

# THE KANGRA CENTRAL CO-OPERATIVE BANK LTD. DHARAMSHALA

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Teh. Dharamshala, Distt. Kangra, Himachal Pradesh, 176 215, India.

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Website: <https://www.kccb.in/>



## *Request for Proposal*

RFP Notice No. KCCB/IT/2022/01(A)

Supply, Installation, Implementation, Configuration, Integration, Testing, Commissioning and Maintenance of Compute / Storage and Ancillary Infrastructure, Networking Devices and SDWAN Services at the Data Centre, Disaster Recovery Site and Branch Locations

December, 2022



THE KANGRA CENTRAL COOPERATIVE BANK LTD.,  
DHARAMSHALA

## DISCLAIMER

The information contained in this Request for Proposal (RFP) document or subsequently provided information to bidders, whether verbally or in documentary form by or on behalf of The Kangra Central Cooperative Bank Ltd, Dharamshala, 176 215 (KCCB), or any of their employees, consultants or advisers, is provided to bidders on the terms and conditions set out in this RFP document and any other terms and conditions subject to which such information is provided.

This RFP document is not an agreement and is not an offer or invitation by the KCCB to any other Party. The purpose of this RFP document is to provide interested parties with information to assist in formulation of their Proposal. This RFP document does not purport to contain all the information each bidder may require. This RFP document may not be appropriate for all persons or entities, and it is not possible for KCCB, their employees, consultants or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP document. Certain bidder may have a better knowledge of the proposed Project than others. Each bidder should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP document and obtain independent advice from appropriate sources. KCCB, its representatives, their employees, consultants and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the RFP document.

KCCB may in their absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP document.

Some of the activities listed to be carried out by KCCB as a part of the tendering process or the subsequent implementation are indicative only. KCCB has the right to continue with these activities, modify the sequence of activities, add new activities or remove some of the activities, in their best interests.



THE KANGRA CENTRAL COOPERATIVE BANK LTD.,  
DHARAMSHALA

## ADVERTISEMENT

### TENDER NOTIFICATION

The Kangra Central Cooperative Bank Ltd. (KCCB)  
Dharamshala. 176 215  
<https://www.kccb.in/>

The Kangra Central Cooperative Bank Ltd, Dharamshala, H.P. 176 215, hereby invites e-tenders from experienced Firms for Supply, Installation, Implementation, Configuration, Integration, Testing, Commissioning and Maintenance of Compute / Storage and Ancillary Infrastructure, Networking Devices and SDWAN Services at the Data Centre, Disaster Recovery Site and Branch Locations

The Proposals should be submitted electronically according to the instructions as stipulated in the Request for Proposal Documents. The Document can be downloaded from the Bank's website <https://www.kccb.in/> from 10:00 hrs on Tuesday, December 13, 2022. The cost of Document is ₹ 5,000/- (Rupees Five Thousand Only) which needs to be remitted online along with the Proposal as directed in the Document. The last date of submission of Bid is scheduled at 14.00 hrs on Thursday, January 5, 2023.

(-sd-)

**Managing Director**



THE KANGRA CENTRAL COOPERATIVE BANK LTD.,  
DHARAMSHALA

## IMPORTANT DATES

S No	Description	Schedule
1	Date of uploading of Request for Proposal Document on Bank's website	Request for Proposal Documents can be downloaded from the Bank's website <a href="http://www.kccb.in/">http://www.kccb.in/</a> starting from 10:00 hrs on Tuesday, December 13, 2022. The Request for Proposal Document cost needs to be remitted online along with the Proposal as directed in this document.
2	Pre bid conference with prospective Bidders	At 14.30 hrs on Thursday, December 22, 2022 at Conference Hall, The Kangra Central Cooperative Bank Ltd, Dharamshala, Himachal Pradesh, 176 215 or online depending upon the prevailing Covid-19 conditions.
3	Last date of submission of Bid	The bidders are required to submit their bids online on the e-procurement portal of Government of Himachal Pradesh at <a href="https://hptenders.gov.in/">https://hptenders.gov.in/</a> on or before 14.00 hrs on Thursday, January 5, 2023.
4	Date of opening of the Technical Bids	At 15.30 hrs Thursday, January 5, 2023 at Conference Hall, The Kangra Central Cooperative Bank Ltd, Dharamshala, Himachal Pradesh, 176 215.
5	Date of opening of the Commercial Bids	To be announced during the opening of Technical Bids.
<b>The bank reserves the right to amend the date due to unforeseen circumstances. All such changes will be duly notified on the website of the bank.</b>		



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## PREAMBLE

The Kangra Central Co-Operative Bank Limited, Dharamshala is a DCCB currently operating in five districts of Himachal Pradesh viz Kangra, Hamirpur, Una, Kullu and Lahaul & Spiti. The Bank has operationalized state of the art Core Banking Services and has established all the necessary computing and communication infrastructure. The Bank has its Data Centre at Dharamshala and Disaster Recovery Site at Bengaluru. The system has been in operation for last 10 years and the Bank has also added a few more branches as well as plans to open a few more.

Thus the objective of this tender is to undertake Supply, Installation, Implementation, Configuration, Integration, Testing, Commissioning and Maintenance of Compute / Storage and Ancillary Infrastructure, Networking Devices and SDWAN Services at the Data Centre, Disaster Recovery Site and Branch Locations as per the technical / functional specifications given in this RFP document.

It is also felt that the Bank should not get tied down to a particular technology or vendor now or in future for further upgradation as well as expansion. Pertinent to this is the fact that all the equipment and components must conform to open global standards and universal protocols. Consequently, interoperability of heterogeneous components across vendor, make or model shall have to be meticulously ensured. In furtherance to this objective the prospective Bidders should ensure the compatibility and inter-operability of the proposed solution with the existing installation base in the Bank.

The Bank endeavours to employ OEMs / capable consortia for the purposes of this tender. To ensure efficient and effective rollout of the project as well as to ensure smooth operations of the complete system during the entire project life, the prospective Bidders are expected to work in collaboration with the agency finalized by the Bank for this purpose.

Further, the investment that the Bank is intending to make vide this RFP needs to be protected and it is expected that the vendors should undertake to supply spares as well as to ensure up-gradation / expansion for a reasonable period in future for all the components quoted and supplied by them. In order to ascertain this, the vendors must be willing to sign maintenance contract if awarded directly or through third parties.



