms and specifications in the RFP. Failure to furnish all the information required or to submit a Bid not substantially responsive to the RFP in every respect will be at the Bidder's risk and may result in the rejection of the Bid.

1.7 Cost of Preparation

The Bidder shall bear all costs associated with the preparation and submission of its Bid and the Bank will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the Bidding process.

1.8 Normalization of Bids

The Bank 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 the Bank feels that any of the bids needs to be normalized and that such normalization has a bearing on the commercial bid; the Bank may at its discretion ask all the technically shortlisted Bidders to resubmit the technical and commercial bids once again for scrutiny. The Bank can repeat this normalization process at every stage of technical submission or till the Bank is 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 the Bank during this process. The Bidders, by submitting the response to this RFP, agree to the process and conditions of the normalization process.

1.9 Submission of Bid and communication

The Bank expects the bidders to carefully examine all instructions, terms and conditions mentioned in this RFP document before submitting its **unconditional compliance** as part of the RFP. Failure to furnish all information required or submission not substantially responsive to the RFP in every respect will be at the bidder's risk and may result in the rejection of Bids.

Bids duly sealed should be submitted, in person or through Courier Service at Bidder's Responsibility and in electronic form on GeM Portal ([https://gem.gov.in/)](https://gem.gov.in/), on or before the last Date and Time for bid submission at the address mentioned below. Any other mode of submission, e.g. by fax, e-mail etc. will not be accepted. No Claim of any Bidder(s) shall be entertained, whatsoever for delayed submission of their bid at any stage because of any reason. Therefore, Bidder (s) are advised to submit their bid well before the scheduled time.

The Assistant General Manager (IT)
Head office IT,
2nd Floor, Plot No. 151,

Sector 44, Institutional Area,
Gurugram -122003.
E-mail: hoit.tenders@psb.co.in
Phone: +91-9868456224; +91-9717961264

Online bid submission is mandatory. The hard copies of bids of only those bidders who submitted bid documents online will be accepted. The hard copies of documents submitted should be same as submitted online. Bids will be opened in the presence of the bidder representatives who choose to attend the opening of tender on the specified date, time and place of bid opening. No separate intimation will be given in this regard.

Bank reserves its right to cancel the order even after issuing the letter of Intent (LOI) / Purchase Order, if bank receives any directions / orders from Statutory Body / RBI/Govt. of India in a nature that binds the bank not to take the project forward or any reasons whatsoever. The decision of the Bank shall be final in this regard without disclosing any reason to any bidder or person.

1.10 Late bids

a) Any bid received after the due date and time for receipts of bids as prescribed in this RFP will be rejected. However, in case of the specified date of submission of bids being declared a holiday for the bank, the bids will be received up to the specified time on the next working day.

b) The bank may, at its discretion, extend this deadline for submission of bids by amending the bid documents, in which case all rights and obligations of the Bank and bidders, previously subject to the deadline, will thereafter be subject to the deadline extended.

c) All such information will be published on Bank's website only. The bidders have to take note of it.

1.11 Modifications and/ or Withdrawal of Bids

1. Bids once submitted will be treated as final and no modification will be permitted. No Correspondence in this regard will be entertained.

2. The Bid should contain no alterations, erasures or overwriting. The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of bid not substantially / conclusively responsive to the bidding documents in every respect will be at the Bidders risk and may result in rejection of the bid.

3. No bidder shall be allowed to withdraw the bid after the deadline for submission of bids.

4. In the case of the successful bidder, he will not be allowed to withdraw/back out from the bid commitments. The bid earnest money in such eventuality shall be forfeited and all interests/claims of such bidder shall be deemed as foreclosed

1.12 Earnest Money Deposit (EMD):

1. The bidder shall furnish Noninterest earning Earnest Money Deposit (EMD) amount of Rs. 2.50 Crore (INR Two Crore and Twenty-Five Lakh Only) as mentioned in the Bid Schedule by way of Bank Guarantee drawn on any Scheduled

Bank in India (except Cooperative Bank, RRB & Punjab & Sind Bank) in favor of Punjab & Sind Bank, payable at Delhi.

2. The same should be valid for an additional 45 days beyond bid validity period. Bank at its discretion can demand for extension for the validity of EMD. The format for submission of EMD in the form of Bank Guarantee is as per Appendix-D.

3. The Bank Guarantee issued by the issuing Bank on behalf of Bidder in favor of Bank shall be in paper form as well as issued under the "Structured Financial Messaging System" (SFMS) sent to Punjab & Sind Bank, Sector 44 Branch, Gurgaon, IFSC PSIB0021509. Any bank guarantee submitted in physical mode, including EMD/bid guarantee which cannot be verifiable through SFMS will be rejected summarily.

4. Non submission of EMD leads to rejection of Bid.

5. All MSEs having registration as per provisions of the Public Procurement Policy for Micro and Small Enterprises i.e. District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or directorate of Handicrafts and Handlooms or Udyog Aadhaar Memorandum or any other body specified by Ministry of MSME and Start-ups (recognized by DIPP) are exempted from submission of Tender Fee and EMD only. Relevant certificates should be submitted by the bidder in this regard to avail exemption. Bid Security Declaration should be submitted by eligible MSEs/Startups on Company's letter head with company seal and signature of the authorized person as per Annexure-III.

6. The EMD may be forfeited/ Bank Guarantee may be invoked:

   a) If the bidder withdraws/amends the bid during the period of bid validity (180 days from the date of opening of bid).
   b) If the bidder makes any statement or encloses any form which turns out to be false, incorrect and / or misleading at any time prior to signing of contract and/or conceals or suppresses material information; and / or
   c) The selected bidder withdraws his tender before furnishing the unconditional and irrevocable Performance Bank Guarantee.
   d) The bidder violates any of the provisions of the terms and conditions of this tender specification.
   e) In case of the successful bidder, if the bidder fails:
      - To sign the contract in the form and manner to the satisfaction of Punjab & Sind Bank.
      - To furnish Performance Bank Guarantee in the form and manner to the satisfaction of Punjab & Sind Bank.
      - Bank may proceed against the selected bidder in the event of any evasion, avoidance, refusal or delay on the part of bidder to sign and execute the Purchase Order / Service Level Agreements or any other documents, as may be required by the Bank, if the bid is accepted.
      - The Execution of Bid Security Declaration/ Invocation of EMD may suspend participation of the Bidder in any tender in this Bank for three (03) years.

7. Bid securities of the unsuccessful bidders will be returned to them at the earliest after

expiry of the final bid validity and latest on or before the 30th day after the award of the contract. The EMD of the selected bidder will be returned within 15 days after submission of Performance Security (PBG) and execution of Contract with the Bank.

1.13 Performance Bank Guarantee (PBG)

1. The successful bidder/s should submit a Security Deposit / Performance Guarantee as specified in Key Information within 30 days from the date of Purchase Order.
2. Security Deposit should be submitted by way of Bank Guarantee in favor of Punjab & Sind Bank payable at Delhi / Bank Guarantee may be obtained from any of the Scheduled Commercial Banks (except Cooperative Bank, RRB & Punjab & Sind Bank) for an amount of 5% of total project cost.
3. The Bank Guarantee issued by the issuing Bank on behalf of Bidder in favor of Punjab & Sind Bank shall be in paper form as well as issued under the "Structured Financial Messaging System" (SFMS) sent to Punjab & Sind Bank, Sector 44 Branch, Gurgaon, IFSC PSIB0021509. Any bank guarantee submitted in physical mode, including EMD/bid guarantee which cannot be verifiable through SFMS will be summarily rejected.
4. 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.
5. Security Deposit/Performance Bank Guarantee should be valid for 60 months with an additional 12 months as claim period.
6. The selected bidder shall be responsible for extending the validity date and claim period of the Bank guarantees as and when it is due, on account of incompletion of the project and contract period.
7. The security deposit / bank guarantee will be returned to the bidder after one year of completion of Contract Period. If the Contract is extended, the selected bidder has to submit fresh PBG for 5% of the extended Contract value and period along with claim period and also execute fresh/extension of Contract with the Bank within 15 days from the date of issuance of Purchase Order for renewal.
8. The Bank shall invoke the Bank guarantee before the expiry of validity, if work is not completed and the guarantee is not extended, or if the selected bidder fails to complete his obligations under the contract. The Bank shall notify the selected bidder in writing before invoking the Bank guarantee.
9. Bank shall invoke the performance guarantee in case the selected Bidder fails to discharge their contractual obligations during the period or Bank incurs any loss due to Bidder's negligence in carrying out the project implementation as per the agreed terms & conditions. It will be refunded to the selected bidder without interest, after he duly performs and completes the contract in all respects.

1.14 Contract Period:
The terms and conditions of purchase order and RFP (read with addendums/ Corrigendum/Clarifications) shall constitute a binding contract.

The contract period for the project is 5 years which is further extendable up to 2 years.

The bank may, at its sole discretion, extend the contract for a period of two durations of one year each or part thereof subject to satisfactory functioning of the successful bidder at the same terms and conditions and mutually agreed rates. The decision to further extend the contract with the same bidder shall be at the sole discretion of the Bank. Further, the Bank will have the right to renegotiate prices of AMC, ATS rates at the end of the contract period. The other Terms and Conditions of the Contract will remain the same for extended periods.

The Pre-Contract Integrity Pact Agreement submitted by the bidder during the Bid submission will automatically form a part of the Contract Agreement till the conclusion of the contract including extended period.

The performance of the selected bidder shall be reviewed every quarter, and the Bank reserves the right to terminate the contract at its sole discretion by giving 30 days prior notice. Any offer falling short of the contract validity period is liable for rejection.

1.15 Evaluation Process of the Bids

1.15.1 Preliminary Scrutiny

a. The Bank will examine the Bids to determine whether they are complete, required formats have been furnished, the documents have been properly signed, and the Bids are generally in order.

b. The Bank may, at its discretion, waive any minor infirmity, non-conformity, or irregularity in a Bid, which does not constitute a material deviation.

c. The Bank will determine the responsiveness of each Bid to the Bidding Document. For the purposes of these Clauses, a responsive Bid is one which conforms to all the terms and conditions of the Bidding Document without material deviations. Deviations from, or objections or reservations to critical provisions, such as those concerning Bid Security, Applicable Law, Bank Guarantee will be deemed to be a material deviation.

d. The Bank's determination of a Bid's responsiveness will be based on the contents of the Bid itself, without recourse to extrinsic evidence. The Bank reserves the right to evaluate the bids on technical and functional parameters, including possible visit to inspect live site/s of the Vendor and witness demos of the system and verify functionalities, response times, etc.

e. If a Bid is not responsive, it will be rejected by the Bank and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

f. If any information / data / particulars are found to be incorrect, bank will have the right to disqualify / blacklist the company and invoke the performance bank guarantee/ EMD.

A stage bid system is adopted for selection of the vendor:
- ▶ Stage 1 – Eligibility Bid evaluation
- ▶ Stage 2 - Evaluation methodology for eligible bidders
    - ▪ Technical Bid Evaluation
    - ▪ Commercial Bid Evaluation

During evaluation of the Tenders, the Bank, at its discretion, may ask the Vendor for clarification in respect of its tender. The request for clarification and the response shall be in writing, and no change in the substance of the tender shall be sought, offered, or permitted. The Bank reserves the right to accept or reject any tender in whole or in parts without assigning any reason thereof. The decision of the Bank shall be final and binding on all the vendors to this document and bank will not entertain any correspondence in this regard.

1.15.3   Evaluation Methodology for Eligible Bidder

The Technical Bids would be evaluated by the Technical Evaluation Committee based on the technical evaluation criteria and sub criteria.

Before proceeding for complete Technical Bid evaluation, Bank Committee will check for below mandatory compliance. The bids which comply on below criteria will be evaluated based on the technical evaluation criteria and sub criteria listed below:

Stage	Requirement	Max Score	Min Marks
Stage A	Compliance with Technical Requirements*	60	100%
Stage B	Bidder's proposal, capabilities and Demonstration Customer Feedback	40	80%

*=The technical specification (Mentioned in Annexure XII) has to be complied by each bidder if any of the "Mandatory (Y)" specification is not complied then the bid will be rejected.

1. When deemed necessary the Tender Evaluation Committee may seek clarifications on relevant aspects from the Bidder. However, that would not entitle the Bidder to change or cause any change.
2. The scoring methodology for Technical Bid components is explained in the following paragraphs.
3. Scores for the above individual parameters shall be added to determine the technical scores of the Bidders. The Bidder with the highest technical score shall be ranked as T1.

1.15.3.1   Scoring Methodology for Stage A:

1. The Bidder should provide a response to each of the requirements listed in Appendix. The response must specify whether the Solution proposed by the Bidder is compliant with the requirement or not. The compliance for each requirement should be marked as:
   ➢ Compliant Out-of-Box (Y)
   ➢ Non-Compliant (N)
2. The Bidder's response to the requirements stating how the Solution is compliant

shall be evaluated. The response has to be filled by the bidder against each compliance point i.e. 'Compliant Out-of-box'' or 'Non – Complaint'. If any response is not filled, it shall be considered as 'non-compliant'.

3. To validate the technical compliance points Bidder has to prepare LAB setup in India (preferable in NCR) in their environment with the devices / CI running in bank environment (details provided in RFP) which can demonstrated online/offline. Bank may ask for POC in bank environment. Bank will also validate the compliances during presentation of bidder.

4. The technical specification marked as "Mandatory (Y) " has to be complied by each bidder if any of the "Mandatory (Y)" specification is not complied then the bid will be rejected.

5. The technical requirements will be scored as below –

Functional Compliance	Evaluation	Score
Compliant as 'Yes' functionality	Evaluated as 'Out of Box' functionality of the Solution	1
Non-Compliance	Functionality is not available in the Solution	0

6. The Compliance Score A (based on response to technical requirements) is calculated as below:

$$A = \frac{No\ of\ compliant\ out\ of\ box}{Total\ Number\ of\ Technical\ Requirements} * 100$$

1.15.3.2   Scoring Methodology for Stage B:

1. Bidder's capabilities and Demonstration (B):

The Bidder is requested to host the evaluation of the POC and the product walk-through at the bidder own development centre /Lab. The bidder is expected to have all subject matter experts available to respond to queries promptly. Bank will be in contact with each bidder to finalise the dates of the evaluation and walk through.
The Bidder will have to demonstrate Integrated Proof of Concept (PoC) as part of technical evaluation based on the following method:

Sl. No.	Evaluation Criteria	Marks
B1	Provisioning and display of: A- **Compute (**VM with HA**), Load Balancer (**L4& L7**) & Storage (**SDS or SAN**)**	4
	B- **Software defined Firewall (Micro segmentation with zero trust security)**	4
	C- **Software Defined Network**	3
	D- **Container Platform**	3
	E-**Cloud Management Console (**Self-service infrastructure and application deployment,	6

	Performance optimization and capacity planning, real-time events Logging, Notification, Alarms, auditing capabilities, etc. through single web-based interface.) *Bank's evaluation committee will provide use cases on the spot (based on above Domains) to the bidder during POC to evaluate the capabilities of the bidder.		**(Total 20 Marks)**
B2	Customer Feedback		**10**
B3	Presentation by Bidder A- **Understanding of requirement** (Clarity on scope, existing Infra, deliverables and objectives) B- **Proposed Private Cloud Architecture** (Scalability, Security and High Availability) C- **Integration with existing setup** D- **Project Implementation Plan and Timelines** (Detailed deployment plan with key milestones) E- **Operations and Support Model** (Proposed SLA, L1,L2 & L3 support structure with escalation matrix)		**2** **2** **2** **2** **2** **(Total 10 Marks)**
	Total Marks (B1+B2+B3)		**40**

Please note, during POC there should not be any resource from OEM. Complete POC has to be demonstrated by Bidder only.

B2: Customer Feedback:
The Bidder will provide contact details of two customers, out of which one should be in Public Sector Bank where a proposed solution has been implemented. Bidders are required to submit only those client reference where list of technology stack implemented is similar to the proposed solution. PSB team will be contacting the Bidder's customer over phone / visit / email.

Hence, Bidder to obtain necessary approvals from their customers. The customer feedback would carry a weightage of 10 marks and would be evaluated on the
Following parameters:
•   Overall customer satisfaction.
•   Adherence to implementation timelines.
•   Post implementation services.

A Committee of officers and Executives of Bank would carry out Reference Site Visits and/or Telephonic discussions with the existing customers of the Bidder. The inputs that have been received from the Customer would be considered by Bank and this might not need any documentary evidence. This rating would be purely on the inputs provided by the Bidders customers.
The scoring would be relative among the bidders.

Bank at its discretion may reject the proposal of the Bidder without giving any reasons whatsoever, in case the responses received from the Site Visits are negative.

Technical Bid Evaluation Score $(St) = (Stage\ A) + (Stage\ B)$

To proceed to the next round, Bidders will need to score 100% score in Stage A and a minimum of 80% marks in stage B in the Technical Bid Evaluation.

1.15.2 Opening of Price Bids/ Reverse Auction

The bidder must quote the best competitive price in the indicative commercial bid. Please note the contents and comply with the requirements of the same. Bidders are requested to ensure that they have a valid digital certificate well in advance to participate in Reverse Auction event.

Only those bids which are found to be technically responsive will be informed of the date / time / venue of opening of price bids / reverse auction.
The Bids will be evaluated as per criteria mentioned in this RFP document. Thereafter the Bank reserves the right of selection of vendor by rates quoted by the vendors in reverse auction over GeM Portal (who are found eligible after evaluation of Bids).

Abnormal low bid prices/predatory pricing

An abnormally low bid is one in which the bid price, in combination with other elements of the bid, appears so low that it raises material concerns as to the capability of the bidder to perform the contract at the offered price. In such cases, the Bank shall be within its absolute right to seek written clarifications from the bidder/s, including detailed price analysis of the bid price in relation to the scope, schedule, allocation of risks and responsibilities, and any other requirements as the Bank may deem necessary.

If, after evaluating the price analysis, Bank determines that the bidder/s has/have substantially failed to demonstrate its capability to deliver the contract at the offered price, bank may at its sole discretion:
  a. reject / cancel the bid/proposal after giving 7 days' notice to the such bidder/s; and /or
  b. forfeit the bid security and/or invoke Bank Guarantee; and /or
  c. recover cost incurred/to be incurred by the bank for the delay in implementation including the penalty, if any, imposed by the Regulator/Government/Other authorities for non-compliance of Regulatory/ Government/Other authorities guidelines; and /or
  d. debar such bidder/s from future RFP processes/contracts for the period as deemed fit by the Bank; and/or
  e. circulate the list of such entities to member organization/s for circulation among members and/ or
  f. Circulate/publish the list of such entities, as deemed fit.

In the event of rejection/cancellation of any bid/s as above, the Bank shall also be within its absolute right at its sole discretion to award the contract to the next bidder/s in the ratio stated in the RFP.

1.15.3 Clarification of bids

To assist in the scrutiny, evaluation and comparison of offers/bids, The Bank may, at its sole discretion, ask some or all Bidders for clarification of their offer/bid. The request for such clarifications and the response will necessarily be in writing and no change in the price or substance of the bid shall be sought, offered or permitted. Any decision of the Bank in this

regard shall be final, conclusive and binding on the Bidder. The bidder has to respond to the bank and submit the relevant proof /supporting documents required against clarifications, if applicable, within the time frame stipulated by the Bank.

The bidder shall notify The Bank in writing of all subcontracts awarded under the contract if not already specified in his bid. Such notification, in his original bid or later, shall not relieve the bidder from any liability or obligation under the contract. The Bank reserves rights to accept such arrangement or reject the proposal outright. Proof of such contracts should be submitted to the Bank.

The Bank may, at its discretion, waive any minor non-conformity or any minor irregularity in the offer. Bank's decision with regard to 'minor non-conformity' is final and the waiver shall be binding on all the bidders and the Bank reserves the right for such waivers.

1.15.4 Commercial Evaluation & Online Reverse Auction:

- **The Commercial bidding will be carried out through Online Reverse Auction over GEM portal.**
    1. The Indicative commercial bids of only the technically qualified bidders will be opened.
    2. In the Indicative commercial bids (In Annexure - IX). Prices shall be expressed in Indian Rupees only. The bidder must quote prices exclusive of all applicable taxes / GST and duties. The cost will not depend on any variation in dollar exchange rate/change in tax structure.
    3. The bidder must quote the best competitive price in the indicative commercial bid.

1.15.5 Reverse Auction

The indicative prices are to fix the start price for on-line Reverse Auction. The shortlisted Service Providers shall be intimated the date and time for participating in the On-Line Reverse Auction. Bidder should be agreeable to accept the offer at the price quoted in Reverse Auction, in case bidder is identified selected as L1 Bidder. Contract will be awarded to L1.

Reverse Auction would be conducted amongst all the technically qualified bidders except the highest quoting bidder (H-1). The technically qualified Highest Quoting bidder will not be allowed to participate in RA. However, H-1 will be allowed to participate in RA in following cases:
    1. If number of technically qualified bidders are only 2 or 3.
    2. If L-1 is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE L-1.
    3. If L-1 is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII L-1.

1.15.6 Address for Submission of Bid and communication

Offers should be addressed to the following office at the address given below:

**Head Office IT,
2nd Floor, Plot No. 151,
Sector 44, Institutional Area,
Gurugram -122003
Phone: +91-; +91-9717961264**

- No vendor shall involve himself /itself or any of his /its representatives in any price manipulation directly or indirectly with other bidders. If any such practice comes to the notice, Bank shall disqualify the vendor /bidders concerned from the e-Procurement process.

- Bidder shall not disclose details of his bids or any other details concerning Reverse Auction process of the Bank to any other third party without specific permission in writing from the Bank.

- Neither Bank nor service provider / auctioneer can be held responsible for consequential damages such as no power supply, system problem, inability to use the system, loss of electronic information, power interruptions, UPS failure, etc. at vendors' place. (Bank shall, however, entertain any such issues of interruptions, problems with open mind and fair degree of transparency in the process before deciding to stop or extend the auction.)

1.15 No commitment to accept lowest or any bid

The Bank shall be under no obligation to accept the lowest or any other offer received in response to this tender notice and shall be entitled to reject any or all offers including those received late or incomplete.

The bank reserves the right to make changes in the terms and conditions of purchase. Bank will be under no obligation to have discussions with any bidder, and/or entertain any representation.

1.16 Right To Accept Any Bid and To Reject Any OR All Bids/Cancellation of Tender process

PUNJAB & SIND BANK reserves the right to accept or reject in part or full any or all offers without assigning any reason thereof even after issuance of letter of Intent. Any decision of Punjab & Sind Bank in this regard shall be final, conclusive and binding upon the bidders. The Bank reserves the right to accept or reject any Bid in part or in full, and to annul the Bidding process and reject all Bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for Bank's action. During any stage of evaluation process, if it is found that the bidder does not meet the eligibility criteria or has submitted false /incorrect information the bid will be summarily rejected by the Bank and no further correspondence would be entertained in this regard. Bank further reserves the right to amend, rescind, reissue or cancel this RFP and all amendments will be advised to the Bidder and such amendments will be binding upon them. The Bank also reserves its right to accept, reject or cancel any or all responses to this RFP without assigning any reason whatsoever. Further please note that the bank would be under no obligation to acquire any or all the items proposed. No contractual obligation whatsoever shall arise from the RFP process unless and until a formal contract is signed and executed by duly authorized officials of Punjab & Sind Bank and the bidder.

1.17 Correction of Errors

Bidders are advised to exercise greatest care in entering the pricing figures. No corrigendum or requests for prices to be corrected will be entertained after the bids are

opened. If there are any corrections in the bid document, the authorized signatory should initial them all, failing which the figures for such item shall not be considered. Discrepancies in bids will be corrected as follows:

- Where there is a discrepancy between the amounts in figures and in words, the amount in words shall prevail.
- If there is a discrepancy between percentage and amount, the amount calculated as per the stipulated percentage basis shall prevail
- 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 Bank, there is an obvious error such as a misplacement of a decimal point, in which case the line-item total will prevail.
- 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 totaling the line items in the Bill of Materials will prevail.
- 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.
- In case the bidder does not accept the correction of the errors as stated above, the bid shall be rejected.
- The Highest Technical bidder shall not automatically qualify for becoming selected bidder and for award of contract by the bank.
- The Lowest Commercial Bidder shall not automatically qualify for becoming selected Bidder and for award of contract by the Bank.
- 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. Bank will make similar treatment for 4th or subsequent decimal point to finally arrive at two decimal points only.
- If for some reason, negotiations with the successful bidder fail to result in an agreement within a specified timeline, the Bank reserves the right to award the contract to the next most eligible bidder based on the evaluation.
- The Bank shall not incur any liability to the affected Bidder on account of such rejection.

Based on the Bank's requirements as listed in this document, the bidder should identify and offer the best-suited solution / bill of material for the product that would meet the Bank's requirements and quote for the same.

During Tender process, if any event of conflict arise between the content of the Annexures submitted by bidders and the main body of RFP, then the content of main RFP shall prevail/ applicable.

1.18 Soft copy of tender document
The soft copy of the tender document will be made available on the Bank's website (https://punjabandsindbank.co.in/) and GeM Portal (https://gem.gov.in/). However, the Bank shall not be held responsible in any way, for any errors / omissions /mistakes in the downloaded copy.

The bidder is advised to check the contents of the downloaded copy for correctness against the printed copy of the tender document. The printed copy of the tender document shall be treated as correct and final, in case of any errors in the soft copy.

1.19 Bid validity period

Bids shall remain valid for 180 (One Hundred Eighty) days from the date of submission of Bid. The Bank holds the right to reject a bid valid for a period shorter than 180 days as non-responsive, without any correspondence. In exceptional circumstances, The Bank may solicit the Bidder's consent to an extension of the validity period. The request and the response thereto shall be made in writing. The extension of validity period by the Bidder should be unconditional and irrevocable. The Bid Security provided shall also be suitably extended.

A Bidder acceding to the request will neither be required nor be permitted to modify its bid. A Bidder may refuse the request without forfeiting its bid security. In any case the bid security of the Bidders will be returned after completion of the process.

1.20 Pre-bid meeting

For clarification of doubts of the bidders on issues related to this RFP, the Bank intends to hold a Pre-Bid Meeting on the date and time as indicated in the RFP in **Key-Information**.

For any clarification with respect to this RFP, the bidder may send an email to hoit.tenders@psb.co.in by last date of submission of queries as defined in **Key-Information** in this document**.** No queries will be entertained from the bidders after the above date and time.

If the meeting date is declared as a holiday under NI Act by the Government after issuance of RFP, the next working day will be deemed to be the pre-bid meeting day.

The format to be used for seeking clarification is mentioned in **Appendix-C (Pre-bid Query Format).** It may be noted that all queries, clarifications, questions etc., relating to this RFP, technical or otherwise, must be in writing only and should be sent to the email-id as stated earlier. No oral or individual consultation will be entertained.

The bank has the discretion to consider any other queries raised by the bidder's representative during the pre-bid meeting.

Only two authorized representatives of the bidders who have purchased the RFP will be allowed to attend the meeting.

The Bank will consolidate all the written queries and any further queries during the pre-bid meeting and the replies for the queries shall be made available to all the bidders. The clarification of the Bank in response to the queries raised by the bidder/s, and any other clarification/amendments/corrigendum furnished thereof will become part and parcel of the RFP and it will be binding on the bidders.

Non reply to any of the queries raised by the vendors during pre-bid Meeting shall not be considered as acceptance of the query/issue by the Bank.

1.21 Amendment to RFP Contents

At any time prior to the last date for bid-submission, the Bank may, for any reason, whether at its own initiative or in response to clarification(s) requested by a prospective bidder, modify the RFP contents by amendment. The amendment will be published on Bank's website & GeM Portal and will be binding on bidders. However, it is the bidder's responsibility to keep its communication channels (face-to-face, phone, fax, e-mail etc.)

alive including observing Bank's website for latest development in this regard. The Bank will not be liable for any communication gap. To provide prospective bidders, reasonable time to take the amendment into account for preparation of their bid, the Bank may, at its discretion, extend the last date for bid-submission.

The bank reserves the right to scrap the tender at any stage without assigning any reason.

1.22 Disqualification

Any form of canvassing/ lobbying/ influence/ query regarding short listing, status etc. will result in disqualification.

1.23 Fixed Price

The prices quoted in the tender response will be fixed for the period of the contract. The price should be exclusive of all taxes and levies which will be paid by the Bank at actual.

1.24 Project Execution

The entire project needs to be completed expeditiously. The Bank and the selected bidder/s shall nominate a Project Manager immediately on acceptance of the order, who shall be the single point of contact for the project. However, for escalation purpose, details of other persons shall also be given. The project manager nominated by the bidder/s should have prior experience in implementing a similar project.

1.25 Confidentiality of the Bid Document

The Bidder, irrespective of his/her participation in the bidding process, shall treat the details of the documents as secret and confidential.

1.26 Eligibility Criteria

Eligibility criteria to be met mandatorily by the bidders:

Sr.	ELIGIBILITY CRITERIA	SUPPORTING DOCUMENTS TO BE SUBMITTED
1.	Proof of Earnest Money Deposit	To be submitted along with the bid.
2.	The Bidder should be a partnership firm registered under LLP Act, 2008/Indian Partnership Act, 1932 or Company in India as per Indian Companies Act, 1956 or Indian Companies Act, 2013 and should have been in operation for last 5 years as on RFP date.	Copy of the certificate of incorporation issued by The Registrar of Companies.
3.	The bidder should have valid PAN and GST Registration in India	Copy of Valid PAN Card, GST Registration Certificates issued by competent authority in India
4.	The bidder should have a minimum turnover of INR 300 Crore per annum for each of the past 3 financial years (i.e. 2022-23, 2023-24 & 2024-25).	Provide CA Certificate mentioning the turnover and net worth for each financial year. and Audited Financial statements (Balance sheet & Profit & Loss statement).