THE KANGRA CENTRAL COOPERATIVE BANK LTD.,  
DHARAMSHALA

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## INVITATION TO BID

No KCCB/IT/2022/01(A)

Dated : December 13, 2022

To:

All the prospective Bidders

Dear Sirs/Madams,

Pursuant to your intent, I, the Managing Director acting for and on behalf of The Kangra Central Cooperative Bank Ltd, Dharamshala, Himachal Pradesh, 176 215, have pleasure in permitting the download of the Request for Proposal Document from the website of the Bank to enable you to submit your binding offers.

a. This request for proposal is for:

Supply, Installation, Implementation, Configuration, Integration, Testing, Commissioning and Maintenance of Compute / Storage and Ancillary Infrastructure, Networking Devices and SDWAN Services at the Data Centre, Disaster Recovery Site and Branch Locations.

b. Bidders are advised to study the Request for Proposal Document carefully. Submission of Proposal shall be deemed to have been done after careful study and examination of the Request for Proposal Document with full understanding of its implications.

c. Sealed offers prepared in accordance with the procedures enumerated in "INSTRUCTIONS TO BIDDERS" should be submitted to the Managing Director of the Bank not later than the date and time laid down, at the address given in "Schedule of Request for Proposal". The bids shall be opened in the presence of those Bidders who may wish to be present as per the "Schedule of Request for Proposal".

d. This Request for Proposal Document is not transferable; however OEMs are free to quote through their authorized distributors or system integrators.

Yours Faithfully,

Managing Director,  
The Kangra Central Cooperative Bank Ltd,  
Dharamshala. Himachal Pradesh.  
176 215.





## INSTRUCTIONS TO BIDDERS

The Bidder is expected to have read and examined all the instructions, forms, terms and specifications in the Request for Proposal Document with full understanding of its implications. Failure to furnish all information required in the Request for Proposal Document or submission of a bid not substantially responsive to the Request for Proposal Document in every respect will be at the Bidder's risk and may result in outright rejection of the bid.

### 3.1 DEFINITIONS, ACRONYMS & ABBREVIATIONS

The following definitions shall govern for the respective terms as hereinafter mentioned in this document:

Bank	The Kangra Central Cooperative Bank Ltd. Sehkar Jyoti Building, Civil Lines ,Dharamshala, Teh. Dharamshala, Distt. Kangra, Himachal Pradesh, 176 215, India. Official Website: <a href="https://www.kccb.in/">https://www.kccb.in/</a>
Bidder	Any party meeting the eligibility as hereinafter laid down who has downloaded the Request for Proposal Document from the Bank's website and intends to offer the goods & services mentioned in this document.
Authority	The Managing Director, The Kangra Central Cooperative Bank Ltd. Dharamshala. Himachal Pradesh, 176 215.
Consultant	National Institute of Technology, Hamirpur (H.P.) - 177 005. Official Website: <a href="http://www.nith.ac.in">http://www.nith.ac.in</a> Email: <a href="mailto:kumar@nith.ac.in">kumar@nith.ac.in</a> / <a href="mailto:kumarspandey@gmail.com">kumarspandey@gmail.com</a> Phone: +91-98052-25569
OEM	Original equipment manufacturer in case of hardware and original assignee or developer in case of software.
BG	Bank Guarantee
DD	Demand Draft
EMD	Earnest Money Deposit
IT/ICT	Information and Communication Technologies
PBG	Performance Bank Guarantee
RFP	Request for Proposal / Tender Document / Bid Document
SLA	Service Level Agreement
SP/SI	Service Provider. The terms Systems Integrator/ Implementation Partner / Bidder / Vendor are also used interchangeably.
COTS	Commercially off the shelf: The software application which is readily deployable with or without configuration to suit the customer's specific process requirements and does not involve developing the application from scratch.



	<p>The software application which is implementable or deployable and maintainable by any other competent agency other than the manufacturer or agency which has developed the software.</p> <p>The software solution available with complete transparency including operation manuals, help documents and source code.</p> <p>The software solution which has preconfigured templates of business processes, technical features and provides a predictable operational performance.</p>
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### 3.2 COST OF THE REQUEST FOR PROPOSAL DOCUMENT

The Bidder shall pay ₹ 5,000/- (Rupees Five Thousand Only) being the cost of the Request for Proposal Document. It can be done by way of electronic transfer as directed on the e-procurement portal <https://hptenders.gov.in/> of the Government of Himachal Pradesh.

It is an absolute must that the cost of Request for Proposal Document is paid as directed, failing which the offer shall stand summarily rejected and no correspondence in this matter shall be entertained. However, the Micro and Small enterprises (MSMEs) and start-ups (duly recognized by GoI) as well as Government Organizations are exempt from paying such fee.

### 3.3 SCHEDULE OF REQUEST FOR PROPOSAL

- 3.3.1 Request for Proposal Document can be downloaded from the e-procurement portal <https://hptenders.gov.in/> of the Government of Himachal Pradesh starting at 17:00 hrs on Tuesday, December 13, 2022. The Request for Proposal Document cost needs to be paid as directed on this portal.
- 3.3.2 Prospective bidders seeking any clarification may prefer to attend a pre-bid meeting (online or offline) scheduled to be held at 14:30 hrs on Thursday, December 22, 2022. This conference may be conducted online or offline at the Bank's premises depending upon the COVID-19 pandemic situation in the country and various advisories and notifications of the Government of India or the Government of Himachal Pradesh thereon. In case of online pre-bid conference, relevant details along with and helpdesk number to join the conference shall be posted on the Bank's website <https://www.kccb.in> and the e-procurement portal <https://hptenders.gov.in/>.
- 3.3.3 The changes to the bid, if any, as a result of pre-bid meeting would be communicated through Bank's website & e-procurement portal within 03 working days after holding of pre-bid meeting.
- 3.3.4 The bids (technical and financial) should be submitted online on e-procurement portal <https://hptenders.gov.in/> of the Government of Himachal Pradesh. In order to apply and submit the bids online, the Bidder is required to register on this portal which is free of cost but they must have Digital Signature Certificate (DSC) from one of the authorised Certifying Authority (CA). It is necessary to upload the bid online on the portal alone. Without online submission, no offline / hard copy bid shall be considered even if the same is received in time.
- 3.3.5 The online bids will be accepted till 14.00 hrs on Thursday, January 5, 2023. However, the Bank may at its sole discretion extend the bid submission date. The modified target date & time will be notified on the e-procurement portal <https://hptenders.gov.in/> of the Government of Himachal Pradesh.
- 3.3.6 The Technical Bids will be opened through online mode at 15.30 hrs on Thursday, January 5, 2023. The Bidder(s) or their authorized representatives may be present if they so desire.
- 3.3.7 The Financial Bids of only technically qualified Bidder(s) will be opened at a date announced by the Bank on the e-procurement portal <https://hptenders.gov.in/> of the Government of Himachal Pradesh and on the Bank's website <https://www.kccb.in>. The Bidder(s) who have been declared eligible after evaluation of the technical bids or their authorized representatives may be present if they so desire.

The address for the above activities (3.3.6, & 3.3.7) would be:



Office of The Managing Director,  
The Kangra Central Cooperative Bank Ltd.  
Dharamshala. Himachal Pradesh, 176 2153.

The address for all the correspondences pertaining to this Request for Proposal is:

Office of The Managing Director,  
The Kangra Central Cooperative Bank Ltd.  
Dharamshala. Himachal Pradesh, 176 2153.

PHONE +91 1892-224969 / 222877 / 223280 / 222353 / 222326

EMAIL: [{chairman,md,gmw,gmn,it}@kccb.in](mailto:{chairman,md,gmw,gmn,it}@kccb.in)

### 3.4 PROCEDURE FOR SUBMISSION OF BIDS

Bids must be uploaded on the e-procurement portal <https://hptenders.gov.in/> of the Government of Himachal Pradesh by the Bidder along with scanned copies of all relevant documents. The Bidders are required to register themselves on the portal and thereafter, they can attach and upload all such documents needed for the techno- Financial Bid as requested in this Tender.

Bid shall be uploaded in two parts: **Part I - Technical Bid** and **Part II - Financial Bid**.

#### 3.4.1. **PART – I: Technical Bid shall contain the following:**

Technical Bid/Proposal must include the duly signed Bid Covering Letter, proformas as mentioned in the Tender, along with all documentary and statutory proofs.

1. The Bid must contain the name, address and contact details of authorised person / representative submitting the Bid and must be signed and stamped by the Bidder with his / her signature on every page of the Bid.
2. All documentary proofs and undertakings as requested under the Eligibility and Technical Criteria need to be attached as per the need of the relevant work schedule. The bidder should clearly indicate the name(s) of schedule(s) for which they are bidding in the attached format.
3. The Bidder's name stated in the Bid shall be exact legal name of the company as incorporated.
4. All changes / alterations / corrections in the Bid shall be signed with date in full by the authorised person signing the Bid. No erasing and / or overwriting is allowed.
5. Transfer of Bid submitted by one Bidder to another is not permissible.
6. The Technical Bid in original duly digitally signed should be scanned and uploaded on the e-procurement portal <https://hptenders.gov.in/> of the Government of Himachal Pradesh. Please note that rates should not be indicated in the Technical Bid. Only Financial Bid should indicate rates.
7. Part-I should be separately zipped, digitally signed and uploaded on the above portal as directed therein.

#### 3.4.2. **PART – II: Financial Bid shall contain the following:**

1. Financial Bid / Proposal shall include the prices quoted for each activity/item with unit cost as per the requirement.
2. All prices to be quoted in Indian Rupees, and must clearly state all applicable taxes separately.
3. In the Financial Bid, the Bidders must quote the rates in figures as well as in words as specified in excel template. If there is any discrepancy between the price quoted in figures and words, price quoted in words shall prevail.
4. Financial Bid shall be uploaded by the Bidder online on the e-procurement portal <https://hptenders.gov.in/> of the Government of Himachal Pradesh as per the rate schedule specified in the BoQ template (excel file).



### 3.5 COSTS INCURRED WITH BIDDING

The Bidder shall bear all costs associated with the preparation and submission of its Bid, including cost of presentation for the purposes of clarification of the Bid, if so desired by the Bank and the Bank will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding Process.

### 3.6 CLARIFICATION OF REQUEST FOR PROPOSAL DOCUMENT

3.6.1 All the clarifications / modifications requested by the prospective OEMs or Bidders should necessarily be submitted in writing via email (preferably in **excel or word file**) to the Bank and Consultants two days prior to such pre-bid meeting i.e. latest by Tuesday, December 20, 2022, 17:00 hrs.

3.6.2 No query or concern will be entertained and addressed by the Bank after holding the pre-bid meeting.

3.6.3 Following format may be used for seeking the clarifications:

S.N.	Page No.	Clause No.	Description of the clause stated in the RPF	Clarification and Amendment Requested

3.6.4 Upto a maximum of 2 (two) representatives of each prospective Bidder will be permitted to attend the pre-bid meeting. The purpose of these meetings is to clarify issues and to answer questions on any relevant matter that may be raised upto that stage.

3.6.5 Outcomes of these meetings shall be published on the website of the Bank, allowing at least 7 days' time prior to the last date for receipt of bids. Any modification of the Request for Proposal Document, which may become necessary as a result of the Pre-bid Meeting, shall be made by the Bank explicitly through revised Request for Proposal Document and shall be binding on all the Bidders irrespective of whether they attended the meeting or not.

3.6.6 Non-attendance at the Pre-bid Meeting will not be a cause for disqualification of a Bidder.

### 3.7 AMENDMENT IN REQUEST FOR PROPOSAL DOCUMENT

3.7.1 At any time upto the last date of receipt of Bids, the Bank may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Request for Proposal Document by an amendment.

3.7.2 The amendment will be notified in writing or by email or fax to all prospective Bidders who have received the Request for Proposal Document and the same will be binding on them. It will also be uploaded to the Bank's website.

3.7.3 In order to afford prospective Bidders reasonable time to take the amendment into account in preparing their Bids, the Bank may, at its discretion, extend the last date for the receipt of Bids.

### 3.8 LANGUAGE OF BIDS

The Bids prepared by the Bidder and all correspondence and documents relating to the Bids exchanged by the Bidder and the Bank, shall be written in the English Language, provided that any printed literature furnished by the Bidder may be written in another language so long as it is accompanied by an English translation in which case, for purposes of interpretation of the Bid, the English translation shall govern.