Sr.	ELIGIBILITY CRITERIA	SUPPORTING DOCUMENTS TO BE SUBMITTED
	The bidder should have positive Net Worth as on 31/03/2025. The Bidder should be profitable organization on the basis of profit before tax (PBT) for at least 02 (two) out of last 03 (three) financial years.	The CA certificate provided in this regard should be without any riders or qualification.
5.	The bidder should be an authorized representative/partner of OEM in India. Bidder needs to provide Manufacturer Authorization Form (MAF) from OEM stating that bidder is authorized partner of OEM and authorized to participate in this tender and in case the bidder is not able to perform obligations as per contract during the contract period, OEM will provide contracted services within the stipulated time.	MAF from OEM as per Annexure-VI on their letter Head needs to be provided. (Name, designation, contact no & official mail ID of the signing authority must be clearly mentioned in the MAF.)
6.	Bidder should have implemented and managing (end to end) at least two private Cloud setup using sophisticated tools and techniques in any scheduled commercial Bank/BFSI/Govt Organization (out of 2 projects, at least 1 project should be in Public Sector Bank) in India in the last 5 Years. The private cloud experience should be in same tool/hypervisor which is proposed by Bidder in this RFP's response. The minimum Work Order value should be of amount INR 60 Crore.	Copy of Purchase Order/Copy of Work Order and signoff from user organization mentioning successful implementation / migration of the solution. Contact details of client along with Email, Name and Contact Details.
7.	The bidder must possess below certifications, at the time of bidding: • ISO 27001 • ISO 9001	Copy of valid certificates
8.	Bidder must have supplied at least 20 servers, 200TB SAN Storage, 1 Enterprise Backup Solution, 5 Red hat (RHEL) Subscription and 100TB Object storage in past 3 years to any Govt./PSU organization.	Copy of Purchase Order
9.	Bidder must have at least 250 technical manpower on their payroll, out of which at least 50 resources with experience in the proposed tools/solution as on the date of submission of the bid.	Declaration from HR head on company letterhead, countersigned by authorized signatory of the bidder.

Sr.	ELIGIBILITY CRITERIA	SUPPORTING DOCUMENTS TO BE SUBMITTED
10.	The proposed OEM solution (private cloud) should be implemented in at least two Scheduled Commercial Banks (out of which at least 1 in Public Sector Bank) in India in last 5 years. Solution implemented should be live and running successfully as on date of RFP with minimum 50 nodes.	Credential letter/mail confirmation from the client OR Copy of Purchase Order/ SLA along with latest as on date of RFP and other supporting documents
11.	In case bidder is already having association with Punjab & Sind Bank as a service provider in any project. The Bidder should have good track record with Bank.	Bidder should submit satisfactory certificate from bank w.r.t timely delivery of project, support quality and technical expertise of manpower deployed. The certificate should be obtained from Bank post published date of the RFP.
12.	The Bidder to provide information that none of its subsidiary or associate or holding company or companies having common director/s or companies in the same group of promoters/management or partnership firms/LLPs having common partners is not owned by any Director or Employee of the Bank.	Undertaking to be submitted duly signed by the authorised signatory of the Bidder.
13.	The bidder has to provide confirmation that any of its subsidiary or associate or holding company or companies having common director/s or companies in the same group of promoters/management or partnership firms/LLPs having common partners has not participated in the bid process.	Letter of confirmation (self-certified letter signed by authorized official of the bidder).
14.	Bidders should not be under debarment/blacklist period for breach of contract/fraud/corrupt practices by any Scheduled Commercial Bank/ Public Sector Undertaking / State or Central Government or their agencies/ departments on the date of submission of bid for this RFP and also certify that they have not been disqualified / debarred / terminated on account of poor or unsatisfactory performance and/or blacklisted by any Scheduled Commercial Bank / Public Sector Undertaking / State or Central Government or their Agencies / Departments at any time, during the last 3 years. (Refer GOI Cir. No F.1/20/2018-PPD dated 02.11.2021)	To be provided as per Annexure-XI.
15.	The bidder should not be involved in any litigation which threatens solvency of company.	Certificate is to be provided by the chartered accountant /statutory auditor, as per Annexure-X.

Sr.	ELIGIBILITY CRITERIA	SUPPORTING DOCUMENTS TO BE SUBMITTED
16.	If the bidder is an authorized partner/System Integrator of the solution, its OEM should have been in existence for a minimum period of 10 years in India as on 31.03.2025.	Certificate of Incorporation / Supporting document from OEM.
17.	The bidder/OEM should not be from a country which shares a land border with India unless the bidder/OEM is registered with the Competent Authority (as detailed in Office Memorandum-F.No.6/18/2019-PPD of Dept. of Expenditure, Ministry of Finance). bidder/OEM from a country which shares a land border with India means: a. An entity incorporated, established or registered in such a country; or b. A subsidiary of an entity incorporated, established or registered in such a country; or c. An entity substantially controlled through entities incorporated, established or registered in such a country; or d. An entity whose beneficial owner is situated in such a country; or e. An Indian (or other) agent of such an entity; or f. a natural person who is a citizen of such a country; or g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.	A declaration stating "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 CSP fulfil all the requirements in this regard and are eligible to participate in this RFP" to be submitted in Company's letter head.
18.	Bidder should have direct support offices in Delhi/NCR and Mumbai. In case direct support office of the bidder is not present in Delhi/NCR then an undertaking to be provided by the Bidder stating that direct support would be provided by the bidder at Delhi/NCR whenever desired by the Bank.	Letter of confirmation duly signed by the authorised signatory of the Bidder.
19.	Labour Law Compliance	Undertaking to be submitted duly signed by the authorised signatory of the Bidder.
20.	Integrity Pact	Undertaking to be provided as per Appendix-F duly signed by the authorised signatory of the Bidder.
21.	Non-Disclosure Agreement	To be submitted as per Annexure-VII duly signed by the authorised signatory of the Bidder.

Documentary evidence must be furnished against each of the above criteria along with an index. All documents must be signed by the authorized signatory of the Bidder. Relevant portions in the documents submitted in pursuance of eligibility criteria, should be highlighted.

Broad Scope:

Bank proposes to appoint a Solution Integrator (henceforth referred as Bidder) to supply, implement and manage bank's on-premises Private Cloud Infrastructure including but not limited to compute, storage, network, security etc. with the ability to scale up as per the workload requirements as and when required during contract period.

General Scope of Work:

1. The Bidder shall be responsible for design and provisioning of required IT infrastructure, underlying system software and cloud services for deploying and hosting various applications of Bank including DC-DR site. The Bidder will examine Bank's application landscape that needs to be hosted on private cloud infrastructure. This activity will enable the Bidder to gauge the Application workloads criticality, complexity and the network connectivity required. The solution should be capable of enabling automatic Scale in and Scale out, should be agnostic to underlying hardware, storage, network, and operating system and shall allow Bank to add/reduce cloud resources on demand basis through a user-friendly dashboard. The solution needs to provide the ability for IT Administrators to automatically provision the services via a Web Portal.

2. Bidder has to provide Infrastructure along with the following (but not limited to):

   ✓ Server Virtualization Hypervisor
   ✓ Servers
   ✓ SAN Switches
   ✓ Object Storage
   ✓ Private Cloud Management & Orchestration
   ✓ Private cloud platform network monitoring
   ✓ Virtual Load Balancer (L4 & L7)
   ✓ Software Defined Network
   ✓ Software defined firewall with micro-segmentation, advanced threat prevention and zero trust security
   ✓ DC-DR Replication Software
   ✓ Container Platform
   ✓ Operating System
      o Windows (datacenter editions) Licenses: 100 % of the HW resource (total core) used (Out of these licenses 10% of licenses with software assurance support & will be used for critical VMs)
      o RHEL Subscriptions Licenses: (100 % of the HW resource (total core) (out of these licenses 100% of licenses with premium support at DC site and with standard support at DR site).

      [Note- In the event of OS installation on the VMs created in private cloud environment the OS requirement is factored as follows for initial use. Bank

will place the additional licenses requirement on basis of the price quoted during the contract period]

- ✓ Backup solution for Private Cloud Infrastructure with backup and recovery.
- ✓ Tape Library
- ✓ Onsite Manpower Support
- ✓ Upgrade of the existing VMware-based infrastructure (8 node each at DC and DR site, 2*26 CPU Core per node), including hypervisor, licenses alignment, hardware AMC (wherever applicable) and integration of this legacy and new environment under a single management and orchestration layer with all capabilities of new proposed private cloud platform. The current infrastructure comprises approximately 600 virtual machines across DC and DR.
- ✓ End to end support for the private cloud platform (OS, DB, Virtualization, Hardware, Software, Network, Firewall, Storage, Containers, middleware, Backup etc.) including existing platform (with upgrade).
- ✓ Existing SAN Storage upgrade / New SAN Storage
  - o **Option A**: Bank has existing Dell EMC Powerstore 1000T (Service Tag: 8ZZ8MX2 and 8ZZ7MX2) and Powerstore 500T (Service Tag: GKZY983 and HKZY983) which needs to be upgraded with additional 100TB each (usable without deduplication and compression) storage at each DC and DR site along with renewal of support services for 5 years from OEM. Bidder has to install and configure both storages (Powerstore 1000T) and to be formatted for reuse in private cloud project and will be managed by Bidder for complete project duration contract.
    Or
  - o **Option B**: New SAN Storage of 300TB (usable without deduplication and compression) at each DC and DR site, along with migration of existing Virtual machines to new storage.

- ✓ Migration of existing servers to Private cloud platform (P2V and V2V).

3. The Quantity mentioned in the RFP is indicative only. Bank at its discretion may increase or decrease the no. of estimated quantity at the time of placing order. The line items may change as per Bank discretion.

4. Faulty drives/media will not be returned to bidder/OEM/Vendor or any stakeholder in any case. The bidder/OEM should include the required services for the same with the proposal.

5. The proposed Solution shall have unified management and dashboard for provisioning, automation and orchestration of resources. The proposed solution shall be based on Software defined Network and Controller based SAN Storage with No Single Point of failure architecture. There shall be dedicated clusters for MZ, DMZ & Management nodes (if any). The proposed Solution must support Virtualized and Containerized workloads.

6. Bidder has to implement all features (as per need of the Bank) available in the solution. And also provide dashboards for the same.

7. Bank expects that the proposed solution architecture should be optimized in terms of cooling, power, and space (preferably 3/4 no. of racks each side) requirements.

8. The private cloud architecture should be capable of implementing diverse applications like web, applications, databases, big data solution etc. with adequate provision of virtualization and application-level isolation.

9. The solution should be architected to run from primary data centre. In the event of a data centre failure, there should be provision to shift traffic to the DR site. The RPO during disaster recovery shall be <=15 Minutes and RTO shall be <=1 Hour. The Bidder shall provide a comprehensive BCP-DR plan. The Bidder should prepare and submit a detailed implementation plan with mapping of infrastructure at DC site and DR site. The proposed infrastructure at DR site will be replica (except UAT environment) of infrastructure at primary data center. The bidder is required to provide all assistance to bank official for successfully conducting the DR Drills as per bank's IT & BCP policy at least 4 times in a year (but not limited to).

10. The proposed solution should integrate the current SOC and Network infra of Bank and be guided with current security framework and tools (specifically SIEM, HIPS, PIM, DAM, WAF, ITSM etc) and future security tools. It is envisaged that Private cloud will be accessed through Bank Intranet as well as over internet by Bank users and external entities. Bank Private Cloud infrastructure will also have direct/API connectivity to other trusted organizations.

11. The Bidder shall integrate the private cloud platform with Bank's monitoring tools for measuring the service levels, performance and utilization of servers, storage etc. for generating periodic reports on utilization of resources as per SLA.

12. Bidders should build a self-resilient architecture, especially management layer should be in High Availability that requires minimal monitoring and support.

13. Bidders should adopt suitable automation tools so as to optimize the number of resources deployed on site. The Bidder should provide adequate support for Cloud Infrastructure Management both at Primary Data Centre and DR site to meet the stipulated SLA. Bidder should have back-to-back support to ensure speedy turnaround time in case of system failure.

14. The Bidder should quote all the latest versions of products, software, hardware's etc. The quoted products, software, hardware, servers, other Infrastructures, etc. should not be declared as end of support during the contract period of agreement from the date of issue of purchase order.

15. Bidder should facilitate migration of application on the cloud infrastructure, cloud provider will host the application & DBs both at DC and DR. Bank intends to migrate various applications & DB to Private Cloud in phased. However, after full-fledged implementation of private cloud environment, bidder shall be responsible for facilitating the migration of applications.

16. Hardware Sizing cum technical specifications mentioned in Annexure XII are based on certain calculations and assumptions. These are based on minimum sizing specifications/requirements to be met in response to the RFP. Bidder should make their own calculations, investigations, decisions to size their products/ solutions/services appropriately to meet the requirements of the RFP (such as Redundancy, high throughput, IOPS etc.).

17. Utilization of Hardware resources in cloud environment should be less than 75%. Thereafter selected bidder should apprise/suggest to Bank in advance for resource augmentation.

18. 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.

19. The Bidders should consider solution design (HLD & LLD), architecture, licenses, device licenses, storage, backup solution, connectivity, number of ports /segment requirements in Infrastructures/devices, etc. while proposing the Private Cloud Infrastructure as per the requirements of this RFP.

20. The licenses and Subscriptions for all the proposed products/solutions should be in the name of Bank and should be valid during the tenure of the agreement. Bank may further extend the quantity to additional user licenses for all the proposed products/ solutions on similar rates as and when required during tenure of the agreement.

21. The sizing requirement for DC and DR will be 1:1. DC site should have additional UAT environment.

22. After completion of installation the successful bidder will arrange for 5 days training for a group of Twenty (20) people for management & maintenance of private cloud environment in Bank premises.

23. Successful bidder will also provide Standard Operating Procedure (SOP) for managing the Private Cloud Infrastructure.

24. Monitoring: The monitoring solution should have self-monitoring ability to track status of its critical components & parameters such as Up/Down status of its services, applications & servers, CPU utilization, Memory capacity, File system space, and event processing etc. It should provide this information in real-time through graphical dashboards, events/alarms as well as in the form of historical reports. Should be able to send e-mail or Mobile –SMS to predefined users for faults and reached threshold value of CPU, RAM and space utilization.

25. Operations & Maintenance Services: The Bidder shall be responsible for providing adequate support for proposed private Cloud infrastructure hosted at DC and DR during Contract period. The resources shall manage IT infra supplied by the Bidder. The resources will consist of skilled (preferably certified) for various Private Cloud components. The resources will have to be deployed at Bank premises.

26. Low Level Design (LLD) for private cloud platform and Backup solution will be done by OEM and post implementation validation and certification by the OEM that the solution has been implemented as per best practices and as per the plan & design provided by them. The bidder need to make necessary arrangement for the same and cost for the same should be considered in proposed commercials.

27. The successful bidder should submit the design document, Test plan, Method of Procedure, Architecture Design, detailed Project plan, User Acceptance Testing (UAT) and rollback plan along with the documentation.

28. Bank if intends may request POC (Proof of Concept) of the products before issuance of Purchase Order and the successful bidder shall arrange the same at no additional cost to Bank.

29. All the hardware components should come with 3 years warranty; subsequently, the Bidder shall provide AMC support for the next 2 years. Bank may extend the comprehensive AMC for further 2 years after completion of 5 years contract at the same terms and conditions based on the requirement. However, Bank may negotiate the cost.

30. All software components should come with 1-year warranty; subsequently, the Bidder shall provide ATS support for the next 4 years. In case subscription, subscription cost shall be equally distributed in 5 years. The bidder shall propose Support & Subscription services from the OEM with unlimited number of support requests, remote support, access to product updates/upgrades and 24x7 supports for issues.

31. Open Source Tools: In case of open source, Bidder must submit self-declaration on letter head with authorized signatory that the proposed solution is not community version and support will be provided by bidder via Back lining agreement with OEM / support provider during the contract period.

32. Bidder shall ensure that all supplies (Solutions, Hardware and Software) must not be 'End of Life (EoL)', End of Support (EOS) and 'End-of-Software Support (EoSS)' for the duration of 7 years from the date of delivery of equipment. In case the OEM has not declared the EoL/EoS/EoSS dates for the equipment proposed by the bidder, the bidder has to submit along with the bids a letter of undertaking from the OEM on OEM's Letterhead confirming (a) OEM has not declared the EoL/EoS/EoSS dates for the equipment under reference which shall be on or after the floating date of the RFP, and (b) the equipment shall not be EoL/EoS/EoSS for the entire duration of the contract. However, if for reasons beyond the control of OEM/Bidder, the EoL/EoS/EoSS dates are declared by the OEM during the contract period and if those dates are prior to the date of end of contract period, the bidder has to arrange for the replacement of equipment with equivalent or higher specifications (working in Bank's environment) which will not reach EoL/EoS/ EoSS for the remaining duration of the contract plus two years, at no extra cost to the Bank. This replacement must be completed 6 months prior to the date of EoL/EoS/EoSS of the already supplied.

33. The bidder will also supply backup solution one each at DC and DR site along with purpose built backup storage, tape library, etc. Backup server should be physical on both DC & DR location and it should not be single point of failure.

34. Bidder has to provide physical servers for Backup solution components such as Master Server, Media Server etc. The Backup solution servers should be in High Availability and there should not be any single point of failure. Sizing of Backup servers should be as per Backup OEM's recommendation.

35. The bidder will provide necessary dedicated hardware infra if any required for Backup Solution as per industries best practices to complete the entire full data backup within the mentioned backup windows as per technical specifications.

36. There will be separate virtual machines for Web Server (DMZ), Application Server, and Database Server (MZ) etc. and all are in different logical zones/VLAN separated. Accordingly, the connectivity should be established for making them operational. DMZ to MZ or vice versa, traffic will flow via Bank's physical Firewall.

37. The accessories (including cables (both Fibre and Ethernet patch cords of minimum 10 meters in length), rack mounting kit, Power strip in the rack etc.) required for the installation and configuration of the equipment's should also be specified and supplied

by the Bidder. Bank will not arrange for the same. If there is any/whatsoever gap/interpretation/ misunderstanding between Bank's requirement and bidder/OEM understanding for proposed solution, it will be the responsibility of bidder/OEM to fill up the gap on time without any extra cost to Bank during implementation of Project/Warranty/AMC/ATS.

38. Bidder has to carryout hardening of OS (Operating System), patch management activity and other configuration on OS, private cloud and its related software, etc., (which is provided under this RFP) as per the requirement of the bank or VAPT Observations / audit of the bank during the warranty/AMC/ATS period as per Bank's requirement at no additional cost to the Bank. Bidder has to undertake BIOS, OS, etc. upgrade wherever the requirement is felt by bank (during Warranty/AMC/ATS). Bank conducts VAPT (Vulnerability Assessment & Penetration Testing) and Information Security audit on quarterly basis. The vendor/supplier needs to comply with the findings of the VAPT within stipulated time in terms of the hardware / OS / applications provided on private cloud platform.

39. In case of any new version release (any component of product) by the OEM in the solution provided, the bidder will have to ensure installation of same version by Bidder in Bank environment within 90 days of release without any additional cost to the Bank. Before installing new update, the bidder will have to test the release in test environment with all applicable test scenarios and obtain necessary approval from the Bank before production deployment. The version should be most recent and stable.

40. The Bank carries out various Information Security Audits on regular basis. The bidder shall provide required inputs/reports/data as and when asked by the Bank for the purpose. Also as per the SOP of the Bank, the bidder shall arrange and provide closure/compliance of the audit findings as reported by the Bank in stipulated time.

41. Bidder should regularly check for updates and ensure that no hardware or software solution is running below N / (N-1) version (till 90 days from release of version N) at any time with latest patch, where N is the latest stable version made available by the OEM on its update channels. Bidder/OEM shall be required to submit plan for Upgradation of firmware / OS version / any major component upgrade, which must include testing, UAT and production implementation plan within 15 days of release of patch and should complete the process within 90 days of release of respective release/patch at no additional cost to Bank.

42. The proposed 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.

43. Periodic reporting as per the requirements stipulated in this document, as well as Bank's IT Security and IT policies and guidelines issued from time to time must be adhered by the Bidder.

44. Post implementation, scope includes (but not limited to) support and implementing of the following activities from time to time: (a) Firmware Upgrades, (b) Faulty Parts replacement, (c) Hardware System monitoring, (d) Troubleshooting & Performance Tuning, (e) Operating System patches & Upgrades, (f) patches & Upgrades of supplied software, (g) Advisories on software upgrades & vulnerabilities, (h) Support during DR Drills, (i) Any support required to make systems & software up and running and technical recommendations suggested by regulatory body.

45. Bidder has to provide technical documents, brochure etc. for all the items quoted to prove future scalability requirements. The Bidder will be responsible for providing and updating system & user documentation as per the modifications.

46. The Private cloud solution must deliver service models such as IaaS (Infrastructure as a Service) and PaaS (Platform as a Service) as defined by NIST (in the service models section of the document SP 800-145). Bank is also in process of adoption of Public Cloud for hosting the Banking applications. Bank will also integrate On-Premise Private Cloud Infrastructure with Cloud Service Provider's (CSP) Public Cloud for moving the workload to the public cloud as and when urgent workload requirement arises. Bidder will provide the necessary software/solution if any, required for moving the workload to CSP's cloud infrastructure and coming back to Bank's On- Premise Private Cloud Infrastructure as and when such requirement arises. Bank may adopt multi-cloud infrastructure for hosting the applications. The solution provided under this RFP must be compatible to perform the above activities with four major CSP's cloud infrastructure i.e. AWS, Azure, Google Cloud and Oracle Cloud.

47. Bidder shall ensure that the solution is complied with all the regulatory guidelines of GOI/ RBI and also adheres to requirements of IT Act 2000 (including amendments in IT Act 2008 and IT Act Rules, 2011), Digital personal Data Protection Act 2023 and amendments thereof from time-to- time.

48. If the bidder quotes servers which require non-standard racks then the bidder will supply the required number of non-standard racks without any additional cost to the Bank. Bank will make provision for standard racks only for mounting the servers.

49. Bank will ONLY provide space, power, cooling and rack space. All other requirements needed for the solution including software and hardware shall be provided by the bidder.

50. A solution shall not be a "single point of failure" in the flow of network traffic; failure of one or more of the solution components should not affect the functionality of the organizational network.

51. The bidder/OEM should provide single pane of glass for monitoring entire infrastructure.

52. The bidder shall guarantee a 24x7x365 availability with quarterly uptime of 99.9999% for storage solution and 99.99% for other components of solution (except for storage).as specified in Scope of Work, during the entire period of the Contract.

53. All the mentioned software must be on respective software OEM's part code. Bank must be able to get premium support from software OEMs directly which shall be provided by 24x7x365 manner.

54. The bidder should provide complete escalation matrix of Bidder as well as OEM which should have a 24x7x365 days support in order to log the calls and the support and escalation contact matrix to be updated on periodic basis by bidder and submit to Bank.

55. The bidder shall also be able to use online ticket logging system provided by the Bank.

56. Bidder shall be submitting reports as per the SLA in the format agreed by the Bank.

57. The successful Bidder shall co-ordinate with other on boarded system integrator's resources of the Bank to ensure seamless running of the solution.

58. The Bidder has to ensure on-site support for resolving all Hardware, OS (Operating Systems) & Private Cloud solution and related software issues, including re-installation, reconfiguration of OS and other required software supplied during warranty and AMC (Annual Maintenance Contract) / ATS (Annual Technical Support) period (or such other extended period as per the contract terms).

59. Proposed solution should not dependent on any hardware make and model from specific OEM.

60. Proposed solution should be able to work on latest x86 server hardware but not restricted to particular vendor/make/model.

61. The bidder shall provide perpetual licenses for all software components asked in this RFP and should be in name of Bank.

62. No additional licenses of software will be required for any hardware Upgradation/addition of disk in future as per Bank's requirement.

63. Detailed process documentation, SOP's and management of solution should be created for managing the infrastructure and submitted before project signoff.

64. Transportation to & from, lodging and boarding of manpower shall be in the scope of the Bidder.

65. Bidder has to follow worldwide practice and international standard for documentation for the entire system development life cycle. The documents and manuals should be kept up to date with proper version control during the entire contract period. Bank may require the bidder to deliver the following in hard and soft copy to Bank during development and implementation of the solution.

      a) Detailed System Requirements Specification Document
      b) High Level architecture document
      c) High Level Design document
      d) Low Level Design document
      e) Test cases with results during UAT, SIT and any other test cases
      f) Deployment plan document
      g) Change management methodology document
      h) Security guide
      i) User management guide
      j) Release notes
      k) Impact matrix
      l) OEM escalation matrix
      m) Standard Operating Procedure document for all processes mentioned in this RFP.

Acceptance by Bank on implementation of Private Cloud

- The materials including hardware and software should meet the technical specifications envisaged in this tender document as well as functional specifications.

- The Bidder must submit a comprehensive Acceptance Test Plan document, containing various aspects of the Acceptance Test to demonstrate all the features of the proposed Solution.
- The Bidder along with Bank representative shall carry Scenario based Acceptance Test with various use cases after installation of the proposed solution.
- Appliances will be considered to have been commissioned when all services as described in this RFP document are able to run smoothly over the network as DC and DR (as required by Bank). Mere installation of servers with out-of-the box features will not constitute as commissioning of the proposed solution.
- The final acceptance will be provided by Bank after verifying all aspects as mentioned in the document have been delivered to satisfaction including Audit and certification provided by OEM.

66. Bidder has to submit and maintain Software Bill of Material (SBOM) and Cryptography Bill of Material (CBOM) as per guidelines of CERT-In "Technical Guidelines on Software Bill Of Materials (SBOM)" and other regulatory bodies.

67. In addition to the indicative hardware procurement, Bank will augment additional hardware, storage space based on Bank's requirement from time to time at a price fixed as per Bill of Material and TCO of this RFP over a period of 2 years. For any future upgrades, Bank will use the price quoted in the Bill of Material as the reference price for arriving at the cost of newly required hardware or software on pro-rata basis and Upgradation will be done by selected bidder/OEM only during contract period.

68. Hypervisor layer should provide High Availability & automated distributed resource scheduling for VM placement & load balancing. It should support features like snapshots & cloning of individual virtual machines, non-disruptive Scale-Up & Scale-Out to grow capacity and/or performance whenever required. It should provide ease of use wizard for snapshot scheduling and instant batch cloning of Virtual Machines Data Centre. This will simplify virtual machine network configuration, Enhanced network monitoring and troubleshooting capabilities, Support Network QOS for virtual machines and also support for advanced networking features.

69. Solution should also have capability to use Software Defined Networking.

70. HCI (if proposed) should be able to connect and use external SAN storage proposed by bidder.

71. Any integration issues arising due to non-compatibility of proposed components shall be rectified/replaced by the bidder at no additional cost to the Bank.

72. The solution must have common performance policies framework and one should be able to change & apply that as granular on per virtual machine & virtual disk on the fly without any disruption to business application.

73. Virtualization platform should provide access to developers through Kubernetes APIs to consume VMs, containers and DC infra resources like compute, storage, and networking.

74. Private Cloud should be capable of providing Zero RPO by deploying stretched cluster for a metro distance Datacenter Sites.

75. Solution should have No Single Point of Failure with complete redundancy at all levels. Solution should be sized to support data & cluster availability in event of single Node Failure.

76. Solution must support Asynchronous / Synchronous replication and also be capable of providing zero data loss, minimum downtime of VMs from day one within the same cluster.

77. Proposed solution should be based on modular scalable architecture having the ability to add auto-discoverable Nodes. Node addition should be non-disruptive & seamless and should allow simple ONE node scaling.

78. Proposed solution must support automated cluster deployment, configuration and non-disruptive updates and migration.

79. Entire proposed solution should be capable to integrate with CI/CD pipeline, wherever feasible.

80. Bank expects that bidders deploy their resources at the locations and provide the onsite support for any issues reported /logged by Bank's specified locations. If the bidder's resources are unable to resolve the issues then the bidder is expected to send the SME resource to the respective location to resolve the issue/event at no additional cost to the Bank.

81. The support coverage would be for all the application / Solution / Hardware supplied by the Bidder through this RFP.

82. The bidder should act as a Single Point of Contact for all internal users whether for service requests, incidents or problems for all the applications solutions / hardware provided / taken over / supported by the Bidder by way of this RFP.

83. Bidder should deploy competent resources for the team to provide necessary maintenance and support as per the requirement of the Bank. Bidder has to deploy adequate resources to ensure that the systems are up and customer service is not impacted. To ensure that the SLAs are met, the Bidder if required will need to deploy additional resources during the contract period including implementation schedule without any additional cost to the Bank. The Bank has a right to interview and reject resources deployed by the Bidder.

84. Team should be available on-site and would resolve day-to-day production issues reported in all in applications/DB/OS/ hardware etc. by debugging and analyzing the same.

85. Upon intimation of the issue from the Banks' Team, the Facility Management team would analyses the issue and provide the necessary solution /Patch as per the SLA.

86. Bidder's support team would liaison with the ATS / AMC team of OEM Bidder to report product related bugs, parameters and obtain & apply the fixes (if applicable) for the same in consultation with Bank.

87. Bidder needs to note that the products and solutions proposed by the Bidder by way of this RFP should come with warranty of 3 Years for Hardware and 1 Year for Software.

Thereafter, the Bidder should provide AMC/ATS for these products and solutions during contract period.

88. In case, the resource deployed by the bidder is unable to continue during contract period, it will be the responsibility of bidder to provide similar resource within 7 days.

89. Bank shall evaluate and interview the resources proposed to be deployed at Bank and will subject to the approval of the bank personnel. Bank reserves right to reject any resource if found not capable or not meeting Bank's expectation.

Indicative resource requirement:

Resource	Location of the resource	Minimum no. of Resources Per Shift	Shift Timings
Team Lead (L3)	Delhi/NCR	1	General Shift
L1/L2 - Private Cloud Platform (Virtualization & Windows) Platform	Delhi/NCR	2	8 AM to 4 PM 3 PM to 11 PM
L1/L2 - OS (Linux RHEL)	Delhi/NCR	1	8 AM to 4 PM 3 PM to 11 PM
L1/L2 - Backup & Storage	Delhi/NCR	1	24x7x365
L2 - Database Management - Primarily Oracle DB (Along with support for MySQL and MSSQL)	Delhi/NCR	1	24x7x365
L1/L2- Containers Platform	Delhi/NCR	1	8 AM to 4 PM 3 PM to 11 PM
L1 - FMS	Mumbai DC	1	General Shift or as an when required

- Ratio of L1:L2 resource for each domain will be 1:1. However this ratio is not applicable if Bidder wants to deploy all L2 resources instead of L1.