**3.9 BID CURRENCY**

The Prices in the bid document shall be denominated in INDIAN NATIONAL RUPEES or any other currency which can be converted to INDIAN NATIONAL RUPEES. For the purposes of evaluation of bids, the exchange rate as advertised by the Reserve bank of India on the day of opening of commercial bids shall apply.

**3.10 VALIDITY**

Bids shall remain valid for 180 days from the last date of bid submission. The Bidder(s) may be required to give consent for the extension of the period of validity of the bid beyond initial 180 days, if so desired by the Bank in writing or by fax. Refusal to grant such consent would result in rejection of bid without forfeiture of the EMD. However, any extension of validity of bids will not entitle the Bidder to revise / modify the bid. The decision of the Bank in this regard will be final, conclusive and binding on the Bidder.

**3.11 MODIFICATIONS & WITHDRAWAL**

The bid submitted may be withdrawn or resubmitted before the expiry of the last date of submission by making a request in writing to the Managing Director of the Bank to this effect. No Bidder shall be allowed to withdraw the bid after the deadline for submission of bids.



## TERMS & CONDITIONS OF THE REQUEST FOR PROPOSAL

This RFP is open to all companies from within India, who are eligible to do business in India under relevant Indian laws as in force at the time of bidding and who fulfil the minimum qualification criteria as hereinafter laid down.

Following qualifications and criteria shall be adopted by the Bank to securitize and evaluate the technical bids received from the prospective bidders. Bidders who are not meeting any of the below mentioned general, technical, or commercial criteria and not furnishing the requisite documents along with their bid shall be disqualified straightway by the Bank and their bids shall not be considered for further evaluation and award of work.

However, the Bank reserves the right to allow any minor deviation in the pre-qualification criteria OR the terms & conditions OR the Technical Specifications as stipulated in this RFP depending upon the merits of the case. The decision of the Bank in this matter shall be final, conclusive and binding on the Bidders.

### 4.1 GENERAL ELIGIBILITY CRITERIA

S. No.	Criteria	Documents to be submitted
1	The Bidder(s) should be a registered company in India under Companies Act 1956 and should have been in operation for at least 05 years as on date of RFP.	Copy of the Certificate of Incorporation should be enclosed as <b>EG – 1</b> .
2	The Bidder(s) should not have been blacklisted / debarred by the Government of India or their undertakings, any State Governments or their undertakings during last 3 years. In such cases the bid will be summarily rejected and no correspondence in this matter shall be replied to by the Bank.	Undertakings from the Bidder(s) in this regard should be enclosed as <b>EG – 2</b> .
3	The Bidder(s) must have valid GST and PAN numbers allotted by the respective authorities.	Copies of all the relevant certificates should be enclosed as <b>EG – 3</b> .
4	The Bidder as well as OEM should have a fully functional Helpdesk for Support (24*7)	Detail of Help Desk Centres and Escalation Matrix should be enclosed as <b>EG – 4</b> .
5	The Bidder(s) must either be an OEM(s) or their authorized business partners of repute as evidenced by copies of relevant certificates.	The bidder should submit Manufacturers Authorization Certificate (MAF) as <b>EG - 5</b> specific to the bid for items mentioned in the RFP.



#### 4.2 TECHNICAL ELIGIBILITY CRITERIA

S. No.	Criteria	Documents to be submitted**
1.	The Bidder should have established at least three Data Centres during last 05 years out of which at least one should be functional in a Bank or Govt. establishment in India.	Copy of Purchase Orders, or Contracts or Letters of Appreciation should be enclosed as Annexure <b>ET-1/B</b> .
2.	The Bidder as well as OEM(s) of all major products should be ISO 9000 certified or must possess an equivalent certification having current validity.	ISO 9000 or equivalent certificates of Bidder as well as OEM(s) should be enclosed as Annexure <b>ET-2/B</b> .

#### 4.3 COMMERCIAL ELIGIBILITY CRITERIA

S. No.	Criteria	Documents to be submitted**
1.	The Bidder(s) should have at least an aggregated turnover of more than ₹ 15 Crore during last three audited financial years.	Copies of the audited balance sheets and profit and loss account for last 3 financial years should be enclosed as Annexure <b>EC-1/B</b> .
2.	The Bidder(s) should have been posting profits in one of the financial year during last 03 years and should have a net positive worth.	Duly certified and signed statement by the authorized CA be enclosed as Annexure <b>EC-2/B</b> indicating that the firm is having positive net worth.
3.	The Bidder(s) should not be involved in any Bankruptcy filing or for protection from it.	Undertakings by the Bidder(s) in this regard should be enclosed as Annexure <b>EC-3/B</b> . Otherwise; if they are so involved they must furnish a bank guarantee valid for three years of an amount equal to the total value of their bid along with their commercial bid and should mention that they have done so in their technical bid.

#### 4.4 GENERAL CONDITIONS

- 4.4.1 Minimum validity of the Proposal must be 180 days from the last date of bid submission.
- 4.4.2 The Bank reserves the right, not an obligation, to carry out the capability assessment of the Bidder(s) and pre dispatch inspections at the cost of the Bidder. This right inter alia includes seeking technical demonstrations, presentations and live site visits.
- 4.4.3 The Bank reserves its absolute right to seek any clarifications or document(s) from the respective Bidder(s) at any stage.
- 4.4.4 The Bank will neither provide nor shall pay any charges for boarding, lodging and transportation facilities for the Bidder(s) or their Representative.
- 4.4.5 The products / services offered should strictly conform to the specifications given in the product literature. The models proposed / marked for withdrawal from the market or models under quality testing should not be offered.
- 4.4.6 Equipment offered should be capable of being fully integrated with the existing network of the Bank immediately on installation.



- 4.4.7 The Bidder(s) are required not to impose their own terms and conditions to the bid and if submitted, it will not be considered as forming part of their bids. The decision of the Bank shall be final, conclusive and binding on the Bidder(s).
- 4.4.8 It is implicit that the Bidder has guaranteed that all the equipment supplied are original & new including all its components and as per the technical specifications. All the hardware and software supplied is licensed and legally obtained in the name of the Bank.
- 4.4.9 In addition to the terms and clauses enumerated in this RFP document, all the relevant provisions of General Financial Rules 2017 and any addendum / corrigendum and all the relevant guidelines of CVC and Government of India as well as Government of Himachal Pradesh shall be deemed to be part of this RFP document and shall be assumed to have implicitly admitted to by the prospective Bidders.

#### **4.5 PURCHASER'S RIGHT TO REJECT ANY / ALL BIDS**

- 4.5.1 The Bank reserves the right to accept or reject any bid partially or fully or annul the bidding process and reject all bids at any time prior to award of contract without assigning any reason, thereby incurring no liability to the affected Bidder(s). The Bank is under no obligation to inform the affected Bidder(s) of the ground for its action.
- 4.5.2 The Bank reserves the right to accept or reject any technology proposed by the Bidder(s).
- 4.5.3 The Bank reserves the right to re-issue the Request for Proposal or any part thereof without assigning any reason whatsoever, at the sole discretion of the Bank.
- 4.5.4 The Bank reserves the right to issue Purchase Order in phases or to alter the quantities specified in the offer. The Bank also reserves the right to delete one or more items from the list of items specified in offer.
- 4.5.5 Any decision of the Bank in this regard shall be final, conclusive and binding on the Bidder(s).

#### **4.6 BID REJECTION CRITERIA**

The bid(s) will be rejected in case of any one or more of the following conditions:

- 4.6.1 Bids which are not substantially responsive to the Request for Proposal Document.
- 4.6.2 Bids not made in compliance with the procedure mentioned in this document or not substantively responsive.
- 4.6.3 Failure on part of the Bidder to provide appropriate information as required in the bid proposal or any additional information as requested by the Bank, including any supporting document.
- 4.6.4 Incomplete or conditional bids or bids that do not fulfil all or any of the conditions as specified in this document.
- 4.6.5 Bids without earnest money deposit.
- 4.6.6 The submission of more than one bid under different names by one Bidder. If the same is found at any stage, all the bids by that bidder will be rejected.
- 4.6.7 Material inconsistencies in the information submitted.
- 4.6.8 Misrepresentations in the bid proposal or any supporting documentation.
- 4.6.9 Bid proposal received after the last date and time specified in this document.
- 4.6.10 Bids found in unsealed cover, unsigned bids, bids signed by unauthorized person and unsigned corrections in the bids.
- 4.6.11 Bids containing erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be authenticated by the person(s) signing the bid.





#### **4.7 BID EVALUATION PROCESS**

- 4.7.1 The Bidder must meet all the eligibility criteria mentioned in Section 4.1, 4.2 and 4.3 failing which their bids will be rejected and shall not be considered for further evaluation.
- 4.7.2 The Technical Bids of all the Bidders who meet the eligibility criteria shall be evaluated further for compliance of specifications and other such parameters as may be needed. The decision of the Bank in this matter shall be final conclusive and binding.
- 4.7.3 The Commercial Bids of all the technically qualified Bidders shall be subjected to financial comparison. It may be noted that the Gross Price and the AMC charges for five years shall be clubbed for the purposes of arriving at the L1 Bidder(s).

#### **4.8 RESPONSIBILITIES OF THE BIDDER(S)**

- 4.8.1 The Bidder(s) shall supply and deliver the equipment as For destination ie, the locations of the DC and DR sites specified by the Bank at a later stage. The rates must include all the charges e.g. packing, forwarding, insurance, freight, commissioning, demonstration, etc. if any at the respective locations.
- 4.8.2 The vendor is required to erect, install, configure and commission the data centre and disaster recovery site as per the requirement of the Bank. They need to operate and run the Data Centre on 24 x 7 x 365 days basis for next 05 years.
- 4.8.3 The vendor shall install, implement, configure and commission the software and other plug-ins / patches as per the requirements of the Bank.
- 4.8.4 All the Bidders shall maintain the infrastructure provided by the Bank for the implementation and operation of the project and allied services.
- 4.8.5 The vendor needs to execute and carryout all the tasks / activities / works as per the satisfaction of the Bank and Consultant. The sign off / UAT certificate shall be issued by the Bank only after the successful testing, demonstration and satisfactory reports are given by the concerned officials / Committee and the Consultants.
- 4.8.6 The successful vendor has to execute and enter into an agreement called Service Level Agreement (SLA) with the Bank. A draft SLA is given at the end of the RFP.

#### **4.9 RESPONSIBILITIES OF THE BANK**

- 4.9.1 The Bank shall provide space and power supply to install the network, equipment and components etc. On day-to-day basis the officials of the Bank shall help the engineers deputed by the Bidder for the job in their capacity.
- 4.9.2 The Bank or Consultant shall provide the necessary directions and inputs to the vendor to install, fix and deploy the equipment at the right place.
- 4.9.3 In case of any confusion or lack of clarity, the Bank or the Consultant will advise the team of vendor.

#### **4.10 SCHEDULE OF PAYMENT**

- 4.10.1 No payment will be made in advance for any supplies under this invitation for bid.
- 4.10.2 70% of the total payment due (exclusive of annual maintenance charges, AMC, etc.) shall be released by the Bank upon successful delivery of equipment / software and raising of relevant invoices thereof.
- 4.10.3 Remaining 30% of the payment shall be released by the Bank upon successful installation, testing and certification (sign off and UAT) report has been issued by the Technical Committee / Consultant / concerned users within one month from the date of raising of relevant invoices thereof.
- 4.10.4 Operation and Maintenance charges shall be released by the Bank on half yearly (bi-annual) basis upon rendering satisfactory services to the Bank and raising relevant invoice thereof by the vendor.
- 4.10.5 The AMC for the supplies for the period after the warranty will be payable on half yearly (bi-annual) basis on post-paid basis within one month of raising of relevant invoices thereof after making



deductions for non-performance/downtime and other penalties imposed, if any. The Bidder may, however, prefer to raise invoice in advance also, though the payment shall be made strictly on post-paid basis.

#### **4.11 TIME SCHEDULE**

The project should be completed within six months from the date of placing the supply order and the Bank's decision in this regard will be final and binding. The supply shall actually be deemed to have been complete on the actual date of installation / implementation and successful demonstration to the duly constituted committee of the Bank.

The detailed schedule will be specified by the Bank at the time of placing supply / work orders after due consultation with the successful Bidder(s).