- Please note above mentioned resource requirement just an indicative requirement. Bidder may quote & deploy for additional resources if required to support and maintain the project. Additionally, Bidder must have sufficient capable resource pool as a backup and should provide/replace the resource within 1 working day (if required).

- At DR site (Noida), bidder has to provide FMS support as and when required by Bank.

Bidder has to submit manpower proposal (with number of resources proposed) as per Appendix J.

Qualification criteria for resources is mentioned in Annexure XIII.

Detailed FMS activities (indicative) are mentioned in Annexure XIV.

Project Timelines:

Sr.No	Description	Delivery Timeline
1	Project Kickoff , HLD and LLD finalization	3 Weeks from the date of the acceptance of PO
2	Hardware and Software delivery to all locations	6 weeks from the date of the acceptance of PO
3	Hardware Implementation at DC & DR	7 weeks from the date of the acceptance of PO
4	Hardware Implementation at DR	8 weeks from the date of the acceptance of PO
5	Software Implementation at DC	10 weeks from the date of the acceptance of PO
6	validation of platform by OEM	11 weeks from the date of the acceptance of PO
7	Software Implementation at DR	11 weeks from the date of the acceptance of PO
8	validation of platform by OEM	12 weeks from the date of the acceptance of PO
9	Closure of Audit, UAT acceptance, Project Sign-off & finalization of SOP Documentation	15 weeks from the date of the acceptance of PO
10	Migration of existing Virtual Servers from VMware Esxi (DR Site) platform to new Private cloud Platform	30 Weeks from the date of acceptance of PO
11	Migration of existing Virtual Servers from VMware Esxi (DC Site) platform to new Private cloud Platform	40 Weeks from the date of acceptance of PO

CHAPTER 3 - TERMS AND CONDITONS

3.1 Payment Terms

The selected Bidder will have to submit the documents (Delivery challans with all the part codes of OEM which shall be reconciled with BOM) at the Bank's office along with a request letter for payment. No advance payment will be made. Payment will be made in Indian Rupees only. All taxes to be paid will be subject to GST applicability. TDS will be applicable.

Particulars of Payment	Payment Milestone
Hardware Cost	70% on delivery of Hardware 20% after Hardware implementation and project sign off by the Bank. 10% after conduction of successful DR drill and acceptance by the Bank.
Software License Cost	60% on delivery of Software 15% Hypervisor & Container platform implementation 15% Orchestration and automation implementation 5% after Software implementation and project sign off by the Bank. 5% after conduction of successful DR drill
Hardware Implementation Cost	70% on successful installation & acceptance by the Bank 30% after completion of successful migration from existing platform.
Software Implementation Cost	70% on successful installation & acceptance by the Bank 30% after conduction of successful DR drill
Hardware AMC / Software ATS	Quarterly in arrears and AMC will commence from the 1st of the next month of the date of completion of the warranty period
FM Charges	Quarterly in arrears upon submission of invoice and after calculating the applicable penalties (subjected to actual deployment of FM resources with prior permission of the Bank and sign-off for the proposed solution)
OEM Design and Assessment Services	50% on successful submission of Low Level Design (LLD) and acceptance by Bank. 50% post validation of platform and acceptance by Bank.

3.2 Assignment & Subcontracting

a) The selected bidder shall not subcontract or permit anyone to perform any of the work, service or other performance required under the contract.

b) If the Bank undergoes a merger, amalgamation, takeover, consolidation, reconstruction, change of ownership, etc., this tender shall be assigned to the new entity and such an act shall not affect the rights of the Agency under this tender.

3.3   Delays in the Bidder's Performance

The bidder must strictly adhere to the schedule, as specified in the purchase contract/purchase order, executed between the Parties for performance of the obligations, arising out of the purchase contract and any delay in completion of the obligations by the Bidder will enable Bank to resort to any or both of the following:

    i.   Claiming Liquidated Damages
   ii.   Termination of the purchase agreement fully or partly and claim liquidated damages.
  iii.   Execution of Bid Declaration Form / Invoking EMD or Performance Bank Guarantee

3.4   Liquidated Damages

The Bank will consider the inability of the bidder to deliver or install the equipment & provide the services required within the specified time limit as a breach of contract and would entail the payment of Liquidated Damages on the part of the bidder. The liquidated damages represent an estimate of the loss or damage that the Bank may have suffered due to delay in performance of the obligations (relating to delivery, installation, operationalization, implementation, training, acceptance, warranty, maintenance etc. of the proposed solution/services) by the bidder.

Installation will be treated as incomplete in one / all the following situations:

- Non-delivery of any component or other services mentioned in the order
- Non-delivery of supporting documentation
- Delivery / availability, but no installation of the components and/or software
- No integration/ Incomplete Integration
- Non-Completion of Transition within suggested timeline
- System operational, but not as per SLA, Timelines and scope of the RFP

If Bidder fails to deliver/implement any or all application/hardware or perform services within stipulated time schedule, the Bank shall, without prejudice to its other remedies under the rate contract, deduct from the ordered price (Solution and Implementation cost), as liquidated damages, a sum equivalent to 5% of the order value for each week of delay till maximum of 10 weeks. If the bidder fails to deliver/implement the same, the Bank may recover the complete cost of undelivered solution. The LD will be charged on order value for the items for which delivery/implementation is delayed.

Further, the Bank also reserves the right to cancel the order and execute the Bid Security Declaration /Invoke Performance Guarantees in case of inordinate delays in the delivery/ installation of the equipment. Bank may foreclose the bank guarantee without any notice. In the event of Bank agreeing to extend the date of delivery at the request of successful bidder(s), it is a condition precedent that the validity of Bank guarantee shall be extended by further period as required by Bank before the expiry of the original bank guarantee. Failure to do so will be treated as breach of contract. In such an event Bank, however, reserves its right to foreclose the bank guarantee.

3.5   Order Cancellation

a.   The Bank reserves its right to cancel the entire / unexecuted part of the Purchase Order at any time by assigning appropriate reasons and recover expenditure incurred by the

Bank in addition to recovery of liquidated damages in terms of the contract, in the event of one or more of the following conditions:

    i.   Delay in delivery of services in the specified period.

    ii.   Serious discrepancies noted in the inspection.

    iii.   Breaches in the terms and conditions of the Order.

b.   The Bank reserves the right to cancel the contract placed on the selected bidder and recover expenditure incurred by the Bank on the following circumstances:

    i.   Non submission of acceptance of order within 7 days of order.

    ii.   Excessive delay in execution of order placed by the Bank.

    iii.   The selected bidder commits a breach of any of the terms and conditions of the bid.

    iv.   The bidder goes into liquidation voluntarily or otherwise.

    v.   An attachment is levied or continues to be levied for a period of 7 days upon the effects of the bid.

    vi.   The progress made by the selected bidder is found to be unsatisfactory.

    vii.   If deductions on account of liquidated Damages exceeds more than 10% of the total contract price.

    viii.   If found blacklisted by any Govt. Department / PSU / other Banks / CERT-In, during contracted period.

    ix.   Non satisfactory performance of the Project in terms of affecting the Core Systems of the Bank or the Core Business of the Bank and the functioning of the Branches/Offices of the Bank.

c.   Bank shall serve the notice of termination to the bidder at least 30 days prior, of its intention to terminate services without assigning any reasons.

d.   In case the selected bidder fails to conduct an event as per stipulated schedule, the Bank reserves the right to get it conducted by alternate sources at the risk, cost and responsibility of the selected bidder by giving 7 days' prior notice to the bidder.

e.   After the award of the contract, if the selected bidder does not perform satisfactorily or delays execution of the contract, the Bank reserves the right to get the balance contract executed by another party of its choice by giving one-month notice for the same. In this event, the selected bidder is bound to make good the additional expenditure, which the Bank may have to incur to carry out for the execution of the balance of the order/contract. Such additional expenditure shall be incurred by the bank within reasonable limits & at comparable price prevailing in the market. This clause is also applicable if for any reason, the contract is cancelled.

f.   The Bank 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 security deposit, if any, under this contract.

g.   In addition to the cancellation of purchase order, the Bank reserves its right to blacklist the vendor for non- performance and/or invoke the Bank Guarantee or foreclose the Security Deposit given by the bidder towards non- performance/non-compliance of the terms and conditions of the contract, to appropriate towards damages.

3.6 Consequences of Termination

In the event of termination of the Contract due to any cause whatsoever, [whether consequent to the stipulated term of the Contract or otherwise], the Bank shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s) which the Bidder shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow the next successor Bidder to take over the obligations of the erstwhile Bidder in relation to the execution/continued execution of the scope of the Contract.

In the event that the termination of the Contract is due to the expiry of the term of the Contract, a decision not to grant any (further) extension by the Bank , the Bidder herein shall be obliged to provide all such assistance to the next successor Bidder or any other person as may be required and as The Bank may specify including training, where the successor(s) is a representative/personnel of The Bank to enable the successor to adequately provide the Service(s) hereunder, even where such assistance is required to be rendered for a reasonable period that may extend beyond the term/earlier termination hereof. Nothing herein shall restrict the right of The Bank to invoke the Performance Bank Guarantee and other guarantees, securities furnished, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available to The Bank under law or otherwise. The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by implication intended to come into or continue in force on or after such termination.

3.7 Audit by Third Party

The selected bidder (Service Provider), if required, has to get itself annually audited by internal/external empaneled Auditors appointed by the Bank/inspecting official from the Reserve Bank of India or any regulatory authority, covering the risk parameters finalized by the Bank/such auditors in the areas of products (IT hardware/software) and services etc., provided to the Bank and the Service Provider is required to submit such certification by such Auditors to the Bank. The Service Provider and or his/their outsourced agents/subcontractors (if allowed by the Bank) shall facilitate the same. The Bank can make its expert assessment on the efficiency and effectiveness of the security, control, risk management, governance system and process created by the Service Provider. The Service Provider shall, whenever required by the Auditors, furnish all relevant information, records/data to them. All costs for such audit shall be borne by the Bank.

Where any deficiency has been observed during audit of the Service Provider on the risk parameters finalized by the Bank or in the certification submitted by the Auditors, the Service Provider shall correct/resolve the same at the earliest and shall provide all necessary documents related to resolution thereof and the auditor shall further certify in respect of resolution of the deficiencies. The resolution provided by the Service Provider shall require to be certified by the Auditors covering the respective risk parameters against which such deficiencies have been observed.

The Service Provider shall, whenever required by the Bank, furnish all relevant information, records/data to such auditors and/or inspecting officials of the Bank/Reserve Bank of India and or any regulatory authority. The Bank reserves the right to call and/or retain for any relevant material information/reports including auditor review reports undertaken by the service provider (e.g., financial, internal control and security reviews) and findings made on Selected Bidder in conjunction with the services provided to the Bank.

3.8 Bidder obligations :

2.1.1 Bidder is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state-of-the-art methods and economic principles and exercising all means available to achieve the performance specified in the Contract.

2.1.2 Bidder is obliged to work closely with the Bank's staff, act within its own authority and abide by directives issued by the Bank from time to time and complete implementation activities.

2.1.3 Bidder will abide by the job safety measures prevalent in India and will free the Bank from all demands or responsibilities arising from accidents or loss of life, the cause of which is Bidder's negligence. Bidder will pay all indemnities arising from such incidents and will not hold the Bank responsible or obligated.

2.1.4 Bidder is responsible for the activities of its personnel and will hold itself responsible for any misdemeanors.

2.1.5 Bidder shall treat as confidential all data and information about the Bank, obtained in the process of executing its responsibilities, in strict confidence and will not reveal such information to any other party without prior written approval of the Bank as explained under 'Non-Disclosure Agreement' of the Bank.

2.1.6 Without the Bank's prior written permission, Bidder shall not store or share Bank's materials including Confidential Information outside the geographical boundary of India or in/with a public cloud.

2.1.7 Bidder agrees that the Bank either itself or through its authorized representative shall have right to perform ethical hacking on public IPs and URLs of Bidder, wherein the Bank has integrations.

2.1.8 Bidder agrees that it shall communicate to the Bank well in advance along with detail plan of action, if any changes in Bidder's environment/infrastructure is of the nature that may have direct or indirect impact on the Services provided under this Agreement or operations of its Services.

2.1.9 Bidder shall ensure confidentiality, integrity and availability of the Bank's information at all times and shall comply with regard to the followings:

(a) Acceptable Usage Policy: Information assets of Bidder should be provided to its authorized users only for the intended purpose and users shall adhere to safe and acceptable usage practices.

(b) Email Usage: The employees of Bidder shall use authorized media only for email communication.

(c) Password Management: Bidder shall have a password management system in place, which ensures secure passwords.

(d) Physical and Environmental Security: Bidder shall provide sufficient guidance for its employees with respect to physical and environmental security.

(e) Logical Access Control and User Access Management: The access to information and information systems shall be according to the principles of "least privilege" and "need to know" basis to authorized users of Bidder.

(f) Infrastructure Security: Bidder shall ensure correct and secure operations of information processing facilities.

(g) Bidder Relationship: Bidder shall ensure that information security risks related to outsourcing of Services to any other party, if permitted by the Bank, shall be assessed and managed regularly, to the satisfaction of the Bank.

(h) Digital Risk: Bidder shall ensure that electronic data is gathered and preserved in a systematic, standardized and legal manner to ensure the admissibility of the evidence for the purpose of any legal proceedings or investigations, whenever demanded by the Bank.

(i) Change Management: Bidder shall provide a managed and orderly method in which changes to the information technology environment (including, database, operating

system, application, networking etc.) are requested, tested and approved prior to installation or implementation.

(j) Port Management: Bidder shall ensure that the controls are implemented for secure port management so as to protect the network from unauthorized access.

(k) Patch Management: Bidder shall ensure that the security patches to information assets and systems are correctly and completely updated in a timely manner for known vulnerabilities.

(l) Access Management: Bidder shall limit access to information and information processing facilities for authorized users only.

(m) Log Management: Logging shall be enabled on all systems of Bidder to ensure audit trail is maintained every time.

3.9   Remote Access

The Bank will not provide any access through VPN. During the migration and implementation, remote access will not be provided.

3.10   Service Level Agreement

The successful bidder is bound and to comply the Service Levels as described below-

i.   The successful bidder shall have to enter into "Service Levels Agreement" having all terms and conditions of this RFP to maintain uptime and provide the service support and onsite support during the entire contract period.

ii.   Both the bidder and OEM will be totally responsible for the maintenance, configuration and fault free operations of supplied infrastructure i.e. hardware, software and its maintenance during the warranty and post warranty (AMC/ATS period) period.

iii.   Any technical glitch/ issue in installed infrastructure of the solution (i.e. hardware and software, OS/DB etc.) should be attended on priority and should be covered under warranty/AMC.

iv.   The bidder has to maintain a guaranteed minimum uptime of 99.99% (for storage it is 99.9999%) for all systems/ solutions supplied under this RFP to avoid any business disruption due to breakdown of system or degraded performance impacting business or unavailability of data. The calculation of uptime will be on a monthly basis.

v.   The issue/ break down message may be communicated to/by the Bank team by way over phone / email/ call logging.

vi.   For penalty calculation, the total time elapsed between the intimation of break down message from Bank side to the vendor and receipt of rectification message from the bidder to Bank side will be considered.

vii.   During the warranty period, the penalty will be deducted in quarterly FMS payment. In case, Bank is unable to adjust penalty in FMS payment, the Bank

at its discretion may invoke the Performance Bank Guarantee (PBG) to deduct the penalty amount.

viii. Post warranty period, the penalty will be deducted in quarterly FMS/AMC/ATS payment. In case, the Bank is unable to adjust penalty in FMS/AMC/ATS payment, the Bank at its discretion may invoke the Performance Bank Guarantee (PBG) to deduct the penalty amount.

ix. If the support services is not provided on 24*7 basis and/or satisfactory services are not provided, the Bank with its discretion may reject the proposal/ terminate the contract, without assigning any reason.

x. Apart from maintaining uptime of 99.99% (99.9999% for storage), for any breakdown / malfunctioning of hardware and it's any of the components or accessories or any system software issue etc., the resolution time is mentioned below:-

$$\text{Uptime \%} = \frac{((\text{Number of hours in month} - \text{Number of hours impacted in month}) *100)}{\text{Total Number of hours in month}}$$

xi. For calculation of uptime (penalty), planned/ scheduled down time will be exempted. Bank will pay the bidder after deducting the calculated penalty from the payable amount.

xii. If any critical component of the entire configuration setup is out of service , then the bidder & OEM shall either immediately replace the defective unit (with new one) or replace it at its own cost or provide a standby, on immediate basis, not more than 4 hours , The bidder should maintain proper inventory of standby components for early resolution of issues.

xiii. If the bidder, having been notified, fails to remedy the defect(s) within the 4 hours' time duration from the incident, the Bank may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights, which the Bank may have against the supplier under the Contract.

xiv. The bidder should comply with the security and audit standards of the Bank and various regulatory guidelines. For this, the bidder should apply new patches related to OS/ firmware & BIOS updates etc, without any additional cost to the bank, during the contract period.

xv. For all issues related to installed infrastructure, RCA (Root Cause Analysis) to be provided by the respective OEM within 3 working days. The delay in submission will lead to penalty @ Rs. 2000/day.

Table1: Service Level Agreement and Penalty for Operations

Service Area	Service Level	Penalty
Uptime of the solution for High availability setup	Uptime % of application calculated on monthly basis for each solution.	Penalty shall be applicable in % (as mentioned below) of monthly contract value. If the uptime is below 98%, the Bank shall have full right to terminate the contract with the Bidder.
	99.99% monthly uptime and above	**NA**
	Below to 99.99%	INR. 50000/- for every reduction in uptime by 0.01 % in uptime. Uptime shall be calculated monthly.

Manpower Management:

Service Area	Service Level	Penalty
Manpower Services	The bidder has to provide experienced and certified manpower at Bank premises as per RFP. Any gap will attract penalties. The bidder has to replace the manpower if specially asked by the Bank within a period of one month. A delay beyond next Month billing cycle will attract the penalty.	One day resource cost of each L1/L2/L3 resources respectively till the replacement will be provided by the Bidder.

Security Vulnerability Management:

Service Area	Service Level	Penalty
Version Upgrade Major/ Minor for all Software / Middleware/ OS (All version) and Patching of all Hardware/ Software / Middleware/ OS (All version) (For Servers)	The Operations Team has to have version upgrades /patching of all underlying software / Middleware as per respective OEM recommendations & publish the Monthly version/Patch upgrade calendar for the same. Failure to comply with the Version upgrade calendar will attract penalties.	For breaches of Version upgrade/patching – a) 95-100 % No penalty b) Below 95 %. INR 500 will be deducted per percentage of non-compliance
		For breaches of Version upgrade/patching – a) 95-100 % No penalty b) Below 95 %. INR 100 will be deducted per percentage of non-compliance.
	All identified vulnerabilities over underlying hardware / software / Middleware to be patched as per	**For breaches for timelines under Critical & High Category**

Service Area	Service Level	Penalty
Closure of VA/ PT, and SCD Points on all Hardware / Software / Middleware	respective OEM recommendations. Failure to close these calls within timelines will attract penalties based on criticality of calls. 1. Critical Category- 7 Days 2. High Category- 15 Days 3. Medium- 30 Days 4. Low- 60 Days	- Penalty of Rs.1000 per day per vulnerability for delay in mitigation/ fixing vulnerabilities. **For breaches for timelines under Medium Category** - Penalty of Rs.200 per day per vulnerability for delay in vulnerabilities. **For breaches for timelines under Low Category** - Penalty of Rs.100 per day per vulnerability for delay in mitigation/ fixing vulnerabilities.

Knowledge Management:

Service Area	Service Level	Penalty
Product Administration Training once in a year	Training not conducted by Bidder to the bank personnel and on-site bidder resources as per requirements of RFP.	Penalty of Rs. 5,000 per month for each such solution for each defaulted month will be imposed.
Compliance of RBI/ CERT-IN Advisories/ other regulatory advisory	Compliance by end date, as notified in the advisory Penalty by delay by each day.	Compliance by end date - No Penalty By Delay of each day, INR 10000 per day

Service Delivery Management:

Service Area	Service Level	Penalty
Service/Incident Call Closure	Service Calls/Incident call logged in ticketing tool and assigned to team should be resolved within defined timelines. Failure to do so will result in penalties.	For breaches for calls: • Penalty of Rs. 1000 per day for per incident ticket remains open for more than 24 hrs-48 hrs. and subsequently Rs 2000 per day if it remains open for more than 48 hours.

Backup and Restoration:

Service Area	Service Level	Penalty
Backup Success SLA	Service Calls/Incident call logged in ticketing tool and assigned to team should be resolved within defined timelines. Failure to do so will result in penalties.	For breaches for calls: Penalty of Rs. 2000 per day for per incident ticket remains open for more than 24 hrs-48 hrs. And subsequently Rs 4000 per day if it remains open for more than 48 hours.
	Service Calls/Incident call logged in ticketing tool and assigned to team	For breaches for calls:

			Penalty of Rs. 20000 per day for per
Restoration Success SLA	should be resolved within defined timelines.		incident ticket remains open for more than 24 hrs-48 hrs. And subsequently
	Failure to do so will result in penalties.		Rs 30000 per day if it remains open for more than 48 hours.

Delay in Implementation of solution:

S. No.	Activity	Time Period for completion	Penalty / Liquidated Damages
1.	Delivery of ordered hardware & Software at DC and DR.	Within 06 weeks from issue of Purchase Order (PO)	1 % of Contract price of delayed items for each week of delay or part thereof
2	Installation and Configuration of hardware at DC and DR	Within 7 weeks (for DC) and 8 Weeks (for DR) from issue of Purchase Order (PO)	₹ 1,00,000/- for each week of delay or part thereof
3.	Installation and Configuration of software/licenses at DC and DR	Within 10 weeks (for DC) & 11 Weeks (For DR) from issue of Purchase Order (PO)	₹ 1,00,000/- for each week of delay or part thereof
4	Closure of Audit, UAT acceptance, Project Sign-off & finalization of SOP Documentation	Within 15 weeks from issue of Purchase Order (PO)	₹ 1,00,000/- for each week of delay or part thereof
5	Migration of existing Virtual/Physical Servers from VMware Esxi/HyperV platform to new Private cloud Platform	40 Weeks from the date of acceptance of PO	₹ 1,00,000/- for each week of delay or part thereof

CHAPTER 4 - LEGAL AND CONTRACTUAL

4.1 Dispute Resolution Mechanism

The Bidder and The Bank shall endeavor their best to amicably settle all disputes arising out of or in connection with the Contract in the following manner:-

   I.   The Party raising a dispute shall address to the other Party a notice requesting an amicable settlement of the dispute within seven (7) days of receipt of the notice.

  II.   The matter will be referred for negotiation between General Manager (IT&DBD) of The Bank / Purchaser and the Authorized Official of the Bidder. The matter shall then be resolved between them, and the agreed course of action documented within a further period of 15 days.

In case any dispute between the Parties, does not settle by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration and such dispute may be submitted by either party for arbitration within 20 days of the failure of negotiations. Arbitration shall be held in New Delhi and conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Each Party to the dispute shall appoint one arbitrator each and the two arbitrators shall jointly appoint the third or the presiding arbitrator.

The "Arbitration Notice" should accurately set out the disputes between the parties, the intention of the aggrieved party to refer such disputes to arbitration as provided herein, the name of the person it seeks to appoint as an arbitrator with a request to the other party to appoint its arbitrator within 45 days from receipt of the notice. All notices by one party to the other in connection with the arbitration shall be in writing and be made as provided in this tender document.

The arbitrators shall hold their sittings at New Delhi. The arbitration proceedings shall be conducted in English language. Subject to the above, the courts of law at New Delhi alone shall have the jurisdiction in respect of all matters connected with the Contract/Agreement. The laws applicable to this contract shall be the laws in force in New Delhi, India. The contract shall be governed by and interpreted in accordance with Indian law. The award will be recorded in writing, along with the reasons therefor. The arbitration award shall be final, conclusive and binding upon the Parties and judgment may be entered thereon, upon the application of either party to a court of competent jurisdiction. Each Party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the Parties unless the award otherwise provides.

The successful bidder(s) shall continue work under the Contract during the arbitration proceedings unless otherwise directed in writing by the Bank or unless the matter is such that the work cannot possibly be continued until the decision of the arbitrator, as the case may be, is obtained. The venue of the arbitration shall be in Delhi.

Notwithstanding the above, the Bank shall have the right to initiate appropriate proceedings before any court of appropriate jurisdiction, should it find it expedient to do so.

4.2   Jurisdiction & Governing Laws

The jurisdiction of the courts shall be in New Delhi and the provisions of this Agreement shall be governed by the laws of India.

4.3   Notices

Notice or other communications given or required to be given under the contract shall be in writing and shall be faxed/e-mailed followed by hand-delivery with acknowledgement thereof or transmitted by pre-paid registered post or courier.

Any notice or other communication shall be deemed to have been validly given on date of delivery if hand delivered & if sent by registered post than on expiry of seven days from the date of posting.

4.4 Authorized Signatory

The selected Bidder shall indicate the authorized signatories who can discuss and correspond with the bank about the obligations under the contract. The selected Bidder shall submit at the time of signing the contract a certified copy of the resolution of their board, authenticated by the company secretary, authorizing an official or officials of the Bidder to discuss, sign agreements/contracts with The Bank, raise invoice and accept payments and also to correspond. The Bidder shall provide proof of signature identification for the above purposes as required by the bank.

4.5 Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the selected Bidder or The Bank as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:-
- Natural phenomenon, including but not limited to floods, droughts, earthquakes, epidemics and pandemics
- Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos
- Terrorist attack, public unrest in work area

Provided either party shall within 10 days from occurrence of such a cause, notify the other in writing of such causes. The Bidder or The Bank shall not be liable for delay in performing his/her obligations resulting from any force Majeure cause as referred to and/or defined above. Any delay beyond 30 days shall lead to termination of contract by parties and all obligations expressed quantitatively shall be calculated as on date of termination. Notwithstanding this, provisions related to indemnity, confidentiality survive termination of the contract.
The determination of whether a particular condition or situation qualifies as a Force Majeure event shall rest solely with the Bank, and such determination shall be final and binding on the bidder.

4.6 Confidentiality

This document contains information confidential and proprietary to the Bank. Additionally, the bidder will be exposed by virtue of the contracted activities to internal business information of the Bank, affiliates, and/or business partners. Disclosure of receipt of any part of the aforementioned information to parties not directly involved in providing the services requested could result in the disqualification of the bidder, premature termination of the contract, or legal action against the bidder for breach of trust. The information provided / which will be provided is solely for the purpose of undertaking the services effectively.
No news release, public announcement, or any other reference to this RFP or any program there under shall be made without written consent of Bank. Reproduction of this RFP, by photographic, electronic, or other means is strictly prohibited.

The bidder must undertake that they shall hold in trust any Information received by them, under the Contract/Agreement, and the strictest of confidence shall be maintained in respect of such Information. The bidder also has to agree to restrict access and disclosure of Information to such of their employees, agents, strictly on a "need to know" basis, to maintain confidentiality of the Information disclosed to them in accordance with this Clause.

Physical as well as logical security of data to be ensured. This step should include having the employees assigned to Punjab & Sind Banks' work sign a 'Confidentiality Agreement'. The selected vendor(s) undertakes not to keep this data with its company after the end of this agreement. This clause will outlive the agreement date. The Bidder shall sign a Non-disclosure Agreement as stated in the RFP.

4.7 Ownership and Retention of Documents

The Bank shall own the documents prepared by or for the selected Bidder arising out of or in connection with the Contract.

Forthwith upon expiry or earlier termination of the Contract and at any other time on demand by The Bank, the Bidder shall deliver to The Bank all documents provided by or originating from The Bank / Purchaser and all documents produced by or from or for the Bidder while performing the Service(s), unless otherwise directed in writing by The Bank at no additional cost.

The selected Bidder shall not, without the prior written consent of The Bank/ Purchaser, store, copy, distribute or retain any such Documents.

The selected Bidder shall preserve all documents provided by or originating from The Bank / Purchaser and all documents produced by or from or for the Bidder in the course of performing the Service(s) in accordance with the legal, statutory, regulatory obligations of The Bank /Purchaser in this regard.

4.8 Intellectual Property Rights

In the event of any claim asserted by a third party of infringement of copyright, patent, trademark, industrial design rights, etc., arising from the use of the Goods or any part thereof in India, the Vendor(s) shall act expeditiously to extinguish such claim. If the Vendor(s) fails to comply and the Bank is required to pay compensation to a third party resulting from such infringement, the Vendor(s) shall be responsible for the compensation to the claimant including all expenses, court costs and lawyer fees. The Bank will give notice to the Vendor(s) of such a claim, if it is made, without delay. The Vendor(s) shall indemnify the Bank against all third-party claims.

4.9 Intellectual Property Indemnity & Indemnity against Misuse of License

The selected vendor(s) has to undertake to indemnify Punjab & Sind Bank and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any Indian or foreign patent, trademark or copyright, arising out of the performance of this contract.

The selected vendor(s) shall have to undertake to indemnify Punjab & Sind Bank and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement or misuse by vendor(s) of, any license issues arising out of the execution of this contract.

Service provider shall ensure that all persons, employees, workers and other individuals engaged by or sub-contracted (if allowed) by Service Provider in rendering the Services under this Agreement have undergone proper background check, police verification and other necessary due diligence checks to examine their antecedence and ensure their suitability for such engagement. No person shall be engaged by Service provider unless such person is found to be suitable in such verification and Service Provider shall retain the records of such verification and shall produce the same to the Bank as and when requested.

4.10 Legal Compliance

The successful bidder hereto agrees that it shall comply with all applicable union, state and local laws, ordinances, regulations and codes in performing its obligations hereunder, including the procurement of licenses, permits and certificates and payment of taxes where required. If at any time during the term of this agreement, the Bank is informed or information comes to the Bank's attention that the Successful bidder is or may be in violation of any law, ordinance, regulation, or code (or if it is so decreed or adjudged by any court, tribunal or other authority), the Bank shall be entitled to terminate this agreement with immediate effect.

It shall be the sole responsibility of the Vendor(s) to comply with all statutory, regulatory & Law of Land and provisions while delivering the services mentioned in this RFP. If any new guidelines are issued by these organizations, the bidder shall arrange for its compliance/ Upgradation/ development during the contract period without any cost to Bank.

The Successful bidder shall maintain all proper records, particularly but without limitation accounting records, required by any law, code, practice or corporate policy applicable to it from time to time including records, returns and applicable documents under the Labour Legislation.
The Successful bidder shall ensure payment of minimum wages to persons engaged by it as fixed from time to time under the Minimum Wages Act, 1948. In case the same is not paid, the liability under the act shall solely rest with the successful bidder. Further, bidder to ensure that salary payments to resources deployed for Bank's Project is done through Transfer mode from bidder's Bank a/c directly to credit into their specific salary accounts only. No cash payments are to be made to provide remuneration for services provided to the Bank on behalf of selected bidder.

Service Provider shall procure and maintain all necessary licenses, permissions, approvals from the relevant authorities under the applicable laws especially contract Labour (Abolition) Act, EPF Act and ESI Act, throughout the currency of this Agreement.

Service Provider shall be solely liable & responsible for compliance of all applicable Labour Laws in respect of its employees, agents, representatives and sub-Contractors and in particular Laws relating to terminal benefits such as Pension, Gratuity, Provident Fund, Bonus or other benefits to which they may be entitled and the Laws relating to Contract Labour, Minimum Wages, registration of labours, ESIC, PF, workman compensation etc. and the Bank shall have no liability in these regards. Salaries of employees of the vendors are being directly credited to the employees' account. Confirmation that Payment of statutory dues like PF, ESIC etc. are being made on time to the employees be submitted along with the monthly bills raised by vendor.

The bidder should adhere to laws of land and rules, regulations and guidelines prescribed by various regulatory, statutory and Government authorities. The Bidder is to compliant to all existing regulatory guidelines of GOI /RBI and also adheres to requirements of the IT Act 2000 (including amendments in IT Act 2008) and Payment and Settlement Systems Act

2007 and amendments thereof. A self-declaration to this effect is to be submitted by the bidder.

The Bank reserves the right to conduct an audit / ongoing audit of the services provided by the bidder. The Bank reserves the right to ascertain information from the banks and other institutions to which the bidders have rendered their services for execution of similar projects.

Compliance in obtaining approvals/permissions/licenses: The Vendor(s) shall promptly and timely obtain all such consents, permissions, approvals, licenses, etc, as may be necessary or required for any of the purposes of this project or for the conduct of their own business under any applicable Law, Government Regulation/Guidelines and shall keep the same valid and 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 and all purposes of this Tender and in the event of any failure or omission to do so, shall indemnify, keep indemnified, hold harmless, defend, protect and fully compensate the Bank and its employees/ officers/ staff/ personnel/ representatives/agents from and against all third party 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 the Bank will give notice of any such claim or demand of liability within reasonable time to the Vendor(s).

This indemnification is only a remedy for the Bank. The Vendor(s) is not absolved from its responsibility of complying with the statutory obligations as specified above. Indemnity would be limited to court and arbitration awarded damages and shall exclude consequential and incidental damages. However indemnity would cover direct and indirect damages, loss or liabilities suffered by the Bank arising out of claims made by its customers and/or regulatory authorities.

4.11 Conflict of Interest

The Bidder shall disclose to the Bank in writing all actual and potential conflicts of interest that exist, arise or may arise (either for the Bidder or the Bidder's team) in the course of performing the Service(s) as soon as practical after it becomes aware of that conflict.

4.12 Inspection of Records

Subject to receipt of prior written notice, all Vendor(s) records/premises with respect to any matters covered by this Tender shall be made available to the Bank or its designees and regulators including RBI, at any time during normal business hours, as often as the Bank deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data. Said records are subject to examination. Bank's auditors would execute confidentiality agreement with the Vendor(s), provided that the auditors would be permitted to submit their findings to the Bank pertaining to the scope of the work, which would be used by the Bank. The cost of the audit will be borne by the Bank.

The scope of such audit would be limited to Service Levels being covered under the contract, and financial information would be excluded from such inspection, which will be subject to the requirements of statutory and regulatory authorities. Such audit shall be conducted within normal working hours of the Vendor(s) and the Bank's auditors shall comply with confidentiality and security requirements as specified by the Vendor(s).

4.13 Publicity

Any publicity by either party in which the name of the other party is to be used should be done only with the explicit written permission of such party.

The bidder agrees to make no reference to Bank or this procurement or resulting contract in any literature, promotional material, brochures, sales presentation or the like without the express prior written consent of Bank.

4.14 Solicitation Of Employees

Both the parties agree not to hire, solicit, or accept solicitation (either directly, indirectly, or through a third party) for their employees directly involved in this contract during the period of the contract and one year thereafter, except as the parties may agree on a case-by-case basis. The parties agree that for the period of the contract and one year thereafter, neither party will cause or permit any of its directors or employees who have knowledge of the agreement to directly or indirectly solicit for employment the key personnel working on the project contemplated in this proposal except with the written consent of the other party. The above restriction would not apply to either party for hiring such key personnel who (i) initiate discussions regarding such employment without any direct or indirect solicitation by the other party (ii) respond to any public advertisement placed by either party or its affiliates in a publication of general circulation or (iii) has been terminated by a party prior to the commencement of employment discussions with the other party.

4.15 Limitation of Liability

Vendor(s) aggregate liability under the Contract shall be limited to a maximum of the Contract value. This limit shall not apply to third party claims for IP Infringement indemnity, bodily injury (including Death) and damage to real property and tangible property caused by vendor(s)/s' gross negligence. For the purpose for the section, contract value at any given point of time, means the aggregate value of the purchase orders placed by bank on the vendor(s) that gave rise to claim, under this Tender. Vendor(s) shall not be liable for any indirect, consequential, incidental or special damages under the Agreement/ Purchase Order.

4.16 Signing of Pre-Contract Integrity Pact

To ensure transparency, equity, and competitiveness and in compliance with the CVC guidelines, this tender shall be covered under the Integrity Pact (IP) policy of the Bank. The pact essentially envisages an agreement between the prospective bidders/vendor(s) and the Bank committing the persons/officials of both the parties, not to exercise any corrupt influence on any aspect of the contract. The format of the agreement is enclosed as **Appendix-F** on stamp paper.

Signing of IP with Bank would be one of the preliminary qualifications for further evaluation. In other words, entering into this pact would be one of the preliminary qualifications for this tender and the pact shall be effective from the stage of invitation of bids till the complete execution of the contract. Any vendor(s)/ bidder did not sign the document or refusing to sign shall be disqualified in the bidding process.

Sh. Debal Kumar Gayen & Sh. Pramod Kumar Garg have been appointed as IEM (Independent External Monitor) for the bank. IEM can be contacted at: -

1. **Sh. Debal Kumar Gayen,**   **2. Sh. Pramod Kumar Garg**
    Email: gayen.dk@gmail.com   **Email: pkgarg.1957@gmail.com**
    Mob: +91-9113484729   **Mob: +91-9810778058**

4.17 Non-Disclosure Agreement

The bidder shall take all necessary precautions to ensure that all confidential information is treated as confidential and not disclosed or used other than for the purpose of project execution. Bidder shall suitably defend, indemnify Bank for any loss/damage suffered by Bank on account of and to the extent of any disclosure of confidential information. The bidder shall furnish an undertaking and have to sign a Non-Disclosure Agreement as per **Annexure-VII** on stamp paper. No media release, public announcement or any other reference to the RFP or any program there under shall be made without the written consent from the Bank. Reproduction of this RFP, without the prior written consent of the Bank, by photographic, electronic or other means is strictly prohibited.

The Assistant General Manager
Punjab & Sind Bank,
HOIT Department,
2nd Floor, Plot No. 151, Sector 44,
Institutional Area,
Gurugram -122003

Dear Sir,

Sub: RFP For Delivery, Implementation and Management of on-premises Private Cloud Infrastructure.

Ref No._____ dated _____

With reference to the above RFP, having examined and understood the instructions including all annexure, terms and conditions forming part of the Bid, we hereby enclose our offer for IT Service and Operation Management Solution in the RFP document forming Technical Bid as well as Commercial Bid being parts of the above referred Bid. I am authorized to sign the documents in this regard and the copy of authorization letter/ POA / Board resolution is attached herewith.

We agree to abide by and fulfil all the terms and conditions of the tender and in default thereof, to forfeit and pay to you or your successors, or authorized nominees such sums of money as are stipulated in the conditions contained in tender together with the return acceptance of the contract.

We confirm that we have noted the contents of the RFP and have ensured that there is no deviation in filing our response to the RFP and that the Bank will have the right to disqualify us in case of any such deviations.

Until a formal contract is executed, this tender offer, together with the Bank's written acceptance thereof and Bank's notification of award, shall constitute a binding contract between us. We understand that The Bank is not bound to accept the lowest or any offer the Bank may receive. We also certify that we have not been blacklisted by any PSU Bank/IBA/RBI at the time of Bid submission and at the time of bid submission.

All the details mentioned by us are true and correct and if the Bank observes any misrepresentation of facts on any matter at any stage, Bank has the absolute right to reject the proposal and disqualify us from the selection process. The bank reserves the right to verify /evaluate the claims made by the Bidder independently.

Dated this ____day of _____, 2025
Authorized Signatory
Designation
Vendor's name
(Name of Address Authorized Signatory)
Company Name and Seal

ANNEXURE – II
Bidder's Information
(Should be submitted on Company's letter head with company seal and signature of the authorized person)

Reg: RFP For Delivery, Implementation and Management of on-premises Private Cloud Infrastructure

Ref: RFP No._____ dated_____

S.No.	Particulars	Details
1.	Name of the Company Address for Correspondence: Registered Office: Corporate Office:	
2.	Constitution (Proprietary/Partnership/Private Ltd./Public Ltd./LLP/Others)	
3.	Registration No. and date of establishment	
4.	Website Address	
5.	Email Address	
6.	Number of Years in the Business	
7.	Detail of Tender Fee and Earnest Money Deposited.	
8.	If any exemption required with respect to EMD or Start-up.	
9.	Income Tax PAN GSTN ID Beneficiary Bank Details Beneficiary Name Beneficiary Account Number Type of Account (OD/OCC etc.) IFSC Name of the Bank and Branch address	_____ _____
10.	Complete Production Site Address	
11.	Complete DR Site Address	
12.	Single Point of contact for this RFP Name: Designation: Mobile No.: Landline No.: Email-ID (any changes in the above should be informed in advance to Bank)	
13.	Name of Person Authorized to sign Designation. Mobile No. Email Address	

Wherever applicable submit documentary evidence to facilitate verification.

DECLARATION:
I/We hereby declare that the terms and conditions of the tender stated herein and as may be modified/mutually agreed upon are acceptable and binding to me/us. We understand and agree and undertake that: -

1. The Bank is not bound to accept the lowest bid or may reject all or any bid at any stage at its sole discretion without assigning any reason, therefore.

2. If our Bid for the above job is accepted, we undertake to enter into and execute at our cost, when called upon by the Bank to do so, a contract in the prescribed form. Unless and until a formal contract is prepared and executed, this bid together with your written acceptance thereof shall constitute a binding contract between us.

3. We have read and understood all the terms and conditions and contents of the RFP and also undertake that our bid conforms to all the terms and conditions and does not contain any deviation and misrepresentation. We understand that the bank reserves the right to reject our bid on account of any misrepresentation/deviations contained in the bid.

4. Bank may accept or entrust the entire work to one Bidder or divide the work to more than one bidder without assigning any reason or giving any explanation whatsoever and the Bank's decision in this regard shall be final and binding on us.

5. I/ We do not have any conflict of interest as mentioned in the RFP document.

6. I/We submit this application under and in accordance with the terms of the RFP document and agree and undertake to abide by all the terms and conditions of the RFP document.

7. The Prices submitted by us have been arrived at without agreement with any other Bidder of this RFP for the purpose of restricting competition.

8. The prices submitted by us have not been disclosed and will not be disclosed to any other Bidder responding to this RFP.

9. We have not induced or attempted to induce any other Bidder to submit or not to submit a Bid for restricting competition.

10. We have quoted for all the services/items mentioned in this RFP in our price Bid.

11. The rate quoted in the price Bids are as per the RFP and subsequent pre-Bid clarifications/ modifications/ revisions furnished by the Bank, without any exception.

12. We agree to the splitting of order in the proportion as stated in the RFP at the discretion of Bank.

13. We certify that while submitting our Bid document, we have not made any changes in the contents of the RFP document, read with its amendments/clarifications provided by the Bank.

14. If our bid is accepted, we are to be jointly and severally responsible for the due performance of the contract.

15. We ensured that salary payments to resources deployed for Bank's Project is done through Transfer mode from bidder's Bank a/c directly to credit into their specific salary accounts only. No cash payments are to be made to provide remuneration for services provided to the Bank on behalf of the selected bidder.

16. Bidder means the vendor(s) who is decided and declared so after examination of commercial bids.

17. We ensure that the entire data relating to payment systems operated by them will be stored in a system only in India. This data should include the full end-to-end transaction details / information collected / carried / processed as part of the message / payment instruction.

18. We confirm that Payment of statutory dues like PF, ESIC etc. are being made on time to the employees.

Date: Place:
Bidder's Authorized Signatory
Designation
Bidder's name   Company Name and Seal

ANNEXURE - III
Bid Security Declaration
(To be stamped in accordance with stamp act)

(Should be submitted by eligible MSEs/Startups on Company's letter head with company seal and signature of the authorized person)

Date: _____

To,
Assistant General Manager (IT)
Punjab & Sind Bank,
HOIT Department,
Plot No.151, Sector 44,
Institutional Area, Gurugram-   122003

Dear Sir,

We, the undersigned, declare that:

We, M/s……………………………….. (herein referred to as bidder) understand that, according to bid clause No. 1.12, bids may be supported with a Bid Security Declaration, bidder render the declaration that:-

Bank may proceed against us for recovery of actual direct losses as per the remedy available under an applicable law (maximum up to Rs………../-) and In case of Execution of Bid Security Declaration, we, M/s……………………………….may be suspend for three (3) years from being eligible to submit our bids for any contracts with the Bank if we, M/s…………………………….. are in breach of our obligation(s) under the bid conditions, in case we, M/s……………………………..:-

- Fails to honor submitted bid; and/or
- If the bidder withdraws the bid during the period of bid validity (180 days from the date of opening of bid).
- If the bidder makes any statement or encloses any form which turns out to be false, incorrect and / or misleading at any time prior to signing of contract and/or conceals or suppresses material information; and / or
- The selected bidder withdraws his tender before furnishing the unconditional and irrevocable Performance Bank Guarantee.
- The bidder violates any of the provisions of the terms and conditions of this tender specification.
- In case of the successful bidder, if the bidder fails:
  - To sign the contract in the form and manner to the satisfaction of Punjab & Sind Bank
  - To furnish Performance Bank Guarantee in the form and manner to the satisfaction of Punjab & Sind Bank either at the time of or before the execution of Agreement.
  - Bank may proceed against the selected bidder in the event of any evasion, avoidance, refusal or delay on the part of bidder to sign and execute the Purchase Order / Service Level Agreements or any other documents, as may be required by the Bank, if the bid is accepted.

We, M/s…………………………….understand that this declaration shall expire if we are not the successful bidder and on receipt of purchaser's notification of the award to another bidder; or forty-five days after the validity of the bid; whichever is later.

Name of Signatory

Designation

ANNEXURE-IV
Pre-Qualification Criteria

Ref: RFP No._____ dated_____

We have carefully gone through the contents of the above referred RFP along with replies to pre-bid queries & amendment, if any, and furnish the following information relating to Pre-Qualification Criteria.

Sr.	ELIGIBILITY CRITERIA	SUPPORTING DOCUMENTS TO BE SUBMITTED	Submitted Document along with page no
1.	Proof of Earnest Money Deposit	To be submitted along with the bid.	
2.	The Bidder should be a partnership firm registered under LLP Act, 2008/Indian Partnership Act, 1932 or Company in India as per Indian Companies Act, 1956 or Indian Companies Act, 2013 and should have been in operation for last 5 years as on RFP date.	Copy of the certificate of incorporation issued by The Registrar of Companies.	
3.	The bidder should have valid PAN and GST Registration in India	Copy of Valid PAN Card, GST Registration Certificates issued by competent authority in India	
4.	The bidder should have a minimum turnover of INR 300 Crore per annum for each of the past 3 financial years (i.e. 2022-23, 2023-24 & 2024-25). The bidder should have positive Net Worth as on 31/03/2025. The Bidder should be profitable organization on the basis of profit before tax (PBT) for at least 02 (two) out of last 03 (three) financial years.	Provide CA Certificate mentioning the turnover and net worth for each financial year. and Audited Financial statements (Balance sheet & Profit & Loss statement). The CA certificate provided in this regard should be without any riders or qualification.	
5.	The bidder should be an authorized representative/partner of OEM in India. Bidder needs to provide Manufacturer Authorization Form (MAF) from OEM stating that bidder is authorized partner of OEM and authorized to participate in this tender and in case the bidder is not able to perform obligations as per contract during the contract period, OEM will	MAF from OEM as per Annexure-VI on their letter Head needs to be provided. (Name, designation, contact no & official mail ID of the signing authority must be clearly mentioned in the MAF.)	

Sr.	ELIGIBILITY CRITERIA	SUPPORTING DOCUMENTS TO BE SUBMITTED	Submitted Document along with page no
	provide contracted services within the stipulated time.		
6.	Bidder should have implemented and managing (end to end) at least two private Cloud setup using sophisticated tools and techniques in any scheduled commercial Bank/BFSI/Govt Organization (out of 2 projects, at least 1 project should be in Public Sector Bank) in India in the last 5 Years. The private cloud experience should be in same tool/hypervisor which is proposed by Bidder in this RFP's response. The minimum Work Order value should be of amount INR 60 Crore.	Copy of Purchase Order/Copy of Work Order and signoff from user organization mentioning successful implementation / migration of the solution. Contact details of client along with Email, Name and Contact Details.	
7.	The bidder must possess below certifications, at the time of bidding: • ISO 27001 • ISO 9001	Copy of valid certificates	
8.	Bidder must have supplied at least 20 servers, 200TB SAN Storage, 1 Enterprise Backup Solution, 5 Red hat (RHEL) Subscription and 100TB Object storage in past 3 years to any Govt./PSU organization.	Copy of Purchase Order	
9.	Bidder must have at least 250 technical manpower on their payroll, out of which at least 50 resources with experience in the proposed tools/solution as on the date of submission of the bid.	Declaration from HR head on company letterhead, countersigned by authorized signatory of the bidder.	
10.	The proposed OEM solution (private cloud) should be implemented in at least two Scheduled Commercial Banks (out of which at least 1 in Public Sector Bank) in India in last 5 years. Solution implemented should be live and running successfully as on date of RFP with minimum 50 nodes.	Credential letter/mail confirmation from the client OR Copy of Purchase Order/ SLA along with latest as on date of RFP and other supporting documents	

Sr.	ELIGIBILITY CRITERIA	SUPPORTING DOCUMENTS TO BE SUBMITTED	Submitted Document along with page no
11.	In case bidder is already having association with Punjab & Sind Bank as a service provider in any project. The Bidder should have good track record with Bank.	Bidder should submit satisfactory certificate from bank w.r.t timely delivery of project, support quality and technical expertise of manpower deployed. The certificate should be obtained from Bank post published date of the RFP.	
12.	The Bidder to provide information that none of its subsidiary or associate or holding company or companies having common director/s or companies in the same group of promoters/management or partnership firms/LLPs having common partners is not owned by any Director or Employee of the Bank.	Undertaking to be submitted duly signed by the authorised signatory of the Bidder.	
13.	The bidder has to provide confirmation that any of its subsidiary or associate or holding company or companies having common director/s or companies in the same group of promoters/management or partnership firms/LLPs having common partners has not participated in the bid process.	Letter of confirmation (self-certified letter signed by authorized official of the bidder).	
14.	Bidders should not be under debarment/blacklist period for breach of contract/fraud/corrupt practices by any Scheduled Commercial Bank/ Public Sector Undertaking / State or Central Government or their agencies/ departments on the date of submission of bid for this RFP and also certify that they have not been disqualified / debarred / terminated on account of poor or unsatisfactory performance and/or blacklisted by any Scheduled Commercial Bank / Public Sector Undertaking / State or Central Government or their Agencies / Departments at any time, during the last 3 years. (Refer GOI Cir. No F.1/20/2018-PPD dated 02.11.2021)	To be provided as per Annexure-XI.	

Sr.	ELIGIBILITY CRITERIA	SUPPORTING DOCUMENTS TO BE SUBMITTED	Submitted Document along with page no
15.	The bidder should not be involved in any litigation which threatens solvency of company.	Certificate is to be provided by the chartered accountant /statutory auditor, as per Annexure-X.	
16.	If the bidder is an authorized partner/System Integrator of the solution, its OEM should have been in existence for a minimum period of 10 years in India as on 31.03.2025.	Certificate of Incorporation / Supporting document from OEM.	
17.	The bidder/OEM should not be from a country which shares a land border with India unless the bidder/OEM is registered with the Competent Authority (as detailed in Office Memorandum-F.No.6/18/2019-PPD of Dept. of Expenditure, Ministry of Finance). bidder/OEM from a country which shares a land border with India means: a. An entity incorporated, established or registered in such a country; or b. A subsidiary of an entity incorporated, established or registered in such a country; or c. An entity substantially controlled through entities incorporated, established or registered in such a country; or d. An entity whose beneficial owner is situated in such a country; or e. An Indian (or other) agent of such an entity; or f. a natural person who is a citizen of such a country; or g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.	A declaration stating "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 CSP fulfil all the requirements in this regard and are eligible to participate in this RFP" to be submitted in Company's letter head.	
18.	Bidder should have direct support offices in Delhi/NCR and Mumbai. In case direct support office of the bidder is not present in Delhi/NCR then an undertaking to be provided by the Bidder stating that direct support would be provided by the	Letter of confirmation duly signed by the authorised signatory of the Bidder.	

Sr.	ELIGIBILITY CRITERIA	SUPPORTING DOCUMENTS TO BE SUBMITTED	Submitted Document along with page no
	bidder at Delhi/NCR whenever desired by the Bank.		
19.	Labour Law Compliance	Undertaking to be submitted duly signed by the authorised signatory of the Bidder.	
20.	Integrity Pact	Undertaking to be provided as per Appendix-F duly signed by the authorised signatory of the Bidder.	
21.	Non-Disclosure Agreement	To be submitted as per Annexure-VII duly signed by the authorised signatory of the Bidder.	

Date

Signature with seal
Name:
Designation:

ANNEXURE-V

ACCEPTANCE/ COMPLIANCE CERTIFICATE

Ref: RFP No._____ dated_____

All Terms and Conditions including scope of work

We here by undertake and agree to abide by all the terms and conditions/ scope of work stipulated by the Bank in this RFP including all addendum, corrigendum etc. Any deviation may result in disqualification of bids.

Punjab & Sind Bank is not bound by any other extraneous matters or deviations, even if mentioned by us elsewhere either in our proposal or any subsequent deviations sought by us, whether orally or in writing, and the Bank's decision not to accept any such extraneous conditions and deviations will be final and binding on us.

Signature:
Seal of company

Technical Specification

We certify that the systems/services offered by us for tender conform to the specifications stipulated by you with the following deviations

List of deviations

1)

_____

2)

_____

3)

_____

4)

_____

(If left blank it will be construed that there is no deviation from the specifications given above)

Signature:
Seal of company

ANNEXURE-VI

MANUFACTURER'S AUTHORIZATION FORM

RFP No:

(Letter to be submitted by the Manufacturer on firm's letter head –For Both Hardware and Software/licenses/subscription)

Deputy General Manager
Punjab & Sind Bank
Second Floor
IT Department
Plot Number 151, Sector 44,
Gurugram, 122003

Dear Sir,

Sub: Request for proposal for selection of vendor(s) for procurement of IT Service and Operation Management Solution vide RFP No: _____

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 Authorized Business Partner (ABP))* to submit a Bid, and sign the contract with you against the above RFP.

1. We hereby extend our full warranty for the Products and services offered by the above ABP against the above RFP.

2. We also undertake to provide any or all of the following materials, notifications, and information pertaining to the Products supplied by the ABP:

(a) Such Products as the Bank may opt to purchase from the ABP, provided, that this option shall not relieve the ABP of any warranty obligations under the RFP; and

(b) In the event of termination of production of such Products:

   i. advance notification to the Bank of the pending termination, in sufficient time to permit the Bank to procure needed requirements; and

   ii. Following such termination, furnishing at no cost to the Bank operations manuals, standards and specifications of the Products, if requested.

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

4. 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 are not from such a country or if from a country, has

been registered with competent authority. We certify that we fulfil all the requirements in this regard and our ABP is eligible to participate in the above RFP.

5. We hereby extend our full guarantee and warranty as per terms and conditions of the Bid and the contract for the equipment and services offered against this invitation for Bid offer by the above firm. We undertake to provide back-to-back support for spare and skill to the bidder for subsequent transmission of the same to the Bank. We also undertake to provide support services during warranty as well as AMC period if the above bidder authorized by us fails to perform in terms of the RFP.

Yours faithfully

Place:
Date:

Authorized Signatory
(Name of manufacturers)
Name:
Phone No.:
Fax:
E-mail:

ANNEXURE-VII

NON-DISCLOSURE AGREEMENT

All bidders must sign the Non-Disclosure Agreement (NDA) while submitting the response to the Request for proposal (RFP). Bidders must comply with all clauses mentioned in the NDA. No changes to the NDA are allowed.

NDA format is provided below.

(To be stamped in accordance with stamp act)

Strictly Private and Confidential

This Non-Disclosure Agreement made and entered into at…………………. This …………………..day……of…………..20……BY   AND   BETWEEN …………………………………… …………………….., a company incorporated under the Companies Act, 1956 having its registered office at ………….. (Hereinafter referred to as the Vendor which expression unless repugnant to the context or meaning thereof be deemed to include its permitted successors) of the ONE PART;

AND

Punjab & Sind Bank, a body corporate, established under the Banking Companies (Acquisition and Transfer of Undertakings) Act 1980 and having its Head Office at 21, Rajendra Place, New Delhi 110008 (hereinafter referred to as "Bank" which expression shall unless it be repugnant to the subject, meaning or context thereof, be deemed to mean and include its successors and assigns) of the OTHER PART.

The Vendor and Punjab & Sind Bank are hereinafter collectively referred to as "the Parties" and individually as "the Party".

WHEREAS:

1. Punjab & Sind Bank is engaged in the business of providing financial services to its customers and intends to engage service provider for procurement of IT Service and Operation Management Solution.
2. In the course of such assignment, it is anticipated that Punjab & Sind Bank or any of its officers, employees, officials, representatives or agents may disclose, or deliver, to the Vendor some Confidential Information (as hereinafter defined), to enable the Vendor to carry out the aforesaid Implementation assignment (hereinafter referred to as " the Purpose").
3. The Vendor is aware and confirms that all information, data and other documents made available in the RFP/Bid Documents/Agreement /Contract or in connection with the Services rendered by the Vendor are confidential information and are privileged and strictly confidential and or proprietary of Punjab & Sind Bank. The Vendor undertakes to safeguard and protect such confidential information as may be received from Punjab & Sind Bank.

   NOW, THEREFORE THIS AGREEMENT WITNESSED THAT in consideration of the above premises and the Punjab & Sind Bank granting the Vendor and or his agents, representatives to have specific access to Punjab & Sind Bank property / information and other data it is hereby agreed by and between the parties hereto as follows:

1. Confidential Information:

   (i) "Confidential Information" means all information disclosed/furnished by Punjab & Sind Bank to the Vendor whether orally, in writing or in electronic, magnetic or other form for the limited purpose of enabling the Vendor to carry out the proposed Implementation

assignment, and shall mean and include data, documents and information or any copy, abstract, extract, sample, note or module thereof, explicitly designated as "Confidential"; Provided the oral information is set forth in writing and marked "Confidential" within seven (7) days of such oral disclosure.

(ii) The Vendor may use the Confidential Information solely for and in connection with the Purpose and shall not use the Confidential Information or any part thereof for any reason other than the Purpose stated above.

Confidential Information in oral form must be identified as confidential at the time of disclosure and confirmed as such in writing within seven (7) days of such disclosure. Confidential Information does not include information which:

(a) is or subsequently becomes legally and publicly available without breach of this Agreement by either party,

(b) was rightfully in the possession of the Vendor without any obligation of confidentiality prior to receiving it from Punjab & Sind Bank,

(c) was rightfully obtained by the Vendor from a source other than Punjab & Sind Bank without any obligation of confidentiality,

(d) was developed by for the Vendor independently and without reference to any Confidential Information and such independent development can be shown by documentary evidence, or is/was disclosed pursuant to an order of a court or governmental agency as so required by such order, provided that the Vendor shall, unless prohibited by law or regulation, promptly notify Punjab & Sind Bank of such order and afford Punjab & Sind Bank the opportunity to seek appropriate protective order relating to such disclosure.

(e) the recipient knew or had in its possession, prior to disclosure, without limitation on its confidentiality.

(f) is released from confidentiality with the prior written consent of the other party.

The recipient shall have the burden of proving hereinabove are applicable to the information in the possession of the recipient. Confidential Information shall at all times remain the sole and exclusive property of the disclosing party. Upon termination of this Agreement, Confidential Information shall be returned to the disclosing party or destroyed, if incapable of return. The destruction shall be witnessed and so recorded, in writing, by an authorized representative of each of the parties.

Nothing contained herein shall in any manner impair or affect the rights of Punjab & Sind Bank in respect of the Confidential Information.