#### **4.12 EARNEST MONEY DEPOSIT (EMD)**

- 4.12.1 Earnest Money shall be deposited online as directed on the e-procurement portal <https://hptenders.gov.in/> of the Government of Himachal Pradesh with the bid. The applicable payable amount is ₹ 20,00,000/- (Rupees Twenty Lacs only).
- 4.12.2 Proposals without Earnest Money Deposit shall not be accepted.
- 4.12.3 The Earnest Money Deposit of unsuccessful bidders shall be returned as soon as possible by the Bank.
- 4.12.4 The successful Bidder(s) will be required to meet the schedule of job given by the Bank and mutually agreed to by them and would abide by the terms and conditions of the contract, failing which the Bank reserves the right to forfeit the full or part of the said deposit, as the case may be.
- 4.12.5 If the Bidder refuses to undertake the allotted work or delays the work deliberately and unnecessarily, their allotment order will be cancelled, Firm will be black-listed and Earnest Money Deposit shall be forfeited. In such a case decision of the Bank will be final and binding.

#### **4.13 RATES**

The rates quoted shall remain firm throughout the period of contract and this contract will remain valid till the date of completion of the job by the Bidder(s) and shall not be subject to any upward modification whatsoever.

#### **4.14 WARRANTY AND SUPPORT**

- 4.14.1 All the goods and services quoted in response to this Request for Proposal shall have an onsite warranty for 03 years and support for next 02 years from the date of successful commissioning and sign off / UAT.
- 4.14.2 If any equipment is damaged during the contract period, the service provider is liable to replace the same with same or higher configuration with no extra cost. The downtime due to such components would be taken into account for calculation of penalties.
- 4.14.3 Providing suitable standby for parts / components with same or better specifications till the time the original part/component is repaired or replaced so that daily business is not affected.
- 4.14.4 During the maintenance period, Bank may ask the vendor to replace any unfit and unprofessional resource or manpower. Each member of the team must be a full time employee of the vendor.
- 4.14.5 Bank shall have no liability whatsoever for any loss or injury to any property or an individual assigned a duty to perform the services under this RFP.
- 4.14.6 Vendor will alone be responsible for any mishap or accident or untoward incidence during the maintenance of computer hardware and other devices which may occur due to negligence / default on the part of the vendor or the staff deputed for the said activity or job.



#### **4.15 PENALTIES**

In case of delay in execution of works or delivery of goods & services, penalties at the following rates shall be imposed on the total amount (as per relevant rate schedule) of delayed goods / services:

2% for delay of the first two months

3% per month for subsequent delays

Maximum delay of six months is tolerable, beyond which the order may be cancelled.

Any lapse, negligence or delay on the part of the vendor or their staff shall also be attributed on them. However, looking at the merit of the case, the Bank upon recommendations of the Consultants may waive off and relax any condition, deviation or penalty to certain extent.

In this regard, the decision of the Bank shall be final, conclusive and binding on the firm.

#### **4.16 TAXES AND DUTIES**

The Bidder shall be solely responsible for the payment of all taxes including GST, duties, license fees, octroi etc. incurred until completion of the project.

#### **4.17 PERFORMANCE GUARANTEE**

The successful Bidder(s) shall furnish a security in the form of bank guarantee in favour of the Managing Director, The Kangra Central Cooperative Bank, Dharamshala @ 5% of the total value of the order placed to the Bidder, and the same must be valid for 5 years from the date of order, which shall be discharged thereafter.

#### **4.18 INSURANCE**

The Bank will not pay for any insurance charges against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery etc. The insurance shall be purchased by the Bidder, naming the Bank as the beneficiary, in an amount equal to the exact value of the Goods up to the installation at site on all risks basis, including war Risks and strike clauses etc.

#### **4.19 INDEMNITY**

- 4.19.1 The Bidder(s) shall indemnify the Bank against all third party claims of infringement of Intellectual Property Right, including Patent, trademark, copyright, trade secret or industrial design rights arising from use of the Goods, or any part thereof in India.
- 4.19.2 The Bidder(s) shall, at their own expense, defend and indemnify the Bank against all third party claims or infringement of intellectual Property Right, including Patent, trademark, copyright, trade secret or industrial design rights arising from use of the products or any part thereof in India or abroad.
- 4.19.3 The Bidder(s) shall expeditiously extinguish any such claims and shall have full rights to defend itself therefrom. If the Bank is required to pay compensation to a third party resulting from such infringement, the Bidder(s) shall be fully responsible therefore, including all expenses and court and legal fees.
- 4.19.4 The Bank will give notice to the Bidder of any such claim without delay, provide reasonable assistance to the Supplier in disposing of the claim, and shall at no time admit to any liability for or express any intent to settle the claim.

#### **4.20 CONFIDENTIALITY**

- 4.20.1 The Bidder shall not, and without the Bank's prior written consent, disclose the contract or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Bank in connection therewith to any person other than a person employed by the Bidder in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.



4.20.2 The Bidder shall not without the Bank's prior written consent, make use of any document or information.

4.20.3 Any document other than the contract itself shall remain the property of the Bank and shall be returned (in all copies) to the Bank on completion of the Bidder's performance under the contract if so required by the Bank.

#### **4.21 CONFLICT OF INTEREST**

Absence of, actual or potential conflict of interest on the part of the Bidder due to prior, current, or proposed contracts, engagements, or affiliations with the Bank needs to be meticulously ensured. Additionally, they shall proactively disclose and address any and all potential elements, which would adversely impact their ability to complete the requirements as given in the RFP.

#### **4.22 TRAININGS**

The Bidder shall be responsible for training the Bank personnel in the areas of implementation, operations, management, error handling, troubleshooting, system administration and any other related areas. This training can be arranged at the premises of the Bidder or at the Bank. All employees need to be trained by the Bidder who shall be identified by the Bank and shall comprise of people having different levels of qualifications and responsibilities. The final training schedule shall be decided according to a mutually agreed time table before the work order is finally placed.

#### **4.23 LIMITATION OF LIABILITY**

Notwithstanding anything to the contrary contained in the contract, the Bidder's aggregate liability arising out of or in connection with the contract, whether based on contract, tort, statutory warranty or otherwise, be limited to the amount actually paid by the Bank to the Bidder in respect of the services that are subject matter of a claim, subject to a maximum of 100% of the contract value. The Bidder shall not be liable for any special, indirect, incidental or consequential damages of any kind including but not limited to loss of use, data, profit, income, business, anticipated savings, reputation, and more generally, any loss of an economic or financial nature, whether these may be deemed as consequential or arising directly and naturally from the incident giving rise to the claim.