In the event that any of the Parties hereto becomes legally compelled to disclose any Confidential Information, such Party shall give sufficient notice to the other party to enable the other Party to prevent or minimize to the extent possible, such disclosure. Neither party shall disclose to a third party any Confidential Information or the contents of this Agreement without the prior written consent of the other party. The obligations of this Clause shall be satisfied by handling Confidential Information with the same degree of care, which the receiving party applies to its own similar confidential information but in no event less than reasonable care. The obligations of this clause shall survive the expiration, cancellation or termination of this Agreement

2. Non-disclosure: The Vendor shall not commercially use or disclose any Confidential Information, or any materials derived there from to any other person or entity other than persons in the direct employment of the Vendor who have a need to have access to and

knowledge of the Confidential Information solely for the Purpose authorized above. The Vendor shall take appropriate measures by instruction and written agreement prior to disclosure to such employees to assure against unauthorized use or disclosure. The Vendor may disclose Confidential Information to others only if the Vendor has executed a Non-Disclosure Agreement with the other party to whom it is disclosed that contains terms and conditions that are no less restrictive than these presents, and the Vendor agrees to notify Punjab & Sind Bank immediately if it learns of any use or disclosure of the Confidential Information in violation of terms of this Agreement.

Notwithstanding the marking and identification requirements above, the following categories of information shall be treated as Confidential Information under this Agreement irrespective of whether it is marked or identified as confidential:

a) Information regarding Punjab & Sind Bank and any of its Affiliates, customers and their accounts ("Customer Information"). For purposes of this Agreement, Affiliate means a business entity now or hereafter controlled by, controlling or under common control. Control exists when an entity owns or controls more than 10% of the outstanding shares or securities representing the right to vote for the election of directors or other managing authority of another entity; or

b) any aspect of Punjab & Sind Bank's business that is protected by patent, copyright, trademark, trade secret or other similar intellectual property right; or

c) business processes and procedures; or

d) current and future business plans; or

e) personnel information; or

f) Financial information.

3. Publications: The Vendor shall not make news releases, public announcements, give interviews, issue or publish advertisements or publicize in any other manner whatsoever in connection with this Agreement, the contents / provisions thereof, other information relating to this Agreement, the Purpose, the Confidential Information or other matter of this Agreement, without the prior written approval of Punjab & Sind Bank.

4. Term: This Agreement shall be effective from the date hereof and shall continue till expiration of the Purpose or termination of this Agreement by Punjab & Sind Bank, whichever is earlier. The Vendor hereby agrees and undertakes to Punjab & Sind Bank that immediately on termination of this Agreement it would forthwith cease using the Confidential Information and further promptly return or destroy, under information to Punjab & Sind Bank, all information received by it from Punjab & Sind Bank for the Purpose, whether marked Confidential or otherwise, and whether in written, graphic or other tangible form and all copies, abstracts, extracts, samples, notes or modules thereof. The Vendor further agree and undertake to Punjab & Sind Bank to certify in writing upon request of Punjab & Sind Bank that the obligations set forth in this Agreement have been complied with.

Any provisions of this Agreement which by their nature extend beyond its termination shall continue to be binding and applicable without limit in point in time except and until such information enters the public domain

5. Title and Proprietary Rights: Notwithstanding the disclosure of any Confidential Information by Punjab & Sind Bank to the Vendor, the title and all intellectual property and proprietary rights in the Confidential Information shall remain with Punjab & Sind Bank.

6. Remedies: The Vendor acknowledges the confidential nature of Confidential Information and that damage could result to Punjab & Sind Bank if the Vendor breaches any provision of this Agreement and agrees that, if it or any of its directors, officers or employees should engage or cause or permit any other person to engage in any act in violation of any provision hereof, Punjab & Sind Bank may suffer immediate irreparable loss for which monetary compensation

may not be adequate. Punjab & Sind Bank shall be entitled, in addition to other remedies for damages & relief as may be available to it, to an injunction or similar relief prohibiting the Vendor, its directors, officers etc. from engaging in any such act which constitutes or results in breach of any of the covenants of this Agreement.

Any claim for relief to Punjab & Sind Bank shall include Punjab & Sind Bank's costs and expenses of enforcement (including the attorney's fees).

7. Entire Agreement, Amendment and Assignment: This Agreement constitutes the entire agreement between the Parties relating to the matters discussed herein and supersedes any and all prior oral discussions and / or written correspondence or agreements between the Parties. This Agreement may be amended or modified only with the mutual written consent of the Parties. Neither this Agreement nor any right granted hereunder shall be assignable or otherwise transferable.

8. Dispute Resolution: Disputes, if any, arising out of this Agreement remaining unresolved by mutual discussions shall be referred to a panel of three Arbitrator. Each Party to the dispute shall appoint one arbitrator each and the two arbitrators shall jointly appoint the third or the presiding arbitrator. The provisions of the Arbitration & Conciliation Act, 1996, shall accordingly apply. The venue for such Arbitration shall be New Delhi. The language of the Arbitration shall be English.

9. Governing Law: The provisions of this Agreement shall be governed by the laws of India and the competent court at Delhi shall have exclusive jurisdiction in relation thereto even though other Courts in India may also have similar jurisdictions.

10. Indemnity: The Vendor shall defend, indemnify and hold harmless Punjab & Sind Bank, its affiliates, subsidiaries, successors, assigns, and their respective officers, directors and employees, at all times, from and against any and all claims, demands, damages, assertions of liability whether civil, criminal, tortuous or of any nature whatsoever, arising out of or pertaining to or resulting from any breach of representations and warranties made by the Vendor. and/or breach of any provisions of this Agreement, including but not limited to any claim from third party pursuant to any act or omission of the Vendor, during discharge of its obligations under this Agreement.

11. General: The Vendor shall not reverse - engineer, decompile, disassemble or otherwise interfere with any software disclosed hereunder.

All Confidential Information is provided "as is". In no event shall the Punjab & Sind Bank be liable for the inaccuracy or incompleteness of the Confidential Information. None of the Confidential Information disclosed by Punjab & Sind Bank constitutes any representation, warranty, assurance, guarantee or inducement with respect to the fitness of such Confidential Information for any particular purpose.

Punjab & Sind Bank discloses the Confidential Information without any representation or warranty, whether express, implied or otherwise, on truthfulness, accuracy, completeness, lawfulness, merchant ability, fitness for a particular purpose, title, non-infringement, or anything else.

12. Waiver: A waiver (whether express or implied) by Punjab & Sind Bank of any of the provisions of this Agreement, or of any breach or default by the Vendor in performing any of the provisions hereof, shall not constitute a continuing waiver and such waiver shall not prevent Punjab & Sind Bank from subsequently enforcing any of the subsequent breach or default by the Vendor under any of the provisions of this Agreement.

In witness whereof, the Parties hereto have executed these presents the day, month and year first herein above written.

For and on behalf of ------------- Ltd.   For and on behalf of Punjab & Sind Bank
    (Designation)   (Designation)

ANNEXURE -VIII

Escalation Matrix
(Should be submitted by on Company's letter head with company seal and signature of the authorized person)

Ref: RFP No._____ dated _____.

Name of the Company/Firm:

<div align="right">Service-Related Issues</div>

Sl. No.	Name	Designation	Full Office Address	Phone No.	Mobile No.	Email address
a.		First Level Contact				
b.		Second level contact (If response not received in 4 Hours)				
c.		Regional/Zonal Head (If response not recd in 24 Hours)				
d.		Country Head (If response not recd in 48 Hours)				

Any change in designation, substitution will be informed by us immediately.

Date   Signature with seal
Name:
Designation:

ANNEXURE - IX
Format for Bill of material (BOM)

Name of the Bidder:

RFP: RFP for Delivery, Implementation and Management of on-premises Private Cloud Infrastructure

BOM- **As per attached Separate Excel sheet.**

*Note: -
1. Prices shall be expressed in the Indian Rupees only. The bidder must quote price exclusive of all applicable taxes and duties. There should not be any separate incidental/travel/any other hidden charges. The cost will not depend on any variation in dollar exchange rate/change in tax structure during tenure of the project.
2. Bill of material has to be submitted on the letter head and is signed by an Authorized Signatory with Name and Seal of the Company.
3. We agree that no counter condition/assumption in response to commercial bid will be accepted by the Bank. Bank has a right to reject such bid.
4. We are agreeable to the payment schedule as per "Payment Terms" of the RFP.
5. In addition to the indicative hardware procurement, Bank will augment additional hardware, software, storage space etc. based on Bank's requirement from time to time at a price fixed as per Bill of Material and TCO of this RFP over a period of 2 years. For any future upgrades, Bank will use the price quoted in the Bill of Material as the reference price (rate contract) for arriving at the cost of newly required hardware or software on pro-rata basis and Upgradation will be done by selected bidder/OEM during contract period.

Date:

Name of the Bidder   **Seal and Signature of Authorized Person**

ANNEXURE – X

Litigation Certificate

Reg.: RFP For Delivery, Implementation and Management of on-premises Private Cloud Infrastructure.

To be provided by Statutory Auditor/Chartered Accountant

This is to certify that M/s_____, a company incorporated under the companies act, 1956 with its headquarters at, _____ is not involved in any litigation which threatens solvency of the company.

Date: _____
Place: _____

Signature of CA/Statutory Auditor

Name of CA/Statutory Auditor:
Designation:
Email ID:
Mobile No:
Telephone No.:
Seal of Company:

ANNEXURE – XI

Undertaking for non-blacklisting

Deputy General Manager
Punjab & Sind Bank
Second Floor
IT Department
Plot Number 151, Sector 44,
Gurugram, 122003

Dear Sir,

Reg.: RFP For Delivery, Implementation and Management of on-premises Private Cloud Infrastructure

We M/s_____, a company incorporated under the companies act, 1956 with its headquarters at, _____ do hereby confirm that we have not been blacklisted/ debarred by the Government / Government agency / Banks / Financial Institutions in India during last 3 years.

This declaration has been submitted and limited to, in response to the tender reference mentioned in this document

Thanking You,
Yours faithfully,

Date: _____
Place: _____
Signature of Authorized Signatory
Name of Signatory:
Designation:
Email ID:
Mobile No:
Telephone No.:
Seal of Company:

Note: *Bidders have to ensure 100% Compliance to the below mentioned specifications. If not complied then bid will be rejected.*

a) General Compliance

S.No.	Technical Specification	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks (With Reference Page No./Clause No. in Bidder's Technical Documents)
1	Proposed private cloud solution should have all native and built in capabilities like Compute Virtualization, Software Defined Networking, Software Defined Storage, Automation, Container Runtime, Distributed Firewall and Load Balancer from a single OEM.	Y		
2	The proposed private cloud solution should support storage from external fiber channel SAN.	Y		
3	All proposed hardware components (Servers, storage systems, SAN switches and any other related infrastructure) should be fully compatible and interoperattable with each other.	Y		
4	All the software components must be supported by the OEM and should not use any community supported editions.	Y		
5	There should not be any freeware in proposed solution.	Y		
6	All hardware should be from original equipment manufacturers (OEM) and should be currently supported (not end of sale or end of life).	Y		
7	All equipment's are proposed with redundant components (no single point of failure)	Y		

Note: The Bidder must mandatorily mention the exact page number and clause or section reference from their submitted technical proposal or product documentation which demonstrates compliance with each functional specification/requirement. Any response marked as 'Complied' without a valid page or clause reference shall be treated as incomplete and may be liable for rejection or scoring penalties.

b) Private Cloud Software Specifications

Sr. No	Description	Mandatory Compliance (Y/N)	Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
	Private Cloud General Specifications			
1	All the software components must be supported by the OEM and should not use any open source and community supported editions.	Y		
2	The solution should be deployed on-premises and should have single pane of glass for management and operations of existing setup (Vmware Virtualization) and proposed setup.	Y		
3	The proposed solution shall provide continuous availability for critical application workloads in the event of server failures by creating a live shadow instance of a virtual machine that is always up to date with the primary virtual machine with zero downtime	Y		
4	The proposed solution should provide a unified platform for running containers / native pods and virtual machines with unified control over compute, network and storage resources using single monitoring and management tool for creating virtual machines and containers.	Y		
5	The proposed private cloud software should provide capabilities for K8s container registry, service mesh, multi cluster management, ingress LB / controller, and DNS management.	Y		
6	The proposed solution must have inbuilt VM and OS monitoring including leading Application, Database, Compute, and Storage Systems monitoring which provide single pane for all troubleshooting capability by adding topology based relationship view.	Y		
7	The proposed solution should have ability to extend agent-based application monitoring on supported OS for more detailed analytics for applications across physical server, virtual machines and containers on the proposed private cloud monitoring UI.	Y		
8	The Solution provided shall have licenses to monitor the resources utilized for the a particular VM/Application & giving the insight of the underlying infrastructures used (like server, Storage and additional hardware components like switches, routers, firewalls, load balancers, etc. associated with the infrastructure)	Y		

9	The Solution provided should have the below functionalities. 1. Persona Based Dashboards and Reports with customization should be available as part of the solution. 2.Capacity Forecasting, Plan for future projects including Migrations using What-If-Analysis, Cost Visibility into the current utilization , compliance and wastages in provisioning etc. 3.The solution should assist in troubleshooting of workloads underlying infrastructure by correlating metrics, events, property changes, anomalies and associated infrastructure logs as well.	Y		
10	On demand single click upgrade for the complete infrastructure including, hypervisor element manager, BIOS, Drive/NIC Firmware, Hypervisor, etc.	Y		
	Hypervisor Platform Specifications		**Compliance**	
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.	Y		
2	The proposed virtualization software must fully support Oracle, PostgreSQL, MYSQL & Microsoft SQL database. (If required, the bidder must provide a publicly available Oracle & Microsoft SQL document confirming official certification & support for the virtualization software.)	Y		
3	The solution shall provide the ability to rapidly on-board new hosts by automatically deploying reference configurations including networking settings	Y		
4	The proposed solution should have the flexibility to assign storage policies at a VM level and at cluster level	Y		
5	The solution shall intelligently place and balance virtual machines on appropriate available storage tier based on SLA, performance and availability requirements	Y		
6	The proposed hypervisor software must support block-level SAN storage connectivity via HBA ensuring seamless integration with bank's SAN infrastructure and enabling VMs access to storage using Fiber Channel connectivity from the Servers & Storage	Y		
7	The proposed platform should integrate with Container Native Storage, Software defined Storage and SAN Storage for state full applications, the solution should support the Kubernetes constructs like Volumes, PV, PVC and StorageClass, Stateful-Sets.	Y		
8	Proactive High availability capability that utilizes server health information and migrates VMs from degraded hosts before problem occurs	Y		

			Compliance	
9	The solution shall provide the ability to hot-add CPU & memory and hot-plug disks and NICs (provided the same is supported by the guest operating system)	Y		
10	The solution shall provide replication capability of virtual machine data over the LAN or WAN. This replication should simplify management enabling replication at the virtual machine level.	Y		
11	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	Y		
12	The proposed hypervisor solution shall provide capability of live patching without requiring host reboots, ensuring minimal downtime and continuous availability.	Y		
13	Virtualization software should support live Virtual Machine migration between different generations of CPUs in the same cluster.	Y		
14	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	Y		
15	Virtualization software should provide encryption capabilities at VM-level and cluster level for both data at-rest and in-motion.	Y		
16	The virtualization solution should support live migration of virtual machines between the existing VMware (ESXi 7.0.3) setup and the proposed new private cloud setup.	Y		
17	The solution shall provide the ability to boot from iSCSI, FCoE, Fibre Channel SAN and locally attached USB storage.	Y		
18	The solution must support for heterogeneous vGPU profiles with different memory sizes on the same GPU to allow different types of workloads.	Y		
19	Solution must support GPU sharing between workloads by using the time slicing or multi instance GPU mechanism.	Y		
20	Solution should have capabilities to monitor GPU metrics at the cluster and host level.	Y		
21	The solution must support live migration of the VMs with vGPU.	Y		
	Private Cloud Platform Automation		**Compliance**	
1	Solution should provide automation and orchestration solution for automated delivery of IaaS, PaaS, XaaS services so that when VM/app is created it should automatically get the required virtualized compute, storage, networking, firewall, load balancing services without any manual intervention. All compute, network, storage, security, load balancing policies must follow the life cycle of VM and movement within and across DC & DR.	Y		

			Compliance	
2	The solution should have Life Cycle Management Work flows: Provisioning, cloning, re-sizing, snapshot, deletion etc. There should be zero manual intervention in this entire process.	Y		
3	The Solution should have the capabilities for customization of dashboards. Bidder should also create the required dashboards as per PSBs requirement.	Y		
4	Must be able to maintain versioning of blueprints/ templates.	Y		
5	Administrator must be able to manage/control the Repository view for the tenants and enable multi tenancy. Any authorised user must be able to deploy the application using the published blueprint/template in his application Repository.	Y		
6	The solution should provide capability of generating reports for usage, performance, compliance, chargeback , health, forecasting, capacity etc.	Y		
7	The solution must have an approval process to review, reject or approve the blueprints/templates.	Y		
8	The solution shall support approval policies integrated with email/SMS notifications such that approvals/ rejections can be done.	Y		
9	The solution should provide capacity optimization capabilities to identify over-provisioned & under-provisioned resources and provide recommendations, alerts and automated actions on right-sizing and resource consumption so they can be right-sized for adequate performance and avoid resource wastage. Should provide visibility of capacity and VMs which can be reclaimed and cost visibility of the reclaimed capacity and VMs.	Y		
	Private Cloud Platform Management		**Compliance**	
1	Virtualization management software console shall provide a single view of all virtual machines, Host and Cluster allow monitoring of system availability and performance and automated notifications with email alerts.	Y		
2	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.	Y		
3	The virtualization should have capability to simplify host deployment and compliance by creating virtual machines from configuration templates.	Y		
4	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.	Y		
5	Virtualization management software console shall provide capability to monitor and analyze virtual machines, and server utilization and availability with detailed performance graphs.	Y		

			Compliance	
6	Virtualization management software console shall maintain a record of significant configuration changes and the administrator/user who initiated them.	Y		
7	Virtualization management software console shall provide the Manageability of the complete inventory of virtual machines, and physical servers with greater visibility into object relationships.	Y		
8	The proposed solution must support the migration of virtual machines, physical servers, and legacy workloads to the new private cloud setup with minimal downtime, ensuring compatibility across different infrastructure types.	Y		
9	The proposed solution must include built-in WAN optimization features such as traffic compression, deduplication, and latency reduction to ensure efficient and high-speed migration of workloads over long-distance links without excessive bandwidth consumption.	Y		
11	The management software should manage Kubernetes clusters deployed in the solution and the Licenses for the same must be part of the proposed solution.	Y		
12	The proposed solution should be able to perform bulk migration of live VMs by scheduling the movement of hundreds of VMs in parallel.	Y		
13	The proposed solution should enable mobility of VM's across multiple data centers and clouds – Move VMs within your data centre, from local data center to the remote datacentre to optimize resource utilization.	Y		
14	The proposed solution must include a centralized log management and analytics platform to ensure comprehensive visibility, troubleshooting, and auditing without using any external tool/components. The solution must provide: – Centralized ingestion, indexing, and analysis of logs from compute, storage, network, and security components to enable proactive monitoring and rapid troubleshooting. – Advanced query capabilities, pattern detection, and event correlation for identifying anomalies and performance bottlenecks across the private cloud environment. – Customizable alerts for critical system events, integration with security and monitoring tools, and automated log retention policies to meet compliance and audit requirements.	Y		
	Private Cloud Software defined Network		**Compliance**	
1	The solution shall provide a software defined network virtualization layer which is in-built in proposed private cloud hypervisor that allows faithful delivery of network services in software without dependence on specific make/model of networking devices/appliances.	Y		
2	The solution should enable integration of leading third-party network and security solutions through open architecture and standard APIs. The bidder shall provide a list of ecosystem vendors that integrate with the framework.	Y		
3	The solution shall provide ready integration with the proposed platform to automate delivery of networking &	Y		

	security services such as switching, routing and firewalling.			
4	The solution should provide distributed routing so that the routing between Virtual Machines with different IP Subnets can be done in the logical space of Hypervisor without traffic going out of the physical router.	Y		
5	The bidder shall ensure that all proposed components shall have the ability to run on standard server infrastructure based on the x86 architecture without having any dependence on specific make/model of infrastructure components.	Y		
6	The solution should support service insertion via the TOR or at the Hypervisor / SDN level for all/specific traffic between VMs (north-south and east-west traffic) in the Data Center can be redirected to a dynamic chain of security partner services.	Y		
7	The SDN solution must provide native anti-spoofing protection, ensuring that virtual machines can only use assigned IP and MAC addresses. It should automatically detect and block unauthorized address usage, support manual or automated approval mechanisms, and integrate with security policies to prevent IP spoofing and unauthorized network access.	Y		
8	The SDN solution must support Receive Side Scaling (RSS) to optimize network performance by distributing incoming traffic across multiple physical CPU cores	Y		
9	The solution must support the creation and management of multiple Virtual Private Clouds (VPCs) within SDN, ensuring network isolation, flexible security policies, and centralized management for different projects	Y		
10	The SDN solution should have the capability of creating multiple tenants like VPC for different departments / projects so that there is a complete isolation between VPC along with a separate user for each tenant and VPC using RBAC.	Y		
11	The solution should have the capability to extend the same subnet between overlay segments and physical VLAN segments.	Y		
13	The solution should support Virtual edge devices as Virtual appliance for networking and security functions for routing connectivity to physical network, NAT, Firewalling.	Y		
14	The Solution should be capable of supporting major hardware OEMs like Juniper, Arista, Cisco, HPE and Dell.	Y		
15	The solution must include a built-in networking and security framework for containers, supporting seamless pod-to-pod communication and ingress traffic management. It should be compatible with CNI plug-ins and provide advanced networking features out of the box.	Y		

16	The SDN solution should support security policies for virtual machines & K8s workload and can be defined based on grouping construct with dynamic or static membership criteria based on VM name, tags, logical switch, logical port, IPSets, computer OS Name, computer name, Active Directory and other K8s label.	Y		
17	The solution should offer comprehensive flow assessment and analytics and security groups and firewall rules suggestion for the purpose of implementing a zero trust security within the data- center.	Y		
18	The proposed solution must provide a comprehensive, native network monitoring platform that integrates with virtual machines, containers, firewalls, load balancers, switches, and routers to deliver end-to-end network visibility. It should enable real-time traffic analysis, performance monitoring, and security insights across the entire infrastructure without relying on third-party products.	Y		
19	The proposed solution should support traffic visibility, network monitoring, distributed firewall planning and management.	Y		
20	The solution should automatically generate policy recommendations based on intrinsic understanding of application topology.	Y		
21	The private cloud security solution should offer converged visibility and analytics that tie together compute, network, storage and security and provide Physical to Virtual Correlation and troubleshooting. This visibility must also report the amount of East-West, North-South, Internet, virtual machine to virtual machine, virtual machine to physical traffic within the datacentre.	Y		
22	The SDN solution should support distributed routing in-kernel with support of dynamic Routing and static Routing protocol including support for Ipv6	Y		
23	The SDN solution should provide for creation of complete application blueprints along with required virtual networking (routing, load balancing) for the application using a user-friendly graphical interface by using drag & drop functionality. This feature should be available out of the box.	Y		
Availability			**Compliance**	
1	Solution should support DR automation solution delivered from virtualization manager console for automated failover, failback, and recovery of application VMs in proper sequence to other data centre with single click	Y		
2	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. Should receive automatic alerts about possible site failure.	Y		
3	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.	Y		

4	The proposed solution shall provide continuous availability for critical application workloads in the event of server failures by creating a live shadow instance of a virtual machine that is always up to date with the primary virtual machine with zero downtime.	Y		
5	The solution should be able to integrate with leading backup vendor OEM's	Y		
6	The solution should have the capability to create a stretched cluster between two regions to achieve Zero RPO for data replication between the two regions	Y		
	Software Load Balancer (L4 to L7)		**Compliance**	
1	The proposed ADC solution must be a **Software based** solution running on Industry grade server which supports Multitenancy with Role based Access Control (RBAC).	Y		
2	The ADC solution's licensing must provide flexibility to repurpose the license to split into smaller sized virtual load balancer instances easily.	Y		
3	Proposed solution should provide SLB (Server Load Balancing), GSLB (Global Server Load Balancing) & Ingress controller functionality without additional licenses	Y		
4	Proposed solution should support dedicated port for data traffic and out of band management purpose from day one.	Y		
5	Proposed solution support horizontal scaling without disruption to existing traffic.	Y		
6	The solution must be able to handle up to 2500 SSL TPS (RSA), 1.5 Lakh L7 RPS and 10Gbps L4 Throughout with a single appliance.	Y		
7	The proposed solution should support Scale-out and Scale-in for LB instances & backend servers features without disruption to existing traffic flows	Y		
8	Proposed solution should have capability to perform load balancing in reverse proxy mode	Y		
9	Solution should support end to end SSL support including SSL offload - the ability to manage client side SSL traffic by terminating incoming SSL connections and sending the request to the server in clear text. Should support RSA 2048, ECC 128, 256 bit encryption with TLS 1.2 and TLS 1.3.	Y		
10	The solution should have segregation of control plane & data plane in different appliance.	Y		
11	The solution should have the ability to Auto-Build the load balancer, Auto-Heal a failing load balancer and discover the VM resources on cloud.	Y		
12	LB instances must be deployed in active/active mode. If an LB in the group fails then Virtual services that had been running are not interrupted.	Y		
	Analytics Capabilities/Features		**Compliance**	
1	The solution should provide Application performance monitoring through detailed analytics at a per application level. The solution should have in-built Analytics reporting within the centralized manager without the need to add an external reporting or analytics engine	Y		

2	Should have ability to extract real-time end-to-end latencies details for all applications (VIPs) including Client RTT, Server (RTT), Request Transfer time, Response Transfer time, and Application response time. Security insights on DDoS attacks, SSL/TLS insights and security posture strength	Y		
3	Should provide real-time detailed ADC Service health, client connections, load distribution metrics, throughput, and performance statistics.	Y		
	Clustering and Failover		**Compliance**	
1	Solution should provide HA module should support automatic and manual synchronization of ADC configuration from primary/master device to secondary/slave device	Y		
2	ADC instance should support built in failover decision/health check conditions including process health check and gateway health check to support the failover in complex application environment	Y		
3	The solution should support Active/Active Load balancers High Availability for single and multiple apps (virtual services) without the need for any extra configuration / scripting.The proposed solution should support Flexible, Non-Disruptive software upgrades	Y		
	Application Load Balancing Features		**Compliance**	
1	Solution should able to load balance TCP,UDP(L4) & HTTP/HTTPS(L7) based applications & provide Kubernetes ingress services for Load balancing K8s based workloads.	Y		
2	The proposed solution should support session persistence (Transaction stickiness to same servers) based on unique value (Custom parameter) in HTTP header field since there will be multiple calls from & to the same application server.	Y		
3	The solution should support server load balancing algorithms i.e. round robin, weighted round robin, least connection, Persistent IP, Hash IP, Hash Cookie, consistent hash IP, shortest response, proximity, hash header etc.	Y		
4	Solution should support rate shaping for setting user defined rate limits on critical application as well as custom rules to load balance traffic behavior as per Bank requirement	Y		
	Software defined Firewall		**Compliance**	
1	The solution should support Stateful firewalling up to Layer 7 , embedded in the hypervisor kernel, distributed across entire environment with centralized policy and management without the need of any third -party agents	Y		

#				
2	The solution should provide stateful micro-segmentation firewall capability for both virtual machines and containerized workloads, managed centrally from a single console.	Y		
3	Security policies should be dynamically associated with virtual machine workloads so that when workloads move across physical hosts or VLANs, policies move with them without manual reconfiguration.	Y		
4	The solution should offer a distributed, embedded virtual firewall that delivers near line-rate performance for East-West traffic within the virtualized infrastructure.	Y		
5	The firewall should support per-application and per-workload security enforcement using distributed, kernel-level stateful inspection and application-level gateway (ALG) features, regardless of the underlying L2/L3 topology.	Y		
6	The solution should offer deep visibility and analytics including flow analysis, application-level traffic categorization, and firewall rule suggestions to support a zero-trust security model.	Y		
7	The platform should provide integrated traffic and security monitoring across virtual workloads (VMs and containers), enabling real-time analysis and performance metrics.	Y		
8	The firewall solution should support traffic visibility, distributed firewall configuration, and policy lifecycle management from a centralized console.	Y		
9	The platform should include AI/ML-based policy recommendation engine capable of generating security rules based on workload behaviour and application context.	Y		
10	The security solution should provide comprehensive East-West and North-South traffic analytics, correlating virtual-to-virtual and virtual-to-physical flows, while supporting Physical to Virtual (P2V) migration and hybrid troubleshooting.	Y		
11	The firewall should support in-kernel distributed routing with dynamic and static routing capabilities, including support for IPv6.	Y		
Integration with Security Services		Y	**Compliance**	
1	Private cloud software must have native integration with Bank's existing Arcon PAM solution.	Y		
Private Cloud Support			**Compliance**	
1	OEM should provide direct support for L1, L2 and L3 levels 24x7x365 with unlimited incident support and should provide unlimited upgrades and updates.	Y		

c) SERVER TYPE 1 - RACK SERVER

COMPONENT	TECHNICAL SPECIFICATIONS	Mandatory Compliance (Y/N)	Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
Form Factor	**1U/2U** rack mounted with sliding rails	Y		
Supported CPU	Latest Generation Intel® Xeon® or AMD EPYC series Scalable processors with 48 cores	Y		
Configured CPU	At least Dual 48 Cores Latest Intel Xeon Gold Series or latest AMD EPYC series with base clock speed of minimum 2.3Ghz upto 3.7 Ghz or better and with 256 MB cache or better with support for DDR-5 5200MT/s (1DPC) memory speed or higher CPU.	Y		
Memory slots	Minimum 32 DDR5 DIMM slots	Y		
Memory configured	1.5 TB populated with 64GB RDIMMs 5600MT/s Dual Rank	Y		
Disks supported	Scalable Upto 12 SSD,NVMe drives	Y		
Disks configured	Drives 2 x 1.92TB SSD for OS in RAID1, Hot Plug or higher. Bank will not return the defective disk(s) in case of disk failure	Y		
RAID Controller	HW RAID Card with minimum 8GB NV cache, supporting RAID 1, 5, 6, 10.	Y		
I/O slots	Server should support minimum four PCI-Express 5.0 X16 slots.	Y		
Ethernet ports	8x25G SFP+ ports, 2 x 1GbE	Y		
Fibre Channel Ports	2x Dual Port 32 Gbps FC Card,Must also support SR-IOV & NPIV	Y		
GPU	The server must be configured with minimum 1GPU and should support additional GPU GPU Form factor - Full-height, full-length (FHFL), dual-slot The GPU should support double precision (FP64), single-precision (FP32), half precision (FP16), 8-bit floating point (FP8), and integer (INT8) compute tasks The GPU should use a passive heat sink for cooling, which requires system airflow to operate the card properly within its thermal limits The GPU card should have native GPU partioning capability to partition the GPU into minimum seven hardware isolated GPU instances The GPU should have minimum 94GB memory or more	Y		

	The GPU should support peak memory bandwidth of 3900GB/s or more			
Certification and compliances	Should be certified for hypervisor which is proposed by bidder	Y		
Power Supply	Redundant Hot plug Power Supplies, platinum grade or higher. Should be able to dynamically optimize efficiency	Y		
Fans	Minimum 4 high performance standard, hot plug fans as per OEM server requirement	Y		
Power & temperature	Should support real-time power graphing, thresholds, alerts & capping with historical power counters. Temperature monitoring & graphing	Y		
Pre-failure alert	Should provide agent-free predictive failure monitoring & proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, HDD	Y		
Server Management	1. Real-time power meter, temperature monitoring, customized exhaust temperature and System Airflow Consumption	Y		
	2. Silicon root of trust, authenticated BIOS, signed firmware updates and BIOS Live Scanning for malicious firmware	Y		
	3. Telemetry Streaming	Y		
	4. Idle Server Detection	Y		
	5. Power control, Boot control	Y		
	6. The management software should collect system information (including impending component failure) from the device that generated the alert and should be able to send the information securely to OEM to Support to troubleshoot the issue and provide an appropriate solution.	Y		
	7. OEM's management software should be provided	Y		
	8. Firmware and configuration baselines for compliance monitoring and enable automated updates on schedule.	Y		
	9. Scope based access control to limit Users to specific group of devices	Y		
	10. Bare-metal server deployment	Y		
Server security	Should have a cyber-resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks	Y		
	Should provide effective protection, reliable detection & rapid recovery using:	Y		
	Silicon-based Immutable Hardware Root of Trust	Y		

	Signed cryptographic firmware updates	Y		
	Dynamic USB Port Management	Y		
	Secure default passwords	Y		
	Shall provide dynamic system lock down server to prevent malicious attacks against embedded firmware and configuration drift in your datacenter without need to reboot the server.	Y		
	Persistent event logging including user activity	Y		
	Secure alerting	Y		
	Should be able to verify BIOS integrity and authenticity from malicious firmware and support automatic BIOS recovery if BIOS is corrupted (either due to a malicious attack, or due to a power loss during the update process,or due to any other unforeseen event).	Y		
	Shall support boot from SAN and OS Recovery In the event of a corrupted OS image	Y		
	Support Secure System Erase to erase sensitive data and settings from the server storage devices and server non-volatile stores such as caches and logs so that no confidential information unintentionally leaks	Y		
	Configuration upgrades should be only with cryptographically signed firmware and software	Y		
	Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware	Y		
Intrusion alert	Intrusion alert in case chassis cover being opened	Y		
Warranty and Support	5 Years, 24*7 support with 4 Hour On-site response	Y		

d) SERVER TYPE 2 - RACK SERVER

COMPONENT	TECHNICAL SPECIFICATIONS	Mandatory Compliance (Y/N)	Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
Form Factor	**1U/2U** rack mounted with sliding rails	Y		
Supported CPU	Latest Generation Intel® Xeon® or AMD EPYC series Scalable processors with 48 cores	Y		

Configured CPU	At least Dual 48 Cores Latest Intel Xeon Gold Series or latest AMD EPYC series with base clock speed of minimum 2.3Ghz upto 3.7 Ghz or better and with 256 MB cache or better with support for DDR-5 5200MT/s (1DPC) memory speed or higher CPU.	Y		
Memory slots	Minimum 32 DDR5 DIMM slots	Y		
Memory configured	1.5 TB populated with 64GB RDIMMs 5600MT/s Dual Rank	Y		
Disks supported	Scalable Upto 12 SSD,NVMe drives	Y		
Disks configured	Drives 2 x 1.92TB SSD for OS in RAID1, Hot Plug or higher. Bank will not return the defective disk(s) in case of disk failure	Y		
RAID Controller	HW RAID Card with minimum 8GB NV cache, supporting RAID 1, 5, 6, 10.	Y		
I/O slots	Server should support minimum four PCI-Express 5.0 X16 slots.	Y		
Ethernet ports	8x25G SFP+ ports, 2 x 1GbE	Y		
Fibre Channel Ports	2x Dual Port 32 Gbps FC Card,Must also support SR-IOV & NPIV	Y		
Certification and compliances	Should be certified for hypervisor which is proposed by bidder	Y		
Power Supply	Redundant Hot plug Power Supplies, platinum grade or higher. Should be able to dynamically optimize efficiency	Y		
Fans	Minimum 4 high performance standard, hot plug fans as per OEM server requirement	Y		
Power & temperature	Should support real-time power graphing, thresholds, alerts & capping with historical power counters. Temperature monitoring & graphing	Y		
Pre-failure alert	Should provide agent-free predictive failure monitoring & proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, HDD	Y		
Server Management	1. Real-time power meter, temperature monitoring, customized exhaust temperature and System Airflow Consumption	Y		
	2. Silicon root of trust, authenticated BIOS, signed firmware updates and BIOS Live Scanning for malicious firmware	Y		
	3. Telemetry Streaming	Y		
	4. Idle Server Detection	Y		

	5. Power control, Boot control	Y		
	6. The management software should collect system information (including impending component failure) from the device that generated the alert and should be able to send the information securely to OEM to Support to troubleshoot the issue and provide an appropriate solution.	Y		
	7. OEM's management software should be provided	Y		
	8. Firmware and configuration baselines for compliance monitoring and enable automated updates on schedule.	Y		
	9. Scope based access control to limit Users to specific group of devices	Y		
	10. Bare-metal server deployment	Y		
Server security	Should have a cyber-resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks	Y		
	Should provide effective protection, reliable detection & rapid recovery using:	Y		
	Silicon-based Immutable Hardware Root of Trust	Y		
	Signed cryptographic firmware updates	Y		
	Dynamic USB Port Management	Y		
	Secure default passwords	Y		
	Shall provide dynamic system lock down server to prevent malicious attacks against embedded firmware and configuration drift in your datacenter without need to reboot the server.	Y		
	Persistent event logging including user activity	Y		
	Secure alerting	Y		
	Should be able to verify BIOS integrity and authenticity from malicious firmware and support automatic BIOS recovery if BIOS is corrupted (either due to a malicious attack, or due to a power loss during the update process,or due to any other unforeseen event).	Y		
	Shall support boot from SAN and OS Recovery In the event of a corrupted OS image	Y		

		Mandatory Compliance (Y/N)	Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
	Support Secure System Erase to erase sensitive data and settings from the server storage devices and server non-volatile stores such as caches and logs so that no confidential information unintentionally leaks	Y		
	Configuration upgrades should be only with cryptographically signed firmware and software	Y		
	Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware	Y		
Intrusion alert	Intrusion alert in case chassis cover being opened	Y		
Warranty and Support	5 Years, 24*7 support with 4 Hour On-site response	Y		

e) **Server for Management Cluster - RACK SERVER**

COMPONENT	Minimum Technical Specifications	Mandatory Compliance (Y/N)	Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
Form Factor	1U/2U rack mounted with sliding rails	Y		
Supported CPU	Latest Generation Intel® Xeon® or AMD EPYC series Scalable processors with 32 cores	Y		
Configured CPU	At least Dual 32 Cores Latest Intel Xeon Gold Series or latest AMD EPYC series with base clock speed of 2.5 GHz or better and with 60 MB cache or better with support for DDR-5 5200MT/s (1DPC) memory speed or higher. CPU should have launched in or after Q4 '2023	Y		
Memory slots	Minimum 32 DDR5 DIMM slots	Y		
Memory configured	512GB populated with 64GB RDIMMs 5600MT/s Dual Rank	Y		
Disks supported	Up to 10 x 2.5" SAS/SATA	Y		
Disks configured	4x 3.2TB SAS SSD Mix Use, Hot Plug or higher. Bank will not return the defective disk(s) in case of disk failure	Y		
RAID Controller	HW RAID Card with minimum 8GB NV cache, capable of supporting minimum 22.5Gb/s SAS or higher	Y		
I/O slots	Server should support upto eight PCI-Express 5.0 x16 slots.	Y		

Ethernet ports	8x25G SFP+ ports, 2 x 1GbE	Y		
Fibre Channel Ports	2x Dual Port 32 Gbps FC Card, capable of supporting 6400MB/s full duplex line rate per port. Must also support SR-IOV & NPIV	Y		
Certification and compliances	Should be certified for hypervisor which is proposed by bidder	Y		
Power Supply	Redundant Hot plug Power Supplies, platinum grade or higher. Should be able to dynamically optimize efficiency	Y		
Fans	Minimum 4 Gold standard, hot plug fans	Y		
Power & temperature	Should support real-time power graphing, thresholds, alerts & capping with historical power counters. Temperature monitoring & graphing	Y		
Pre-failure alert	Should provide agent-free predictive failure monitoring & proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, HDD	Y		
Server Management	1. Real-time power meter, temperature monitoring, customized exhaust temperature and System Airflow Consumption	Y		
	2. Silicon root of trust, authenticated BIOS, signed firmware updates and BIOS Live Scanning for malicious firmware	Y		
	3. Telemetry Streaming	Y		
	4. Idle Server Detection	Y		
	5. Power control, Boot control	Y		
	6. The management software should collect system information (including impending component failure) from the device that generated the alert and should be able to send the information securely to OEM to Support to troubleshoot the issue and provide an appropriate solution.	Y		
	7. OEM's management software should be provided	Y		
	8. Firmware and configuration baselines for compliance monitoring and enable automated updates on schedule.	Y		
	9. Scope based access control to limit Users to specific group of devices	Y		
	10. Bare-metal server deployment	Y		
Server security	Should have a cyber-resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks	Y		
	Should provide effective protection, reliable detection & rapid recovery using:	Y		

	Silicon-based Immutable Hardware Root of Trust	Y		
	Signed cryptographic firmware updates	Y		
	Dynamic USB Port Management	Y		
	Secure default passwords	Y		
	Shall provide dynamic system lock down server to prevent malicious attacks against embedded firmware and configuration drift in your datacenter without need to reboot the server.	Y		
	Persistent event logging including user activity	Y		
	Secure alerting	Y		
	Should be able to verify BIOS integrity and authenticity from malicious firmware and support automatic BIOS recovery if BIOS is corrupted (either due to a malicious attack, or due to a power loss during the update process,or due to any other unforeseen event).	Y		
	Shall support boot from SAN and OS Recovery In the event of a corrupted OS image	Y		
	Support Secure System Erase to erase sensitive data and settings from the server storage devices and server non-volatile stores such as caches and logs so that no confidential information unintentionally leaks	Y		
	Configuration upgrades should be only with cryptographically signed firmware and software	Y		
	Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware	Y		
Intrusion alert	Intrusion alert in case chassis cover being opened	Y		
Warranty and Support	5 Years support with 4 Hour On-site response	Y		

Note: Above mentioned specifications are bare minimum however Bidder has to provide as per their proposed solution sizing, along with required OS/middleware/DB licenses.

f) Backup Solution Specifications

S.No.	Specification	Technical Specification	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
1		The proposed solution must be an enterprise class backup solution with Disk and Tape based backup solution.	Y		
2		The bidder will also supply backup solution one each at DC and DR site along with disk based backup solution. Proposed hardware for backup solution should not be single point of failure.	Y		
3		The Proposed solution should maintain a database for all backup/restore meta-data.	Y		
4		The Proposed solution must have Disk to Disk to Tape (D-D-T) Backup solution with backup data to be kept on disk for easy retrieval.	Y		
5		Proposed backup solution should be able to take backup from the major operating systems like Windows, Linux, and Solaris.	Y		
6	**Backup Platform Solution**	The proposed backup software must integrate with leading Virtualisation OEM's and able to initiate recovery plan execution from virtualization manager platform with a single click and able to support automated boot of protected virtual machines with pre-specified boot sequence.	Y		
7		The proposed Backup software must capable of VM restoration on different hypervisor (cross-hypervisor restore). A virtual machine (VM) backed up on one hypervisor (like Hyper-V) and restore to a different hypervisor (like VMware) or even a cloud platform	Y		
8		The Proposed solution must support software based de-duplication to support any storage system, cloud repository and object storage as de- duplicated disk target. Backup software should not have any vendor locking on disk storage as a media.	Y		
9		Proposed backup software must support Data compression and de-duplication features.	Y		
10		Backup Solution must support retention lock or equivalent feature which ensures that no data is deleted accidently.	Y		

11	HA Capabilities	The proposed solution must have the High Availability with failover/failback capabilities for the Backup Management server without the need of clustering at OS level and any additional license requirements.	Y		
12		If Solution requires any Backup Servers, media servers, etc. as part of solution, Bidder should quote required servers in HA mode (at least Media Servers) along with required operating system, database licenses etc.	Y		
13	Storage Array Support	Backup Software should support software based de-duplication to support any storage system, cloud repository and object storage as de-duplicated disk target. Based on policy backup software should be able to move data to a tape library automatically.	Y		
14		Backup Software must have the capability to invoke and manage native snapshot based backup for data residing on popular storage devices from Hitachi, Dell-EMC,IBM, HPE, NetApp.	Y		
15	Efficient Data Management	Backup software should have the ability to archive data and create a single repository for backup and archive for space efficiency and easier data management.	Y		
16	Database Support	Backup software should be able to protect the databases (online) through online agents enabling granular restores. Backup Major DBs like Oracle, MS SQL, MySQL, Posgres, MongoDB, MariaDB, Sybase, Informix, DB2, Exchange etc. and Applications likes SAP, etc. across wide range of popular Windows / Linux and Unix flavours.	Y		
17		The Proposed solution must have capability to take online backup of shared disk configured in OS cluster and Oracle RAC solution.	Y		
18	Oracle Support	Backup solution must integrate with RMAN based backups to perform consistent oracle backups and recoveries.	Y		
19		Should be able to perform block level backup and recovery of oracle databases	Y		
20		Should support Oracle online backups of Windows, Linux.	Y		
21		Should have the ability to take automated backups of Oracle DBs based on the size of the oracle logs and also the number of logs generated and truncate them automatically.	Y		
22	High Availability	Recovery of Failed components - Automatic failover of components must be provided as part of the solution for highest resiliency	Y		

23		The backup information must be readable from all target media (Disk, Tape or Cloud) in case of failure of backup media server.	Y		
24		Should have the ability to configure redundant data paths for backup, to enable load balancing and dynamic path failover in case of hardware failure	Y		
25	**Backup Data Retention Policy and Sizing**	The offered disk based appliance/storage should be sized appropriately for backup of front-end data of 100 TB (60% DBs, Filesystem & VMs 40%) as per below mentioned backup policies:	Y		
26		a. Daily incremental backup – retained for 2 weeks on the Disk and 30 days on object storage	Y		
27		b. Weekly full backup for all data types – retained for 2 Weeks in the Disk and 4 weeks on object storage	Y		
28		c. Monthly full backup – retained for 2 months on Disk and 1 year on Tape & Object storage	Y		
29		d. Yearly full backup - retained for 3 months on Disk and 10 years on Tape.	Y		
30	**Backup Based on RPO**	The proposed backup software should have intelligence to auto trigger the backup apart from the scheduled ones to adhere the desired Recovery Point Objectives.	Y		
31	**Virtualization / Hypervisor Support**	Backup software must support Image level backup of popular hypervisors Like Vmware, Nutanix, Hyper-V, Openstack,.etc.	Y		
32		Backup software must support for Online Application Aware backups and granular recovery using image level backup (for quick backup and restore) of VMs.	Y		
33		Backup solution must support for LAN Free backup to disk/appliance of VMs image level backup for proposed virtualisation hypervisors.	Y		
34		Backup software must support report the size of the VM, how much storage is occupied by the guest, and how much data is backed up after eliminating white spaces, etc.	Y		
35		Backup software must support Administrative Consoles which will allow VM administrators to configure, backup and recover their VMs on their own in a multi-tenant infrastructure.	Y		
36		Backup software must support have the ability to auto discover VMs from a VM cluster	Y		
37		Backup software must support Agentless file recovery from VM images	Y		

38		Backup software must support simultaneous multi VM backup and recovery support	Y		
39		Backup software must capable of Full VM restore, Partial VM restore, guest files & folders, disk files, attaching disk to existing virtual machine, virtual machine files. It should capable of backup and restoration of individual file, Folders and mount points.	Y		
40		Proposed backup solution must support Instant recovery of VM from disk and seamless recovery from Tape	Y		
41	**Restoration**	Backup software must capable restoring backup of most recent backup: For example, restore the most recent backup to its original location, A backup from a specific date: For example, restore data to a point in time before it became unusable, Backups from a date range: For example, restore data that was accidentally deleted	Y		
42		Backup software must capable of restoration to destination on The current location (in place), A different VM (out of place), on guest agent installed on server, on different hypervisor (cross-hypervisor restore).	Y		
43		The proposed backup solution should provide search capability from a web portal to allow search for a single file from complete backup.	Y		
44	**Data Management**	Proposed Backup software must support universal recovery to restore from P2V, V2V, V2C.	Y		
45	**Centralized Management**	The backup software should provide centralized management / Single interface for management of all backup and archival.	Y		
46		Proposed enterprise solution backup software should have inbuilt Web based GUI for centralized management. It must have accessibility through web based url for perform full functionality of software,	Y		
47	**Replication**	Backup software/solution should be able to replicate backed up data in de-duplicated format (for bandwidth optimization) to another site for compliance purposes, without the need of external replication tools. All necessary licenses for achieving consistent replication of backup data should be quoted.	Y		
48		Proposed backup software must have network throttling for replication of VMs to avoid any network congestion between DC-DR.	Y		

49	**Hardware Support**	Backup software must have the ability to perform cross hardware restore with completely different hardware configurations. Must support dissimilar system hardware restore on multiple platforms including Windows, Solaris, and Linux.	Y		
50		Comprehensive reporting of media, backup server, jobs, and analytics should be offered as part of the functionality in the supplied software either natively or through additional reporting software.	Y		
51		The proposed solution should have inbuilt feature for extensive alerting and reporting with preconfigured and customizable formats.	Y		
52		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.	Y		
53	**Reporting capabilities**	Proposed solution should provide Full job completion report. Overview of the full backup jobs that were successful, partially successful and failed for each day	Y		
54		Proposed solution should provide Full backup data volume report. Overview of the total data volumes that were backed up for each day	Y		
55		Solution should provide historic backup reports for success & failure Daily, Monthly & Yearly or as per Bank requirement.	Y		
56		Proposed solution should provide Average tape utilization report. Listing of the average amount of data stored on each media	Y		
57	**Two Factor Authentication**	The proposed solution should have capability to enable two factor authentication for the management console access. That is enabling a PIN (Personal Identification Number) along with the passwords.	Y		
58	**Access control**	The backup solution should be capable of integration with active directory infrastructure for ease of user rights management along with role base access control to regulate the level of management.	Y		
59	**Dashboard**	The proposed solution should provide the dashboard pertaining to security of the backup landscape and should be able to provide the current security posture. The dashboard should also help/guide to improvise on the existing security posture.	Y		

60	**Multi tenancy support**	Proposed backup software must be offered with multi tenancy features with GUI based Administration console login which provides a separation for each tenant/department user with backup details of VMs part of their department. While logging through respective tenant user, backup of VMs only visible to tenant which were being assigned to respective tenant.	Y		
61		Should be able to support storage systems, supporting de- duplication across multiple arrays as and when they are added in the infrastructure pool.	Y		
62	**Scalability**	Performance Scalability should be achieved by adding more resources to the infrastructure pool in terms of servers and storage resources	Y		
63		As per the backup policy mention in the RFP, bidder to propose the usable storage capacity, it should be without deduplication and compressed and after configuration of RAID6.	Y		
64		Solution must support encryption of data while stored in Disk and Tape. Necessary licenses and hardware/software as required must be provided	Y		
65		Should have role based access control for users to perform specific actions	Y		
66		Backup software should be able to integrate with active directory for ease of user creation and assigning permissions for administration.	Y		
67		It should be possible to create a user, assign a role, delete a role, limiting user logon attempts and viewing users logged onto the backup server	Y		
68	**Security**	Proposed Solution must have support for 256 Bit AES Encryption for data at rest and data-in-flight copies of backup data.	Y		
69		The proposed solution should be able to restore from any media (Tape/Disk) backup in case Backup solution gets infected.	Y		
70		Backup software should be able to provide reliable protection against external cyber threats. This service will prevent backup copies of data from any corruption or ransomware attack.	Y		
71		Backup software must have all audit trails must be logged for tracking any changes on backup server.	Y		
72		The proposed solution should have ability to protect all mount paths associated with disk libraries configured from a Backup/Media Server against Ransomware attacks.	Y		

S.No.	Specification	Technical Specification	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
73	Kuberenetes	The proposed solution should provide single console to backup all the workloads that is VM and Kubernetes.	Y		
74	Kubernetes Agentless Backup	The proposed solution should be capable of taking backup of containers using CSI integration.	Y		
75	Licensing Methodology	The proposed license should not pose a limit to the use of additional media or proxy servers required for backup. It should be possible to add media or proxy servers in the environment, as required, just by adding requisite hardware. Any additional licenses to support this have to be provided.	Y		
76		All required licenses for support the proposed Tape Library should be provided as per specifications.	Y		
77		All required licenses for redundant/failover backup servers/appliances have to be provided	Y		
78		All required OS, OS Cluster, Database and any other software to run the full functionality of Backup solution should be provided by bidder with same level of warranty/support.	Y		
79		The backup licenses must be perpetual and in the name of Bank.			
80	OEM Support	5 years 24x7 support from OEM for complete Backup solution (software, backup appliance, media servers, Tape library. Etc.)	Y		
81	Regulatory Compliance	The proposed backup solution should comply with CIS Level 1 Security Controls, NIST and STIG	Y		

g) Backup Storage and Tape Library

S.No.	Specification	Technical Specification	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
		Disk Based Storage/Appliance			
1	Disk Based Storage/Appliance	Proposed Backup solution must support a maximum Backup window of 8 Hours or less for taking full Backup of 200 TB front end data to the proposed disk based backup solution with a minimum throughput of 30TB/hr.	Y		
2		Proposed disk-based backup solution must support further expansion of at least 2 times of proposed capacity in this RFP.	Y		

3		Proposed backup solution with storage should have redundant components, HA mechanism in place to avoid Single Point of Failure and should have minimum of 4x16/32 GB FC ports & 2x32G ports on each controller for Host connectivity. Proposed Backup Solution should have scalability with respect to ports and cache in future.	Y		
4		Backup software should be able to provide reliable protection against external cyber threats. This service will prevent backup copies of data from any corruption or ransomware attack.	Y		
5		The disk based backup solution must support global/in-line data duplication using variable block length de-duplication technology.	Y		
6		Offered device shall have separate dedicated drives for Operating System of appliance and shall not participate in data backup.	Y		
7		Offered storage/Appliance Fiber channel ports shall support connectivity of servers via SAN switches while supporting the both source and Target based de-duplication.	Y		
8		Offered disk-based backup device shall also support encryption functionality.	Y		
9		Proposed disk based storage/appliance must have the ability to perform different backup, restore, replication jobs simultaneously.	Y		
10		**Tape Library**			
11		1. The offered Automated tape Library should be supplied with minimum 6 x LTO 9 FC Tape drives and 100 Slots all activated and ready to use. Bidder may size Tape Library higher than the above configuration based on the OEM recommendations.	Y		
12	**Architecture & Capacity**	2. Bidder should supply robotic Backup Solution and should support Full and Incremental, online & offline backup having capability of taking backups on LTO 9 Tape Drives at DC & DR location. Tape library should have minimum No. 6 no of tape drives DC and DR Site. Tape Library shall be offered with minimum of 100 cartridge slots and barcode reader. Bidder should provide all the drives in all the slots configured and Proposed tape library should have features Dynamic storage management, enabling users to dynamically create and change logical libraries and configure any drive into any logical library. Analytic software that provides system configuration operations, reporting, automated scheduling for scanning tapes, cartridge movement for maintenance and management purposes, Barcode reader, Encryption support.	Y		

13		Proposed Tape based backup solution must complete full backups of 200TB frond end data within a maximum backup windows of 12 Hours.			
14		3. Shall be offered with 100 slots license and 200 WORM Cartridges, 5 cleaning cartridges with barcode. Offered library shall support multi brand media cartridges for read and write purpose.	Y		
15	**Future Scalability**	The Tape Library must be further scalable to more than 10 LTO 9 FC TAPE drives & required Slots within the same within the same Library. All the Slots and Drives must be seamlessly accessible by the Single Robotics.	Y		
16	**Connectivity & Integration**	1. Offered Tape Library should be integrated with the other Servers and storage to back up all the data from the SAN to The Tape library using the required back up S/w via LAN or LAN Free methodology for optimised Backup speed. The Bidder needs to supply the necessary Back up software to integrate this functionality. 2. Tape Library should be certified with industry leading backup software vendors like EMC Networker, Commvault , Veritas, Veeam, IBM TSM.	Y		
17	**Hardware Partition**	The offered Automated tape Library must support partitioning so that each drive can be configured in a separate partition thus providing the ability to utilize a single library in a variety of applications. All the necessary Licence or hardware for min 6 partitions scalable to 10 Partitions must be provided along with the library.	Y		
18	**Removable Cartridge Magazines**	The Offered Tape Library must be provided with Removable cartridge magazines facilitate the loading, unloading and offline storage of data cartridges, reducing media handling costs.	Y		
19	**Management**	Tape Library shall provide web based remote management.	Y		
20	**Intelligent Monitoring:**	The overall solution with Tape Library and the backup s/w integration should have features like Intelligent monitoring management and diagnostics	Y		
21	**Other Features**	1] Tape Library shall have GUI Panel 2] The Tape library must Set alerts for backup and archive events. 3] The tape library must have front TOUCH SCREEN PANEL	Y		
22	**Support**	Maintenance will be 24*7*365 for 5 years	Y		

h) SAN Switches:

SNo.	Specifications	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
	64 Port SAN Switch - (All Port active)			
1	The switch should have non-blocking architecture with 56 ports active with 32 G SFP+ modules, switch should also support 64G transceiver for future upgrades.	Y		
2	The switch should be configured with base 56 port and can be upgraded to 64 ports with port-on -demand licenses activation	Y		
3	The switch should support auto-sensing 64,32,16, 8 Gbit/sec FC capabilities.	Y		
4	The switch shall support different port types such as D_Port (ClearLink Diagnostic Port), E_Port, EX_Port, F_Port, optional port-type control Brocade Access Gateway mode: F_Port and NPIV-enabled N_Port	Y		
5	The switch must provide a maximum Aggregate bandwidth of 4Tbps (data rate) end to end or more	Y		
6	Non-disruptive Microcode/ firmware Upgrades and hot code activation.	Y		
7	The Switch must provide autonomous Congestion control mechanisms without user intervention	Y		
8	The Switch must be able to automatically quarantine and un-quarantine slow-devices	Y		
9	The Switch must provide Virtual Machine (VMID) support for end-to-end SAN telemetry	Y		
10	The switch should support Frame-based trunking with up to eight SFP+ ports per ISL trunk; up to 512Gb/s per ISL trunk	Y		
11	The Switch must support POST and online/offline diagnostics, including RAStrace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN port).	Y		
12	The Switch must support web based management and also support CLI.	Y		
13	The switch must support maximum fabric latency of 460 ns including FEC	Y		
14	The switch must support 24K frame buffers	Y		
15	The Switch must support SAN Analytics with parallel SCSI and NVMe-FC analytics	Y		
16	Should provide redundant and hot pluggable components.	Y		

S.No	Specifications	Mandatory Compliance (Y/N)
17	The switch should support Front to back and back to Front airflow	Y
18	The switch should be 1U form factor and rack mountable in a standard EIA Rack	Y

i) Object Storage:

S.No	Specifications	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
1	Offered object storage should be a hardware appliance in which all hardware and software is offered and supported by a single OEM.	Y		
2	Offered object storage should be with 200TiB usable capacity after data protection, with the capability of scaling 5 petabytes. Storage should be provided with 20% additional space over and above 200TiB usable, 10% for versioning and 10% for drive rebuilds. Storage should be configured with no data loss or data unavailability in the case of both scenarios (a) 4 simultaneous disk failures or (b) 1 node failure. A node is defined as the unit of object storage responsible for storing user data (or a portion of it) on itself and erasure coding it.	Y		
3	Object storage should be provided with 25Gbps ports.			
4	Proposed storage should be able to deliver atleast 100000 IOPS (random read/write) with < 5ms latency for small object access.	Y		
5	Object Storage shall scale by dynamically adding additional nodes to system, at the granularity of a single node. The upgrades should be carried out non-disruptively online with support for automated data rebalance across the nodes. It should support a. Nodes of different generations (e.g. different processors and disk configurations) must be supported in same object storage system. b. Added capacity shall be immediately available in advance of any internal rebalancing of existing data.	Y		
6	Object storage system must support a multi-site active-active architecture where data can span across multiple geographic locations and provide a global namespace with anywhere read and write access. Storage should be able to provide multisite failure tolerance support to enable seamless operation even though two sites are down	Y		