#### **4.24 FORCE MAJEURE DURING THE PENDENCY**

During the pendency of the contract if the performance in whole or part thereof by either party is prevented / delayed by causes arising due to any war, hostilities, civil commotion, act of public enemy, sabotage, fire, floods, explosion, epidemics, non-availability of raw material, and other consumables, or any other causes including breakdown of equipment beyond their reasonable control neither of the two parties shall be made liable for loss or damage due to delay or failure to perform the contract during the pendency of forced conditions provided that the happenings are notified in writing within 7 days from the date of occurrence by the consultant. The work shall be resumed under the contract as soon as possible after the restoration of normalcy.

#### **4.25 ARBITRATION**

All disputes, differences, claims and demands arising under or pursuant to or touching the contract shall be referred to the sole arbitrator to be appointed by The Registrar Co- operative Societies, Himachal Pradesh. The award of the sole arbitrator shall be final and binding on both the parties under the provisions of the Arbitration and Conciliation Act, 1966 or by statutory modification/re-enactment thereof for the time being in force. Such arbitration shall be held at Shimla.

#### **4.26 APPLICABLE LAWS & JURISDICTION OF COURTS**

In all matters and disputes arising hereunder, shall be governed in accordance with the Laws of India for the time being enforced and the appropriate Courts at Dharamshala, or any competent court in Himachal Pradesh only shall have the jurisdiction to entertain and try them.



## DETAILED SCOPE OF WORK, SPECIFICATIONS & DELIVERABLES

### 5.1 GENERAL NOTE

- 5.1.1 The given specifications are minimum requirements. Bidders should enclose relevant printed or neatly typed detailed specification sheets of their offerings, which shall also be kept in mind at the time of evaluation of offers.
- 5.1.2 The make and models quoted and offered by the supplier in the technical bid should necessarily conform to the specifications mentioned in the RFP. Further, in case of major deviations and non-compliances against any of the goods & services requested herein, the Bank will not pay the applicable amount to the vendor.
- 5.1.3 All items quoted by the bidders must carry 03 years comprehensive warranty and 02 years of support and maintenance.
- 5.1.4 The given specifications can be met either in the same unit or in any combination of units.
- 5.1.5 The quantities mentioned herein are indicative and shall be used to arrive at L1 Bidder. However, they may vary and shall be paid for by the Bank as per actual. In case of variations in quantities the rates mentioned by the Bidder in the relevant rate schedule shall apply.
- 5.1.6 The Bidders are necessarily required to quote for all the components.

### 5.2 MODULAR DATA CENTRE

#### 5.2.1 SCOPE OF WORK

- a. Supply, installation and commissioning, operation and maintenance of Modular Data Centre including UPS and other accessories in accordance with the technical specifications and scope of work mentioned in the RFP.
- b. **Installation and Configuration:**
  - i. Deploying and setting up the modular data centre and uninterrupted power supply at the Head Office of the Bank at Dharamshala. The vendor is required to handover a fully functional Data Centre.
  - ii. Mounting and proper configuration of all the hardware like Servers, Storage, Routers, Switches, Firewalls / UTM, etc. on the racks of data centre.
  - iii. Configuring all the software associated with the data centre management.
  - iv. Imparting necessary Training / Demonstration to the IT staff and users of the Bank.
- c. **Uptime:** The Bidder will ensure an uptime of more than 99.9% for the Data Centre.
- d. **Warranty:** The equipment offered should be robust and reliable. All the hardware must be supplied with 05 years comprehensive warranty and OEM support.
- e. **Operation and Maintenance:**
  - i. The operation and technical maintenance of the Data Centre at on-site/off-site locations provided by the Bank will be the responsibility of the Bidder. Therefore, to manage the same effectively, the vendor is required to deploy competent IT professionals conversant with the Data Centre on full time basis. The resources deployed in the DC are expected to be present on 24x7x365 days basis.



- ii. The L1 support provided from remote back office is also expected to be made available on 24x7 basis.
- iii. The operation and maintenance shall commence from the actual date of successful installation, commissioning, and rollout of all the hardware, software and services by the vendor and further accepted and certified by the Bank and Consultants.
- iv. The charges towards the same shall be borne by the Bank as quoted by the bidder in their commercial bid. In case of non-performance and unsatisfactory services, the Bank reserves the rights to impose suitable penalty and deduct applicable amount.

#### 5.2.2 TECHNICAL SPECIFICATIONS

S No	Item Description	Quantity Needed
1.	<p><b>Modular Data Centre</b></p> <p>The solution should be a complete DC infrastructure solution offering Cooling, Fire detection &amp; Suppression, UPS, Access Control &amp; Remote Monitoring all integrated together inside a rack, resulting in less footprint and hence increased cost savings. The total cost of ownership would be low and shall be able to be deployed in Modules of 1 &amp; 2 racks, hence saving initial capital infrastructure required. Customer should be able to enhance DC infrastructure as computing requirement increases in future. Modular solution should help in easy relocation of site with less downtime. The DC infrastructure shall incorporate high availability design products (N+N) for power and cooling with best practices from international standards like ASHRAE TC 9.9, NFPA 75 etc.</p> <p><b>Racks: Two Nos.</b></p> <p>The racks shall have following features:</p> <ul style="list-style-type: none"> <li>• 42U Rack, 1000Wx1200Dx2000H, IP-54 Racks to ensure protection against ingress of dust and water.</li> <li>• Safe load carrying capacity of 1400 kg on enclosure frame, and 1000 kg on 19 inch mounting angles</li> <li>• Sturdy frame having 9X folding profile welded construction</li> <li>• Unique 3-Point Locking System with Ergo-form handle &amp; unique safety key for front &amp; back door</li> <li>• Option of using biometric reader with electromagnetic handle for each door.</li> <li>• Front glazed door having 4 mm thick toughened glass for safety</li> <li>• Increased corrosion resistance using state of art paint technology (Nano ceramic coat, EC dip coat &amp; powder coated painting)</li> <li>• Compliance to EIA 310 and IEC 297 standards</li> </ul> <p><b>Closed Loop Cooling: Two Nos.</b></p> <ul style="list-style-type: none"> <li>• The cooling system shall be zero U rack based type with horizontal uniform cold air distribution with (N + 1) redundancy.</li> <li>• It shall be highly efficient, closed loop circuit, “front to back” cooling solution up to 7kW per cooling unit with ambient temperature range +10° C to +50° C .</li> <li>• The cold air distribution shall be lateral, uniform from 1U to 42U in front of the 19” equipment for efficient cooling.</li> </ul>	01