7	Object storage must offer functionality to copy locally stored S3 object data to an external S3 target.	Y		
8	Kubernetes Integration: CSI driver support for container workloads must be provided.	Y		
9	The storage must support integration with leading Backup tools such as Commvault, Veeam, Dell Networker etc.	Y		
10	All nodes of the object storage system must process write requests and write to different sets of disks to take advantage of all spindles and NICs in cluster.	Y		
11	Object Storage shall support protocols like S3, S3a, Swift, NFS, and CIFS and must support multi-access, allowing same data to be accessed simultaneously via 2 or 3 protocols at the same time, eg NFS and S3. Access to the Object Storage should not be limited to a single writer at a time.	Y		
12	Object storage system should support Active Directory/LDAP integration and should support OpenStack Keystone identity services when utilizing the OpenStack Swift API	Y		
13	Object Storage must be certified as supporting SEC Rule 17a-4(f) and CFTC 1.31(b)-(c) standard for electronic record storage. Should be validated by 3rd Party.	Y		
14	Object storage should support IAM (Identity and access management) with object tagging to enable granular access to resources	Y		
15	Object Storage shall have ability to set default retention periods for different categories of objects/content in case application(s) cannot specify retention period. Should also support object lock	Y		
16	Object storage shall allow users to specify expiration policies so that data is automatically removed from the system after defined interval without additional user or application interaction.	Y		
17	Object Storage shall allow a set retention period when object is first archived and then a specific retention period when triggered by known event (e.g. set retention period of image for X years after an image has been approved for storage).	Y		
18	Object Storage shall allow hold to be set on a specific object to prevent deletion until hold is released even if it exceeds the object's retention period (e.g. due to litigation/lawsuit at court).	Y		
19	Object Storage shall support the Amazon S3 interface to store, retrieve and retain record objects including: • Set a policy for a Namespace with a retention period that can be applied to an object by using the policy name when storing a record object storage. • Set and extend a retention period for a Bucket which will then be used as one of the means for determining the retention period for all record objects stored by S3 in the Bucket and set a retention period for each record object sent to object storage. • Support for multi – part upload of large files • Ability to fetch only the relevant information out of a given object using S3 select	Y		

20	Object Storage shall protect all objects with Erasure Coding without the dependencies of RAID storage. And the erasure coded data should be encoded equally efficiently, regardless of object size. Object metadata should be stored as 2 or more copies, so operations are not hampered due to any rebuild operation on metadata	Y		
21	Object Storage shall be WAN optimized by protecting data from local failures using Erasure Coding and from site failures using replication. Object Storage shall support multiple sites (greater than 2).	Y		
22	Object Storage shall allow any object to be accessed from any node at any site with most recent version of data always available (strong consistency) to the requestor	Y		
23	Object Storage shall support metadata indexing and search, with ability to apply unlimited metadata tags to the object	Y		
24	Object Storage must recover from any disk or node failure without connectivity dependency to remote sites. a. All disk and node rebuilds should leverage protection from within the same site so as to avoid consuming expensive and limited WAN bandwidth and minimize rebuild times during rebuild operations. b. On disk or node failure, Object Storage shall redistribute exposed data across as many drives and nodes as possible to take advantage of multiple spindles and minimize data exposure.	Y		
25	Object Storage shall support encryption of all object data, at rest (compliant with FIPS 140-2) and in-flight.	Y		
26	Object Storage shall provide versioning capability to protect and record Object-level changes. Should also offer the capability to create multiple copies of objects natively.	Y		
27	To provide heightened security, Object Storage should allow administrators to disable access to the underlying OS without impacting administrative and end-user APIs and functions. It should also allow lockdown of ports not in use to ensure greater security	Y		
28	Object Storage shall be managed and monitored via integrated UI, CLI & RESTful APIs.	Y		
29	Object Storage shall support multi-tenant architecture including ability to apply quota limits on specific sections within the object store.	Y		
30	Object Storage shall support metering capabilities including reporting on capacity, object count, and bandwidth.	Y		
31	Object Storage should also provide for REST API for more advanced monitoring and auditing capabilities.	Y		
32	Object storage system should support audit trails through the management GUI	Y		
33	Object Storage shall support SNMP and Syslog protocols to provide information related to object storage.	Y		

SNo.	Technical Specifications	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks with Page no.
34	Object storage must provide audit logging of all object level access and administrative actions. Logs should be exportable to external SIEM or log management systems.	Y		
35	Object storage must support Storage-as-a-Service tenants, detailed metering, self-service portal, multi-tenancy and consumption intelligence.	Y		
36	Air gapped or immutable storage tier capability must be supported for backup copies or ransomware protection. The solution must provide secure isolation of such data from primary access pathways.	Y		
37	Physical load balancers should be considered in case of traditional distributed object storage to ensure the workloads are evenly distributed across the nodes.	Y		
38	The solution must have no licensing restriction on number of users, buckets, objects, access policies or API calls. All core features should be available without requiring additional licenses.	Y		

j) Configuration management cum Infra as Code (IaC) Tool:

SNo.	Specifications	Technical Specifications	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
1	General	Must support a declarative or task-based automation model using human-readable configuration files	Y		
2		Should function in an agentless or lightweight agent model	Y		
3		Must support version control integration	Y		
4		Should be capable of idempotent executions, ensuring consistent state on repeat runs	Y		

5	**Infrastructure Provisioning (IaC)**	Must enable automated provisioning of virtual infrastructure on-premises (with the proposed private cloud software), including: - VM lifecycle (create, update, delete) - Assignment of CPU, memory, storage, and network interfaces	Y		
6		Should support infrastructure deployment on major public cloud platforms - Compute instances - Virtual networks, security rules, and storage volumes	Y		
7		Should support dynamic inventory features for accurate resource tracking	Y		
8		Must allow modular and reusable provisioning definitions	Y		
9	**Configuration Management**	Automate setup and management of operating system configurations for both Linux and Windows platforms.	Y		
10		Perform package management, service configuration, and scheduled task setup	Y		
11		Apply security baselines and compliance hardening (CIS,NIST etc)	Y		
12		Manage configuration drift and support enforcement of policies	Y		
13		Must support templating and reusable roles/playbooks for modular deployment	Y		
14	**Application Deployment**	Automate deployment of commonly used services and middleware (Primarily Apache, NGINX, Tomcat)	Y		
15		Configure and deploy database services (Primarily Oracle, MySQL and MS SQL)	Y		
16		Support service orchestration across multiple hosts	Y		
17		Integrate with deployment pipelines triggered by version control or CI/CD tools	Y		
18	**Platform Compatibility**	Support for recent versions of enterprise Linux and Windows Server operating systems	Y		

S. No.		TECHNICAL SPECIFICATIONS	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
19		Compatibility with virtualized on-prem infrastructure platforms and public cloud (AWS, Azure and GCP) environments.	Y		
20		Should support hybrid and multi-environment deployments from a central control point.	Y		
21	**Integration Requirements**	Integration with Git-based version control systems (Gitlab)	Y		
22		CI/CD tools integration (e.g., Jenkins, GitOps, or DevOps pipelines)	Y		
23		Logging systems and centralized monitoring	Y		
24		Secure credential management (e.g., encryption or vault-based solutions)	Y		
25	**Security & Compliance**	Secure handling of secrets and credentials	Y		
26		Role-based access control with optional integration to enterprise authentication systems	Y		
27		Maintain logs of all automation activity for auditing	Y		
28		Support compliance scanning, reporting, and remediation actions	Y		
29	**Reporting and Dashboards**	Real-time visibility into execution status and job history	Y		
30		Inventory and infrastructure state tracking	Y		
31		Compliance reporting and drift detection	Y		

k) SAN Storage:

Unified SAN Storage (* For Bidders who has opted option B for storage as per scope of work)				
S. No.	TECHNICAL SPECIFICATIONS	Mandatory Compliance (Y/N)	Bidder's Compliance (Yes/No)	Bidder's Remarks with Page no. of the reference Document
1	The proposed array should be an all-NVMe array with active-active multi-controller/node scale-out architecture. The array should be scalable to at-least 8 active-active storage controllers/nodes, Proposed Storage should support non-disruptively upgrades, and proposed storage should support single drive capacity upgrade. The proposed array should support data in place upgrade to higher models of the same storage family. Offered storage controller shall be based upon at-least PCI 4.0 technology.	Y		

2	The proposed array should have multi-controller architecture with support of NVMe media for optimal storage performance.	Y		
3	The proposed array should be an unified storage which support both SAN & NAS	Y		
4	The proposed array should be designed with full redundancy across all components at both the hardware and software level enabling the system to have 99.9999% availability.	Y		
5	Proposed storage solution should be offered with minimum 2 controller with minimum 64 CPU cores across controllers and minimum 1024 GB Cache memory on the entire storage Solution. It should scale to at least 2048GB Cache memory and scalable to at least 128 CPU cores by addition of controllers,	Y		
6	The proposed array should support FC, iSCSI, NFS/SMB ,NVMe/TCP,NVMe/FC from day one.	Y		
7	The proposed array should be configured with at least 8 x 32Gbps & 8 x 10Gbps optical front-end ports & Proposed storage should have 100GbE backend.	Y		
8	The proposed array should be configured with a usable capacity of minimum 300TiB actual usable capacity (without including deduplication and compression) using All NVMe Drives on Industry standard RAID6 and should be able to deliver at least 500K IOPS (8K block size, 80% Read/20% Write) with sub-millisecond latency for both read & write IOs . Mentioned performance numbers should be achieved with data reduction techniques like Compression & deduplication and data Encryption turned ON. OEM should submit the document / official sizing tool output stating the above-mentioned performance metrics capability of the proposed system. These performance numbers should be delivered after considering the overheads of deduplication, compression and encryption. The capacity to be configured as a single storage pool which should be accessible to both the controllers simultaneously for Read & Write operations.	Y		
9	The storage must be scalable to at-least 3x usable flash NVMe capacity on the same controllers. The storage should support volume movement within the cluster. Addition of controllers/nodes in the same cluster should not cause any downtime and the system should automatically detect and add new controllers/nodes to the cluster.	Y		
10	The proposed array must support the latest industry standard (No proprietary) dual ported NVMe TLC drives. Array should support mixing of drives of various sizes in same storage pool.	Y		
11	The proposed array should support enterprise class data services including - Thin Provisioning, Inline Compression & Deduplication, replication. Data reduction must be supported on block and vVol. The data reduction feature should have no performance impact on the storage due to DRR.	Y		

12	Proposed storage array should support major Operating systems including Windows 2016, 2019, 2022, 2025, Red Hat, SUSE, Ubuntu, Oracle, VMWare etc.	Y		
13	The proposed array must have capability to create minimum 50,000 snapshots in the proposed storage array for block, Proposed storage solution should support snapshot creation using ROW algorithm. Storage arrays should have ability to use snapshot as writable volume. These snapshots should be secure and immutable.	Y		
14	Proposed array should include LUN level priority based QoS (for IOPs and throughput) engine which is easy to manage. Proposed solution should also have functionality so that a volume with a high-performance policy can be configured handle more IOPS than a volume with a medium-performance policy.	Y		
15	The proposed array should be proposed with native IP ports for remote replication to DR site with appropriate licenses. If separate FCIP routers are required for replication, then the same should be included in the BOM (Min 2 Nos per site).Proposed storage system should be capable of native storage based Synchronous & asynchronous replication with minimum RPO of 5 minutes.	Y		
16	The proposed array should be supplied with native Storage management software with Web based GUI capable of generating customized reports, real time monitoring, at least 1 year of historical performance data for analysis and trending, capacity utilization monitoring.	Y		
17	Proposed storage should include software to create VM consistent point-in-time copies with support for granular data restoration.	Y		
18	a) Management of storage array from private cloud management platform using plug-in.	Y		
19	b) Storage management console should be VMware aware and should report virtual machines running on storage data store/VVOL container, including VM level performance and capacity details. Provide additional software capability if not supported natively.	Y		
20	d) Storage array must support private cloud platform using FC/ iSCSI protocols	Y		
21	e) Support for VMware SRM or leading VM replication software for integration with storage-based replication	Y		

22	Proposed storage solution should support below integration options to enable DevOps and Infrastructure automation. All mentioned options should be officially supported by storage OEM.	Y		
	a) Support for REST API	Y		
	b) Support for Kubernetes Persistent Volumes using Container Storage Integration (CSI)	Y		
	c) Support for Ansible.	Y		
	d) Support for PowerShell modules	Y		
23	The proposed array must include SED (or hardware) based Data at Rest Encryption (D@RE) solution to encrypt data on all drives (AES 256 bit) with embedded automated key management. Encryption should seamlessly work with all the storage features and without any performance penalty.	Y		

Reg.: RFP For Delivery, Implementation and Management of on-premises Private Cloud Infrastructure.

1. **L1 Support Engineer for Infrastructure Management (Windows + Virtualization):**

   Qualification and Experience:
   - At least Bachelor's degree in Computer Applications, Computer Science or Information Technology.
   - Minimum 2 year of technical hands-on experience in related domain (Windows server + Virtualization technology)
   - Certificate in Server virtualization technology (which is proposed by Bidder as part of this RFP) (Preferred)
   - Should have knowledge of server patching, updates, hardening and security measures.
   - Good troubleshooting skills, Coordination with escalation engineer, to execute the assigned tasks.

2. **L1 Support Engineer for Container Platform:**

   Qualification and Experience:
   - Bachelor's degree in Computer Applications, Computer Science, Information Technology, or a related field, or work experience.
   - Minimum 2 years of technical hands-on experience in Kubernetes or Tanzu or Openshift or any other Containers platform
   - Certified Kubernetes Administrator / CNCF Certified (CKA/CKAD) or any other equivalent certificate in container technology.
   - Experience in Administration & monitoring of Proposed Container Orchestration Platform.

3. **L2 Support Engineer for Infrastructure Management (Windows + Virtualization):**

   Qualification and Experience:
   - Bachelor's degree in Computer Applications, Computer Science, Information Technology, or a related field, or work experience.
   - Minimum 4 year of technical hands-on experience in related domain (Windows server + Virtualization technology).
   - Certificate in Server virtualization technology (which is proposed by Bidder as part of this RFP)
   - Good knowledge and experience on Virtualized Networking (Switching, Routing, vLAN etc.), Private Cloud Orchestration and management tool.
   - Good troubleshooting skills, Coordination with escalation engineer, execute the assigned tasks.
   - Knowledge of configuration management cum IaC tool such as Ansible.

4. L2 Support Engineer for Container Platform

Qualification and Experience:
- Bachelor's degree in Computer Applications, Computer Science, Information Technology, or a related field, or equivalent work experience.
- Minimum 4 years of technical hands-on experience in Kubernetes, Containers.
- Should be a Certified Kubernetes Administrator / CNCF Certified (CKA CKA/CKAD) / VCP-Modern Application (Tanzu Technical Specialist)/ Any Cloud Native certification, which specifically focuses on container technologies.
- Experience in Administration & monitoring of Container Orchestration Platform which is proposed by bidder as part of RFP.

5. L3 Support Engineer for Team Lead:

Qualification and Experience:
- Bachelor's degree in Computer Applications, Computer Science, Information Technology, or a related field, or equivalent work experience.
- Minimum 7 year of technical hands-on experience in IT Infrastructure (Private cloud, Backup, Storage, Virtualization etc.)
- Certified Professional on the bidder's proposed virtualization platform and container platform.
- Sound Knowledge and Experience in proposed server virtualization, administration & management, Automation, Private cloud orchestration and related domain
- Good knowledge on HCI, Switching, Routing, vLAN etc.
- Good Knowledge and experience of Storage and Backup domain.
- Good troubleshooting skills, Coordination with escalation engineer, execute the assigned tasks
- Knowledge of configuration management cum IaC tool such as Ansible.

6. L1 Support Engineer for Storage and Backup:

Qualification and Experience:
- At least Bachelor's degree in Computer Applications, Computer Science or Information Technology.
- Minimum 2 year of technical hands-on experience in SAN Storage, Object Storage , SAN Switches and Backup technology.
- Sound Knowledge and Experience in proposed Storage and Backup solution administration
- Good troubleshooting skills, Coordination with escalation engineer, to execute the assigned tasks.

7. L2 Support Engineer for Storage and Backup:

Qualification and Experience:
- At least Bachelor's degree in Computer Applications, Computer Science or Information Technology.
- Minimum 4 year of technical hands-on experience in SAN Storage, Object Storage , Tape Library and Backup technology.
- Sound Knowledge and Experience in Bidder's proposed Storage and Backup solution administration.

- Must have experience on proposed backup tool in RFP.
- Good troubleshooting skills, Coordination with escalation engineer, to execute the assigned tasks.

8. L2 Support Engineer for Database (DBA):

Qualification and Experience:
- At least Bachelor's degree in Computer Applications, Computer Science or Information Technology.
- Minimum 4 year of technical hands-on experience in Oracle Database version 19c or higher
- Sound Knowledge and Experience in configuring and management of Oracle RAC cluster, ODG, ADG far sync, Golden Gate and RMAN technology.
- Should have experience in configuring and restoring backup (both Online RMAN and offline archive backup).
- Should have experience in data archival, Oracle replication methodology, Database security and performance tuning.
- Good troubleshooting skills, Coordination with escalation engineer, to execute the assigned tasks.
- Should basic knowledge and experience in MS SQL and MySQL DB.
- Should have valid certification in Oracle Database Administration.

9. L1 Support Engineer for Linux Administration:

Qualification and Experience:
- At least Bachelor's degree in Computer Applications, Computer Science or Information Technology.
- Minimum 2 year of technical hands-on experience in Red hat Linux/ Oracle Linux / CentOS.
- Sound Knowledge and Experience in installation, configuration and troubleshooting of Linux servers.
- Should have knowledge of Linux Patching process, Hardening procedure and server security.
- Good troubleshooting skills, Coordination with escalation engineer, to execute the assigned tasks.

10. L2 Support Engineer for Linux Administration:

Qualification and Experience:
- At least Bachelor's degree in Computer Applications, Computer Science or Information Technology.
- Minimum 4 year of technical hands-on experience in Red hat Linux/ Oracle Linux / CentOS.
- Sound Knowledge and Experience in installation, configuration and troubleshooting of Linux servers.
- Should have knowledge of Linux Patching process, Hardening procedure and server security.

- Should have valid RHCSA / RHCE certification.
- Experience in Red hat Ansible or similar configuration management tool.
- Good troubleshooting skills, Coordination with escalation engineer, to execute the assigned tasks.
- Knowledge of configuration management cum IaC tool such as Ansible.

11. L1 Support Engineer for FMS at Datacenter:

Qualification and Experience:
- At least Bachelor's degree in Computer Applications, Computer Science or Information Technology.
- Minimum 2 year of technical hands-on experience in IT Infrastructure technologies.
- Should have knowledge of hardware such as server, storage, tape library, Network switches etc.
- Should have knowledge of Datacenter management (Rack mounting, Cabling, Access mechanism, Storage device handing, Tape Movement etc.)

ANNEXURE – XIV
Managed Services Scope of Work (Indicative)

As Bidder is responsible for end to end management of Private cloud platform. This is just an indicative scope of work however bidder scope is not limited to these activities.

Hardware Management

- Managing the incident through service restoration
- Validating severity classification of the problem
- Determining the scope of the problem
- Facilitating the Service Recovery Team meeting
- Escalating the issue as required
- Conducting Root Cause Analysis
- Preparing restoration plans
- Proactive Monitoring of hardware and software during in-scope service hours
- Administer and/or execute Service Management processes and procedures
- Evaluate planned changes to the server environment and advise requirements to support such changes
- Provide server configuration reports and configuration details to the Bank as requested
- Implement configuration management processes and procedures
- Maintain an audit trail of server configuration changes as resulting from release and change control processes.
- The required software agents are to be installed, configured and monitored.
- Provide guidance to the bank and industry best practice for the optimal configuration of the operating system environment
- Produce and maintain installation and configuration diagrams of all installations
- Actively manage and report on the availability of all servers.
- Perform server periodic checks, monitoring and performance tuning.
- Communicate any service issues or implementation concerns with the bank and appropriate support personnel and/or bidders.
- Monitor hardware and system software status, process status, and take necessary action based on detected problems or issues as provided in this schedules.
- Provide problem escalation and interact as necessary with third party suppliers.
- Provide monitoring and troubleshooting for the server environment
- Provide timely notification and escalation to on site personnel if any hardware and software conditions exist that must be resolved on site to meet the service levels provided in this schedule.

- Bidders will ensure appropriate resources are on site to ensure service levels are achieved if recovery or actions are required.
- Propose tools for operations such as monitoring, deployment and configuration etc.
- Ensure server access is secure and authorized.
- Management of logical access to the server environment in accordance with the bank's policy (including administrator \ root access)
- Assist the bank with application support requiring operating system changes or access
- Evaluate the impact of new operating system upgrades or releases on existing applications and performance.
- Install patches as and when these become available, per bidder instructions for security exposures and Operating System bug fixes deemed critical by the bidder.
- Monitor status of system processes
- Monitor and respond to system alerts and events
- Monitor and respond to hardware alerts and events
- Monitor and maintain system error logs
- Performing required batch setup activities (ad hoc requests)
- Monitoring and responding to application alerts
- Monitoring and responding to application file system space issues
- Manage non-root application file systems
- Modifying file system sizes
- Shifting of servers within the premises and reinstallation and configurations including cabling and asset labelling
- Configure the disk storage arrays
- Execute backup and recovery procedures
- Retrieve archived tapes and restore required files and data sets
- Performing mock system failure and then data restoration drills on periodic basis
- Ensure the configuration of operating systems is in line with standards and policies as defined by the bank
- Document and track all configuration management problems using the site change management process.
- Co-ordinate all changes through the site's change management process.
- Configuration management for operating system release levels, patches and status.
- Perform routine system operation functions and system console operations actions such as power on/off, system reboots, and start/stop/reset.

- Apply preventive and corrective maintenance to all system level software (operating system and other non- application software).
- Install and upgrade all system level software (the operating system and other non-application software).
- Escalate hardware related malfunctions to the hardware supplier for resolution as provided in the bidder maintenance contract
- Inventory information about hardware shipping and receiving, raised floor space requirements, equipment placement, cabling, fibre, connectivity details, power and earthing requirements
- Servers/Storage hardware maintenance and support is based on various maintenance levels.
- Alert the bank about hardware changes that may impact application execution in support of the bank's application testing.
- Design back-out processes to return to the former hardware configuration if unforeseen problems occur during installation.
- Co-ordinate the scheduling and installation of supplier- recommended preventative maintenance and other hardware specific changes.
- Schedule down time as and when required to perform required hardware preventative maintenance, installation and testing.
- Design, build, schedule, and implement a hardware refresh template.
- Configure operating systems at the setup of each server, to establish super user privileges and access rules and establishing other standard guidelines, based on the agreed security policy of the bank
- Establish the process and procedures for requesting logon IDs and OS system level access
- Create, modify, and delete system logon IDs using the Change Control Procedure
- Monitor and maintain accounts and IDs and their designated privileges or access to make certain only active, authorized IDs have access, based on the agreed security policy.
- Remove inactive or suspended IDs after a specified amount of time, based on consultation with security administration and the bank's using the Change Control Procedure
- Adjust and maintain operating system and security software parameters for password expiration, available in the specific operating system environment to meet the agreed security policy requirements.
- Provide processes and procedures to maintain operating system data protection options.
- Perform bi-annual re-verification of data owners, authorized submitters and logon IDs, existing level of privileges, based on input from the bank and system security configuration.
- Work with the bank's application support personnel as reasonably required for the monthly/Quarterly reviews and maintenance of inactive

user id's

  - Compile a list of defined user id's on the Operating System, and provide list to the bank
  - Perform reviews of system, monitoring and database administration user id definitions.
  - Bidders will apply the necessary changes as per the outcome of the review.

- Hardening of servers as per bank's policy

- Anti-virus scan and anti-virus update on the servers

- Bidders will delete the bank's application user id definitions, once such a request has been forwarded by the bank.

- Bidder to update virus related signature files on servers to manage the removal of malicious code.

- Support and ensure that the timely installation of updated signature files and anti-virus software patches on all servers within the managed environment occurs.

- Coordinate with Bank's SOC team for receiving the most up-to-date information on malicious code outbreaks and the appropriate software signature files to protect against malicious code.

- Obtain and release signature files for testing and application into a client dedicated environment.

- Signature file and patch updates to be made available and installed utilizing the bank's change control process.

- Testing of signature files are to be performed prior to deployment.

- Perform pre-production scans to identify potential security risks on a server prior to entering the production environment.

- Review the results of vulnerability scans and determine corrective actions based on the results of the scans

- Review the results of penetration testing and determine corrective actions based on the results of the scans.

- Review government and supplier bulletins and various other sources to identify emerging threats or vulnerabilities to the bank's hosts.

- Maintain the risk evaluation process of vulnerabilities in which mitigation plans are determined, in accordance with the agreed security policy.

- Maintain a vulnerability correction process to correct vulnerabilities detected through scanning of servers

- Maintain a vulnerability correction process as new vulnerabilities are identified.

- Correct known vulnerabilities detected within the scope of the Bidder's responsibility, using the appropriate correction and change management processes

- The agreed security policy is to form the basis of security level.

- Maintain processes to provide consistent configuration of parameters

- for logging devices and ongoing maintenance of those parameters.
- Make certain of adequate retention of security event logs, based on the agreed security policy.
- Configure the parameters of the administrative tools for all system hosts, in accordance with the agreed security policy.
- Will provide event logging to the extent that tools, resources, and storage are available on client owned environments
- Ensure sufficient storage capacity available to retain logs
- Provide a listing of resource access rules for re-verification purposes
- Perform quarterly review all user ID's and forward list of ID's not used for the last 6 months to the bank for permission to delete these ID's.
- Process security data identifying logged or audited access to a resource.
- Process security data identifying attempted access to a protected resource.
- Process security data identifying password violation attempts.
- Process security data identifying usage of emergency ID's.
- Monitor and maintain ID's and their designated privileges or access to make certain that only active, authorized ID's have access.
- Adjust and maintain operating system and security software parameters, consisting of password expiration, available in the specific operating system.
- Provide performance management functions and establish performance monitoring thresholds for major processes.
- Proactively identify performance problems and improvements
- Provide capacity planning processes, for short term and long term planning, forecasting resource requirements, and analyzing and reporting resource trends.
- Monitor server utilization, CPU usage and I/O activity, produce capacity projection reports and develop plans for improvements.
- Review server capacity and advice where future additional capacity may be required or archiving policies need reviewing or implementing.
- Use standard operating system utilities and/or other third party tools where appropriate, to project the effects of new changes and workload changes or when large configuration changes are performed in the environment on request of the bank.
- Perform operating system software tuning/optimization as required to maintain day-to-day operations
- Provide, install and maintain performance monitoring software.
- Maintain system parameters to manage subsystem performance and workload throughput.
- Implement changes as necessary to optimize the effectiveness and efficiency of the server platform.
- Analyze system resource and storage utilization.

- Perform capacity trend analysis.

- Perform capacity modelling.

- Capture capacity usage for the last 12 months.

- Provide forecasting based on historic trends and planned bank's initiatives.

- Provide assistance with batch scheduling issues and problems using the problem management process.

- Process job dependency information for batch job cycles as defined by the application support staff.

- Maintain specific batch cycles utilizing the standard operating system CRON scheduler throughout the operational support coverage hours as necessary to meet defined service levels.

- Provide appropriate system resources, tools and procedures to support the processing of user-initiated batch jobs.

- Agree with the bank's prioritization for scheduled, ad hoc and system jobs.

- Provide the necessary operational resources to support bank-submitted or bank-scheduled batch processing.

- Maintain tools and facilities for bank to perform batch scheduling and batch monitoring activities.

- Log problem records if scheduled and automated batch jobs fail.

- Consult with the bank should job priorities require a change due to system constraints.

- Perform problem diagnosis and purging of jobs on Operating System as necessary.

- Monitor automation tools and functionality.

- Maintain and execute system start- up/shutdown processes.

- Monitor, identify, and implement automation techniques to remove manual interventions for ongoing monitoring and operation activities.

- Perform maintenance and support for automation tools and products

- Problem determination and isolation for automated operational processes.

- Maintain and update documented hardware, facility, operating system, database and related system software recovery plans as necessary.

- Perform quarterly tests of the recovery plans to verify the effectiveness there- off in supporting the day-to-day banks operations.

- Provide the required personnel resources to perform recovery plan drills or actual recovery plan execution at the time of disaster.

- Provide requisite mirroring and redundancy across the DC & DR facilities to ensure adequate failover for the server environments.

- Cluster configuration including the integration of startup/shutdown scripts

- Configuration of shared storage

- Provision of documentation on implemented high availability solution

- Installation, maintenance and monitoring of clustering
- Conduct Cluster tests as a part of DR drills.

System Administration

- User account maintenance - Creating users, groups, creating user accounts, deleting user accounts, modifying user accounts etc. on the system.
- File/system/application access management in approval from Bank - Maintaining file and directory permissions on OS and application access management like creating user accounts at application level, assigning application access, setting application passwords, user lockout etc.
- Security monitoring and investigation - Assess risks on a particular system [OS environment and user needs], monitor network security, monitor denial of service attacks, bad bugs programmed threats, track logins, logouts, command runs.
- Performance optimization and reporting - Process and Memory Management, monitoring CPU performance, monitoring Memory performance, monitoring Input / Output performance, monitoring Ethernet traffic etc.
- Error detection, Troubleshooting and correction
- Bidder need to size the resources to maintain the system as per the SLA and scope of work mentioned in the RFP.
- Administer configuration management cum Infra as a Code (IaC) tool.

Updates/Upgrades/New releases/New versions/Patch Management

- The OEM may from time to time release Updates/ Upgrades/New releases/New versions and notify the Bank about the same. The Bidder agrees that all such Updates/Upgrades/ new releases/New versions, as and when released during the term of warranty or AMC will be implemented without any additional cost to the bank.
- Bidders have to note that Support for IPv6 is required as recommended by RBI Guidelines. This is applicable for the entire Solution proposed by the Bidder as part of the RFP. Also the Bidders should ensure that the Solution should be backward compatible to IPv4.

Data space management

- Work with the Bank in defining data space management requirements of the Bank, which includes identifying:
- Fragmented data on a disk, and
- Inefficiently utilized disk space
- Monitor disks at the Bank for fragmented data and periodically run a defragmentation process (that rewrites all the files on a disk, consolidating all the free space into large contiguous space), as appropriate;
- Periodically monitor disk space utilization at the Bank and take action to improve such utilization by (for example) deleting data that is no longer needed;
- Install, configure, test and manage any tools that may be required for data

space management, such as those for compressing/stacking data or re-blocking data.

- Before taking any data management actions, notify the affected End Users at the Bank

Database Administration

The Bidder agrees that Bank's private cloud databases of the Bank will be administered as per applicable standards and requirements. The service covers all the databases run on Bank servers at DC and DR by the Bank including but not limited to:

Operating system, Database and system software Installation

- Installation and upgrade including patches of all OS, Databases and system software related to Bank's private cloud as per the recommendation of Application vendor during the contract period within quoted cost as per Bank's requirement.
- Defining the physical database design (log files, rollback segments, table spaces, database descriptors, partitioned objects etc.)
- Database Hardening and preparation & submission of hardening document as per the security policy of the Bank.

Database Performance Management

- Track & co-ordinate database related incidents/ problems till resolution.
- Conduct first level diagnosis for reported Incidents & perform resolution.
- Analysis of incident/ problem trends
- Co-ordination & escalation to Database's OEM till resolution
- Maintaining & monitoring the health & performance of databases (Primary and standby)
- Monitor & analyses alerts & logs including trace files, database changes, background job status, operating system logs, and space management.
- Monitoring the table space utilization, file system usage and all other events of OS which may deter the performance of the database (primary as well as DR)
- Analyzing/Troubleshooting Database Performance
- Collection of statistics for databases
- Optimizing database performance, Performance tuning
- Monitor physical DBMS for performance & capacity requirements
- Monitoring of databases
- Monitoring of transaction logs
- Provide recommendations on DBMS design
- Monitor the backup & report on backup logs
- DDL, export & import related activities
- Preparing monthly database related reports

- Provide databases for MIS purpose on daily, monthly and on need basis
- Periodic optimization of application databases through compression facilities and database tuning.
- Provide reports on database currency and propose upgrade recommendations
- The bidder is required to install & implement database diagnostics & fine-tuning packs based on bank's requirements.

Database Capacity Management

- Estimate & recommend database requirements based on received data from Database Performance team and Business projections (Half-yearly/ As and when required)
- Perform Database Space analysis
- Alignment to purging policy
- Review archive logs requirements
- Customizations required at DB level

Database Monitoring and Administration

- Setting data storage parameters for storage associated with the physical elements of the database
- Handling password issues
- Configuration of Databases
- Creating a new database instance
- Testing & implementation of patches
- Testing & implementation of upgrades
- Managing, applying & verifying Database program patches
- Database Scripting
- Review, recommend and test patches.
- Coordinate all changes through the agreed upon change management process
- Start-up and shutdown of databases
- Daily activities such as end of day, end of month, end of year/quarter etc.
- Daily / Weekly / Monthly backup of databases
- Database recovery
- Weekly database recovery checks
- Required logs maintenance as per Standards of the Bank
- Disaster recovery as per Standards of the Bank
- Database problem resolution
- Recreation of Indexes
- Perform pre-batch Activities-Scheduling of resources-Scheduling batch services-Define, maintain and document a work schedule for running

production system batch jobs, and possible started tasks- Install and document system related batch jobs in the automated job scheduling package-Manage the root cause analysis for scheduling problems- Develop and maintain standards for job acceptance and implementation. The bidder can either use scripts or propose a tool for batch automation

- Remove applications from the application portfolio following decommissioning from projects or improvements.
- Perform regular import and loading of data and ad-hoc data extractions.
- Responsible for maintaining DB inventory
- Maintaining and performance tuning of UAT databases
- Migration of Databases (Release Upgrade)
- Execution of all back-end changes across all applications as informed by application owner
- Manage database transaction/ archive logs
- Administration/ management of archival databases (Purge from production and move to archive database)
- Resolving corruption (both Physical & Logical) issues at primary & standby databases
- Execute DBMS changes in support of major application or logical database design changes
- Designing &Implementation of logical & physical backups
- Flash back up on daily basis
- Bidder coordination with OEMs for upgrades, patches, bug fixes, performance tuning etc.
- Creation of a Standby database & setting up the DR
- Using data guard for Oracle
- Log shipping/Mirroring/Always On for database
- Monitoring, management and implementation of High Availability (HA) viz. clustering/RAC etc.
- Review of all databases and analysis on weekly basis
- Switchover of databases (as and when required and as per the defined time window)
- Refresh of Databases as per defined frequency or on demand
- Day end, month end, quarter end, year-end End of Day & Begin of Day support
- Resolution of audit points and VA/PT reports
- Support for processes run by branch charges for average quarterly balance/ SB interest calculation
- Apply application data fixes.
- Perform application non production environment data refreshes.
- Cloning of application data environments.
- Monitor capacity and performance of databases.
- Control of the database (adapting database profile parameters, expansion of

tables and table spaces)

- Technical reorganization of the database (defragmentation) also after archiving

- Analysis of the DB tables & indexes - continual performance enhancement measures

- Create new indexes, performs reorganizations as required per analysis

- Creation, maintenance and execution of database related scripts such as start-up and shutdown processes

- Creating and maintaining formal documentation of the database environment (e.g. scripts, design, configuration , access rights)

- Monitor availability of the databases as a subset of monitoring overall service availability

- Providing solution services for database design, configuration and maintenance

- Assist with incident and problem management related activities relating to the database environment (e.g. integration, interface, performance, configuration issues as part of the overall support service) including interaction with third party suppliers where necessary.

- Archive of application specific data as requested.

- Implementation and monitoring of database security.

- Loading software components- Kernel patches, Release changes.

- Proactively apply security fixes

- Documentation upkeep and records maintenance

Database Backup restore

- Manage Database backup/restore schedule, administration (RMAN Backup)/Scheduled Backups and others

- Data Deletion & Purging/archival activity

- Purging of tables based on availability of space on a regular frequency (Frequency to be decided)

- Consolidating all database backups & Transaction log backups at a single file Server

- Perform database backup, restore and recovery routines.

- Compliance, review and updates to database standards documents.

Access management

- Implementing & managing security rules & access authority as per security policy of the Bank ; Database Hardening

- Implementation of database security by creating roles, privileges & profiles

- Management of users in database and assigning of roles/privileges

- Monitoring and management of logs for user access management of privileged users

Database Recovery

- Create & implement database recovery solutions in consultation with Bank's team
- Recovery of database at primary and standby as per case basis
- Restoration activities (from backup media) two time in a year
- Database recovery using the physical & logical backups
- Support for DR Configuration
- Evaluating current backup, recovery, & data replication procedures & providing recommendations for improving those procedures.

System & Security Audit

- Before live implementation / migration of the software solution in production system, the product may be audited by Bank's appointed Software Audit firm / in house team.
- All audit points raised by the auditor internal, external & any other Regulatory Authority in their periodic audit should be complied by the bidder within the stipulated timeline & without any additional cost to the Bank.
- During warranty and AMC / ATS period, the bidder needs to comply with security and system audit observation without any additional cost to the Bank.

Storage and Backup Management:

Data Protection and Security:
- Implementing and managing backup and recovery systems to safeguard against data loss due to hardware failure, human error, or malicious attacks.
- Developing and maintaining robust disaster recovery plans to minimize downtime and ensure business continuity.
- Ensuring compliance with data protection and retention policies.

Storage Management:
- Managing storage infrastructure, including storage arrays, SAN, NAS, and related technologies.
- Monitoring storage capacity, performance, and utilization to optimize resource allocation.
- Troubleshooting and resolving storage-related issues, including performance bottlenecks and capacity limitations.

Backup and Recovery:
- Creating and maintaining backup schedules and procedures to ensure regular and reliable backups.
- Monitoring backup jobs and troubleshooting any failures or errors.
- Performing data restoration from backups in case of data loss or system failures.

Collaboration and Communication:
- Collaborating with other IT teams, such as system administrators, database

administrators, and network engineers, to optimize storage and backup solutions.

- Providing technical support and guidance to users on storage and backup related issues.

Documentation and Reporting:

- Maintaining detailed documentation of storage and backup configurations, procedures, and policies.

- Generating reports on backup performance, storage utilization, and other relevant metrics.

Cloud Infrastructure Management:

- This includes configuring, installing, migrating, setting up, and monitoring hardware, software, and other cloud resources.

Resource Provisioning:

- Administrators create and configure virtual machines (VMs), storage, databases, and other cloud resources based on organizational needs.

- Administer configuration management cum Infra as a Code (IaC) tool.

Access Management:

- They manage user permissions, access to applications, and ensure proper security protocols.

Security and Compliance:

- Implementing and managing security protocols, conducting security assessments, and ensuring the cloud environment complies with industry regulations.

Performance Optimization:

- Monitoring system performance, identifying bottlenecks, and optimizing resource allocation to enhance efficiency.

Troubleshooting and Issue Resolution:

- Quickly identifying and resolving issues within the cloud environment.

Automation:

- Utilizing automation tools to streamline routine tasks, reducing manual effort and potential errors.

Collaboration:

- Working with other IT teams, such as Network, DevOps, and Security, to ensure compliance with standards and best practices.

Cost Optimization:

- Identifying and implementing cost-saving measures for cloud resources and services.

Documentation:

- Creating and maintaining documentation related to cloud infrastructure, configurations, and procedures.

Containers Platform Management:

- Setting up Kubernetes clusters, configuring hardware, and managing cluster

components.

- Managing the entire lifecycle of Kubernetes clusters, including provisioning, scaling, upgrades, and decommissioning.

- Ensuring the control plane (API server, etcd, and controllers etc) is running optimally and securely.

- Managing worker nodes, including adding and removing nodes to adjust to workload demands.

- Monitoring and optimizing resource utilization (CPU, memory, storage).

- Implementing horizontal pod auto scaling (HPA) and managing cluster scaling for high availability.

- Scheduling and verifying backups of critical data and etcd, and testing disaster recovery plans.

- Deployment: Managing application deployments using tools like Helm and Kustomize.

- Rollouts and Rollbacks: Managing rolling updates and rollbacks to ensure zero downtime during application changes.

- Service and Networking: Configuring and managing services, ingress, and network policies to ensure secure communication.

- Role-Based Access Control (RBAC): Implementing and managing RBAC to control access to cluster resources.

- Image Scanning: Regularly scanning container images for vulnerabilities.

- Cluster Monitoring: Monitoring cluster health using tools like Prometheus, Grafana, or native Kubernetes commands.

- Performance Optimization: Optimizing resource allocation and utilization.

- Troubleshooting: Troubleshooting issues related to Kubernetes clusters, including networking, storage, and resource utilization.

- Automation Scripts: Writing and maintaining scripts to automate cluster management tasks using tools like Ansible, Helm, or Bash.

Appendix –A
Instructions to be noted while preparing/submitting Part A – Technical cum Eligibility Proposal

All the Annexures should be submitted in Bidder's Letter Head with seal and signature of the authorized signatory.

1) Earnest Money Deposit (EMD)/Bank Guarantee in lieu of EMD / Exemption Certificate.

2) Power of Attorney / Authorization letter signed by the Competent Authority with the seal of the bidder's company / firm in the name of the person signing the bid documents with supporting documents.

3) Tender Covering letter as per **Annexure-I**.

4) Bidder's Information as per **Annexure-II**.

5) Bid Security Declaration as per **Annexure-III (if eligible).**

6) Compliance to Pre-Qualification Criteria declaration as per **Annexure-IV** with documentary proof in support of the Pre-Qualification Criteria.

7) Acceptance/ Compliance Certificate as per **Annexure-V**.

8) Manufacturer's Authorization form as per **Annexure-VI.**

9) Non-Disclosure Agreement as per **Annexure-VII.**

10) Escalation Matrix as per **Annexure-VIII.**

11) Masked bill of Material as per **Annexure-IX**.

12) Litigation Certificate as per **Annexure-X**.

13) Certificate of non-blacklisting as per **Annexure-XI**.

14) Compliance with Technical Specifications as per **Annexure-XII**.

15) Resource Qualification Criteria **ANNEXURE – XIII.**

16) Managed Services Scope of Work (Indicative) ANNEXURE **– XIV.**

17) Signed Pre-Contract Integrity Pact as per **Appendix-F** in non-judicial Stamp paper**. (Hard copy to be submitted to Bank).**

18) Checklist as per Appendix-G.

19) Appendix I

20) Appendix J

21) Solution Document & detailed specifications as per the RFP.

22) Compliance with technical specifications.

23) Software Bill of Material (SBOM) and Cryptography Bill of Material (CBOM)

24) Detailed BoQ with specifications of hardware, licenses and software etc.

25) Masked Bill of Material

Appendix -B
Instructions to be noted while preparing/submitting Part B - Commercial Proposal

All the Annexures should be submitted in Bidder's Letter Head with seal and signature of the authorized signatory.

1. Bill of Material as per **Annexure-IX**.
2. Compliance statement as per **Appendix-G**.

Appendix-C
Pre-Bid Query Format

(Bidders should submit the queries in excel format only)

Ref: RFP No._____ dated _____.

Sl. No.	Bidder's Name	Page No.	Section	RFP Clause	Clause/Technical Specification	Bidder's Query
1						
2						
3						
4						
5						
-						

Appendix-D
Bank Guarantee Format for Earnest Money Deposit

Performa for the Bank Guarantee for Earnest Money Deposit

(To be stamped in accordance with stamp act)

Ref: Bank Guarantee #   Date:
_____

Assistant General Manager (IT)
Punjab & Sind Bank,
HO IT Department,
Plot No.151, Sector 44,
Institutional Area, Gurugram-   122003

Dear Sir,

In accordance with your bid reference No._____Dated _____M/s_____ having its registered office at _____ herein after Called „bidder") wish to participate in the said bid for RFP For Delivery, Implementation and Management of on-premises Private Cloud Infrastructure. An irrevocable Financial Bank Guarantee (issued by a nationalized /scheduled commercial Bank) against Earnest Money Deposit amounting to Rs……………) valid up to _____ is required to be submitted by the bidder, as a condition for participation in the said bid, which amount is liable to be forfeited on happening of any contingencies mentioned in the bid document. M/s_____ having its registered office at _____ has undertaken in pursuance of their offer to Punjab & Sind Bank (hereinafter called as the beneficiary) dated _____ has expressed its intention to participate in the said bid and in terms thereof has approached us and requested us_____(Name of Bank) _____ (Address of Bank) to issue an irrevocable financial Bank Guarantee against Earnest Money Deposit (EMD) amounting to Rs_____(Rupees_____) valid up to_____. We, the _____ (Name of Bank)_____ (Address of Bank) having our Head office at _____ therefore Guarantee and undertake to pay immediately on first written demand by Punjab & Sind, the amount Rs. _____(Rupees_____) without any reservation, protest, demur and recourse in case the bidder fails to Comply with any condition of the bid or any violation against the terms of the bid, Without the beneficiary needing to prove or demonstrate reasons for its such demand. Any Such demand made by said beneficiary shall be conclusive and binding on us irrespective of any dispute or difference raised by the bidder. This guarantee shall be irrevocable and shall remain valid up to _____. If any further extension of this Guarantee is required, the same shall be extended to such required period on receiving instructions in writing, from Punjab & Sind Bank, on whose behalf guarantee is issued. "Not withstanding anything contained herein above Our liability under this bank guarantee shall not exceed Rs._____ (Rupees_____).

This bank guarantee shall be valid up to _____. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only if you serve upon us a written claim or demand, on or before _____ before 14.30 hours (Indian Standard Time) or within Bank official working hours where after it ceases to be in effect in all respects whether or not the original bank guarantee is returned to us." In witness whereof

the Bank, through its authorized officer has set its hand stamped on this _____
Day of _____ 2025 at _____

Name of signatory
Bank Common Seal
Designation

<u>**Appendix-E**</u>
<u>**Format of Performance Guarantee**</u>
(Issued by any Scheduled Commercial Bank & to be executed on stamp paper of requisite value as per stamp duty payable at place of execution.)

Tender Reference No: _____   Date
_____

The Assistant General Manager
Punjab & Sind Bank
HO IT Department, 2nd Floor,
Plot No.151, Sector 44, Institutional Area,
Gurugram-122003

Dear Sir,

1. WHEREAS pursuant to a Request for Proposal dated…………….. (hereinafter referred to as RFP, issued by Punjab & Sind Bank, HO IT Department 2nd Floor, Plot No.152, Sector 44, Institutional Area, Gurugram-122003 in response of (Vendor(s) / Service Provider), a Company registered under the Companies Act, 1956 and having its Registered / Corporate Office at …………………………………has awarded the Contract valued Rs………………………………….and appointed…………………….as Vendor(s) / Service Provider For Delivery, Implementation and Management of on-premises Private Cloud Infrastructure vide Appointment letter / Purchase Order No…………………………………dated……………..on the terms and conditions as set out inter-alia in the said RFP and in the Appointment Letter / Purchase Order.

2. WHEREAS you have in terms of the said Appointment letter / Purchase Order called upon (Vendor(s) / Service Provider to furnish a Performance Guarantee, for Rs……………………………Rupees only), equivalent to…………………..of the Contract value, to be issued by a Bank in your favour towards due performance of the Contract in accordance with the specifications, terms and conditions of the said Appointment letter / Purchase Order and an Agreement entered / to be entered into in this behalf.

3. WHEREAS (Vendor(s) / Service Provider) has approached us for issuing in your favour a performance Guarantee for the sum of Rs…………………………….. (Rupees………………………………….).

   NOW THEREFORE in consideration of you having awarded the Contract to…..…………….inter-alia on the terms & conditions that provides a performance guarantee for due performance of the terms and conditions thereof. We,…………………Bank,…………………… a body corporate constituted under …………………………………having its Head office at…………………………………………(give full address) and a branch inter-alia at……………………………. India at the request of…………do hereby expressly, irrevocably and unconditionally undertake to pay merely on demand from you and without any demur without referring to any other source, Rs…………………………(Rupees……………………………only) against any loss or damage caused to or suffered by or that may be caused to or suffered by you on account of any breach or breaches on the part of ………………of any of the terms and conditions

of the Contract and in the event of………………committing any default or defaults in carrying out any of the work or discharging any obligation under the said Contract or otherwise in the observance and performance of any of the terms and conditions relating thereto including non-execution of the Agreement as may be claimed by you on account of breach on the part of …………….of their obligations or default in terms of the said Appointment letter / Purchase Order.

4. Notwithstanding anything to the contrary contained herein or elsewhere, we agree that your decision as to whether the ……………..has committed any such breach / default or defaults and the amount or amounts to which you are entitled by reasons thereof will be binding on us and we shall not be entitled to ask you to establish its claim or claims under this Guarantee, but will pay the same forthwith on demand without any protest or demur. Any such demand made by you shall be conclusive as regards the amount due and payable by us to you.

5. This Guarantee shall be valid up to ……….. plus 12 months of the Claim period from the expiry of said guarantee period. Without prejudice to your claim or claims arisen and demanded from or otherwise notified to us in writing before the expiry of the said date which will be enforceable against us notwithstanding that the same is or are enforced after the said date.

6. You will have the fullest liberty without our consent and without affecting our liabilities under this Guarantee from time to time to vary any of the terms and conditions of the said appointment letter or the Contract to be made pursuant thereto or extend the time of performance of the Contract or to postpone for any time or from time to time any of your rights or powers against the ………and either to enforce or forbear to enforce any of the terms and conditions of the said appointment letter or the Contract and we shall not be released from our liability under Guarantee by exercise of your liberty with reference to matters aforesaid or by reason of any time being given to or any other forbearance, act or omission on your part or any indulgence by you or any other act, matter or things whatsoever which under law relating to sureties, would but for the provisions hereof have the effect of releasing us from our liability hereunder provided always that nothing herein contained will enlarge our liability hereunder beyond the limit of Rs…………………….. (Rupees…………………………………only) as aforesaid or extend the period of the guarantee beyond …………………(date) unless expressly agreed to by us in writing.

7. This Guarantee shall not in any way be affected by you are taking or giving up any securities from ……………or any other person, firm or company on its behalf or by the winding up, dissolution, insolvency as the case may be of ……….

8. In order to give full effect to the Guarantee herein contained, you shall be entitled to act as if we were your principal debtors in respect of all your claims against ……….hereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of surety ship and other rights, if any, which are in any way inconsistent with any of the provisions of Guarantee.

9. Subject to the maximum limit of our liability as aforesaid, this Guarantee will cover all your claim or claims against ………from time to time arising out of or in relation to the said appointment letter / Contract and in respect of which your claim in writing is lodged on us before expiry of Guarantee.

10. Any Notice by way of demand or otherwise hereunder may be sent by special courier, telex, fax, e-mail or registered post to our Head Office / Local address as aforesaid and if sent accordingly it shall be deemed to have been given when the same has been posted.

11. This Guarantee shall not be affected by any change in the constitution of _____ or nor shall it be affected by any change in your constitution or by any amalgamation or absorption thereof or therewith but will ensure to the benefit of and be available to and be enforceable by the absorbing or amalgamated company or concern.

12. This Guarantee shall come into force from the date of its execution and shall not be revoked by us any time during its currency without your previous consent in writing.

13. We further agree and undertake to pay you the amount demanded in writing irrespective of any dispute or controversy between you and _____ in any suit or proceeding pending before any court, Tribunal or Arbitrator relating thereto, our liability under these presents being absolute and unequivocal. The payments so made by us shall be a valid discharge of our liability for payment hereunder and _____shall have no claim against us for making such payment.

14. We have the power to issue this Bank Guarantee in your bank's favour as the undersigned has full power to execute this Bank Guarantee under the Power of Attorney issued by our Bank.

15. Our authority to issue this guarantee may be verified with our Controlling Office situated at _____(full details of persons to be contacted address and phone Numbers etc).

16. Notwithstanding anything contained herein above;

   i.   Our liability under this Guarantee shall not exceed Rs_____(Rupees_____ _____only)

   ii.   This Guarantee shall be valid and remain in force up to_____ plus the Claim period of 12(Twelve) months and including the date _____ and

   iii. We are liable to pay the guaranteed amount or any part thereof under this Guarantee only and only if you serves upon us a written claim or demand for payment on or before the expiry of this Guarantee.

Dated this the_____ day of _____ 2025

Signature and Seal of Guarantors   **Vendor(s)'s Bank**

Appendix-F

(To be stamped in accordance with stamp act)
PRE-CONTRACT INTEGRITY PACT
Between
Punjab & Sind Bank (PSB) hereinafter referred to as **"The Principal"**,
And
_____ hereinafter referred to as **"The Bidder/
Contractor"**

Preamble

The Principal intends to award, under laid down organizational procedures, contract/ s for
_____ _____. The Principal values full compliance with all
relevant laws of the land, rules, regulations, economic use of resources and of fairness /
transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Principal has appointed 1. Sh. Debal Kumar Gayen and
2. Pramod Kumar Garg as Independent External Monitors (IEMs) who will monitor the
tender process and the execution of the contract for compliance with the principles
mentioned above.

Section 1 - Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to
observe the following principles: -

a. No employee of the Principal, personally or through family members, will in connection
with the tender for, or the execution of a contract, demand, take a promise for or accept, for
self or third person, any material or immaterial benefit which the person is not legally entitled
to.

b. The Principal will, during the tender process treat all Bidder(s) with equity and reason.
The Principal will in particular, before and during the tender process, provide to all Bidder(s)
the same information and will not provide to any Bidder(s) confidential / additional
information through which the Bidder(s) could obtain an advantage in relation to the tender
process or the contract execution.

c. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a
criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard,
the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary
actions

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

(1) The Bidder(s)/ Contractor(s) commit themselves to take all measures necessary to
prevent corruption. The Bidder(s)/ Contractor(s) commit themselves to observe the
following principles during participation in the tender process and during the contract
execution.

a.   The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage of an kind whatsoever during the tender process or during the execution of the contract.

b. The Bidder(s)/ Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contract submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.

c. The Bidder(s)/ Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any, similarly the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only.

e. The Bidder(s)/ Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

f. Bidder(s) /Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.

(2) The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings".

Section 4 - Compensation for Damages

(1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 - Previous transgression

(1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

Section 6 - Equal treatment of all Bidders /Contractors / Subcontractors

(1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.
(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
(3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 - Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 - Independent External Monitor

(1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders/Contractors as confidential. He/ she reports to the MD & CEO of Punjab & Sind Bank.

(3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.

(4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/ Sub-contractor(s) with confidentiality. The Monitor has also sighed declarations on 'Non-Disclosure of Confidential Information' and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform MD & CEO of Punjab & Sind Bank and recuse himself / herself from that case.

(5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
(6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in

this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

(7) The Monitor will submit a written report to the MD & CEO of Punjab & Sind Bank, within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

(8) If the Monitor has reported to the MD & CEO of Punjab & Sind Bank, a substantiated suspicion of an offence under relevant IPC/ PC Act, and the MD & CEO of Punjab & Sind Bank has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(9) The word **'Monitor'** would include both singular and plural

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by MD & CEO of Punjab & Sind Bank.

Section 10 - Other provisions

(1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(5) Issues like Warranty / Guarantee etc. shall be outside the purview of IEMs.

(6) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.

_____

_____
(For & On behalf of the Principal)   (For & On behalf of Bidder / Contractor)
(Office Seal)   (Office
Seal)

Place --------------
Date --------------
Witness 1:
(Name & Address)
Witness 2:
(Name & Address)

Appendix-G

Sl. No.	Particulars	Submitted (Yes/No)	Page No
	Checklist		
1	Proof of RFP Cost		
2	Certificate of Incorporation, PAN, GST Registration certificate		
3	Proof of EMD		
4	Power of Attorney		
5	Copy of Board Resolution		
6	Audited Balance Sheets & Profit & Loss Statements, CA certificate for turnover & Networth		
7	Annexure-I.		
8	Annexure-II.		
9	Annexure-III (if eligible).		
10	Annexure-IV with documentary proof in support of the Pre-Qualification Criteria.		
11	Annexure-V.		
12	Annexure-VI		
13	Annexure-VII.		
14	Annexure-VIII.		
15	Annexure-IX.		
16	Annexure-X.		
17	Annexure-XI (Undertaking for non-blacklisting)		
18	Annexure-XII (Technical Compliance Sheet)		
19	Software Bill of Material (SBOM) and Cryptography Bill of Material (CBOM)		
20	Bank Guarantee Format for Earnest Money Deposit as per Appendix-D		
21	Signed Pre-Contract Integrity Pact as per Appendix-F on non-judicial Stamp paper.		
22	Appendix-G (Checklist)		
23	Appendix-H (Undertaking of Authenticity)		
24	Appendix-I (Client References)		
25	Appendix J		
26	Masked Bill of Material		
27	Detailed BoQ with specifications		
28	Signed Copy of RFP		
29	Signed Copy of Corrigendum, if any		

Note: a) All pages of the bid documents must be sealed & signed in full by authorized person.
b) All pages of the bid documents should be numbered in serial order i.e. 1, 2, 3….

Bank may ask for any other document on its discretion.

Signature & Seal of the Bidder

Appendix-H

Undertaking of Authenticity

To:

(Name and address of Procuring Office)

Sub: Undertaking of Authenticity for supplied Product(s)
Ref: PSB/HOIT/RFP/GEM___/2025-26 dated 01.08.2025

With reference to the Product being quoted to you vide our Bid No:_____ dated _____, we hereby undertake that all the components /parts /assembly / software etc. used in the Product to be supplied shall be original new components / parts / assembly / software only, from respective Original Equipment Manufacturers (OEMs) of the Products and that no refurbished / duplicate / second hand components /parts/ assembly / software shall be supplied or shall be used or no malicious code are built-in in the Product being supplied.

1. We also undertake that in respect of licensed operating systems and other software utilities to be supplied, the same will be sourced from authorized sources and supplied with Authorized License Certificate (i.e. Product keys on Certification of Authenticity in case of Microsoft Windows Operating System).

2. Should you require, we hereby undertake to produce the certificate from our OEM supplier in support of above undertaking at the time of delivery/installation. It will be our responsibility to produce such letters from our OEM supplier's at the time of delivery or within a reasonable time.

3. In case of default and/or the Bank finds that the above conditions are not complied with, we agree to take back the Product(s) supplied and return the money paid by you, in full within seven days of intimation of the same by the Bank, without demur or any reference to a third party and without prejudice to any remedies the Bank may deem fit.

4. We also take full responsibility of both Product(s) & Service(s) as per the content of the RFP even if there is any defect by our authorized Service Centre / Reseller / SI etc.

Dated this .... day of 202

(Signature)
(Name)
(In the capacity of)

Duly authorised to sign Bid for and on behalf of
_____

Appendix-I

Format for Submission of Client References

To whosoever it may concern

Particulars	Details
Client Information	
Client Name	
Client address	
Name of the contact person and designation	
Phone number of the contact person	
E-mail address of the contact person	
Project Details	
Name of the Project	
Start Date	
End Date	
Current Status (In Progress / Completed)	
Size of Project	
Value of Work Order (In Lakh) (only single work order)	

Name & Signature of authorised signatory

Seal of Company

Appendix J

Manpower Proposal Sheet

S.No	Resource	Location of the resource	Minimum no. of Resources Per Shift	Shift Timings	Total Number of resources Proposed
1	Team Lead (L3)	Delhi/NCR	1	General Shift	
2	L1/L2 - Private Cloud Platform (Virtualization & Windows) Platform	Delhi/NCR	2	8 AM to 4 PM 3 PM to 11 PM	
3	L1/L2 - OS (Linux RHEL)	Delhi/NCR	1	8 AM to 4 PM 3 PM to 11 PM	
4	L1/L2 - Backup & Storage	Delhi/NCR	1	24x7x365	
5	L2 - Database Management - Primarily Oracle DB (Along with support for MySQL and MSSQL)	Delhi/NCR	1	24x7x365	
6	L1/L2- Containers Platform	Delhi/NCR	1	8 AM to 4 PM 3 PM to 11 PM	
7	L1 - FMS	Mumbai DC	1	General Shift or as an when required	

***************End of document*****************