	<ul style="list-style-type: none"> <li>There shall be no loss of vertical "U" space inside the 19" Rack while mounting the equipment.</li> </ul> <p><b>Monitoring Solution:</b></p> <ul style="list-style-type: none"> <li>Monitoring of various physical parameters in rack like temperature, humidity, access, smoke, energy etc.</li> <li>All monitored data and alarms can be sent via network by sending e-mail and sms alerts</li> <li>The following sensors may be connected to the monitoring device: <ul style="list-style-type: none"> <li>Temperature / humidity sensor</li> <li>Airflow sensor</li> <li>Smoke detector</li> <li>Access Control sensor</li> <li>Water leak sensor</li> <li>Auto Door control unit (two connections)</li> <li>Rack based fire extinguisher system</li> <li>Rack based very early smoke detection system</li> <li>SMS &amp; Email notifications via GSM module</li> </ul> </li> </ul> <p><b>Rack based fire suppression system:</b></p> <ul style="list-style-type: none"> <li>The fire suppression system shall be 1U 19 inch rack mount solution for early fire detection &amp; automatic fire extinguishing using eco-friendly NOVEC 1230 clean agent gas.</li> <li>The system shall have built-in emergency power supply for 4 hours.</li> </ul> <p><b>Rack based Power Distribution unit (2 PDU's per rack)</b></p> <ul style="list-style-type: none"> <li>Vertical basic PDU, 32A, Single Phase, C13 Sockets - 16nos, C19 Sockets - 4nos, 32A DP MCB with cover, Power cord of 6sqmm x 3core cable with pin type lugs.</li> </ul>	
2.	<p><b>Uninterrupted Power Supply</b></p> <ul style="list-style-type: none"> <li>2X10 KVA/KW Online UPS with SNMP Card &amp; Monitoring software</li> <li>Rack Mountable UPS with Rail Kit</li> <li>Proper LED/LCD screen to monitor the UPS with following measures and fault indication:</li> <li>Input: Voltage / Frequency <ul style="list-style-type: none"> <li>Output: Voltage / frequency</li> <li>Battery: Remaining time / Voltage</li> <li>Load: Percentage / kW</li> <li>Charger Failure</li> <li>Battery Failed</li> <li>Battery Low</li> <li>Overload</li> </ul> </li> </ul>	02



	<ul style="list-style-type: none"> <li>• AC indicator/Battery Mode of Operation / Bypass feeding the load / UPS Fault</li> <li>• Audible Alarm: <ul style="list-style-type: none"> <li>- Battery Low beep / DC Fault beep/ UPS Overload beep/ o/p short ckt fault beep/ Shutdown beep</li> </ul> </li> <li>• SMF Batteries 12V 26ah 16nos for backup for 15min on Each UPS with suitable, Ventilated, powder coated batteries cabinet &amp; links.</li> <li>• Battery recharge time (After complete discharge) to 90% capacity in 8-10 hours</li> <li>• Input range: 340-460 V Three Phase &amp; 160-285V Single Phase User Selectable type.</li> <li>• Input Power factor: 0.99 or Better.</li> <li>• Output Range: 220V/230V/240V single phase selectable &amp; 380V/400V/415V User Selectable.</li> <li>• Output Power Factor: Unity</li> <li>• Efficiency: Overall 94% or better</li> <li>• Transfer Time (Mode of operation): <ul style="list-style-type: none"> <li>- Nil from Mains mode to Battery Mode</li> <li>- Nil from Battery Mode to Mains mode</li> </ul> </li> <li>• Inverter to Bypass / Bypass to Inverter &lt; 2 ms (Synchronized Mode)</li> <li>• Interface to NMS: <ul style="list-style-type: none"> <li>- SNMP Card for connecting the UPS to LAN thru Ethernet port &amp; monitoring thru NMS should be available along with Battery Temperature Sensor.</li> <li>- RS232 Port should be provided as standard in the UPS. However, there should be provision for USB port also in the UPS</li> </ul> </li> <li>• Remote Monitoring: <ul style="list-style-type: none"> <li>- UPS Should be supplied with data-driven digital monitoring service for your critical equipment, increasing resiliency and transparency through live sensor data. predictive analytics and smart alarming delivered directly to your Smartphone. Remote troubleshooting is provided by the experts monitoring your connected assets 24x7.</li> </ul> </li> <li>• UPS should start up (cold start)</li> <li>• On AC Supply (Mains) without DC Supply (Batteries)</li> <li>• On DC Supply (Batteries) without AC Supply (Mains)</li> <li>• UPS should start up automatically on mains resumption after battery low shutdown</li> <li>• UPS should have internal anticorrosion air filters for dust filtration</li> <li>• Natural Convection Cooling through air vents</li> <li>• Parallel Redundant: UPS should be installed in 2X10kva Parallel redundant Mode &amp; can be capable to be parallel up to minimum 3units.</li> <li>• Certification/ Compliance:</li> </ul>	
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	<ul style="list-style-type: none"> <li>- Product: IEC62040-1, IEC62040-2, IEC62040-3, IEC 61000-4-3, IEC 61000-4-4, IEC-61000-4-5, IEC61000-4-6, IEC61000-4-11, IEC61000-4-12, IEC61000-4-16,</li> <li>- Manufacturer: ISO 9001: 2008, ISO 14001: 2004 and ISO 50001:2011</li> <li>- Noise: &lt; 60 dbA at 1 meter distance</li> <li>• UPS OEM should have local authorized service centre in Kangra District, Himachal Pradesh. Documentary proof should be provided along with bid.</li> <li>• UPS, PDU'S &amp; ATS should be from Same OEM for seamless integration.</li> <li>• Warranty: 5-Years comprehensive on-site OEM Warranty from the date of installation.</li> </ul>	
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### 5.3 HYPER CONVERGED INFRASTRUCTURE

#### 5.3.1 SCOPE OF WORK

- a. Supply, installation and commissioning, operation and maintenance of Hyper Converged Infrastructure for Computing and Storage requirements of the Bank in accordance with the technical specifications and scope of work mentioned in the RFP.
- b. **Installation and Configuration:**
  - i. Deploying and setting up the Hyper Converged Infrastructure at the Head Office of the Bank at Dharamshala and at the Disaster Recovery Site of the Bank in Bengaluru. The vendor is required to handover a fully functional and well configured infrastructure.
  - ii. Installing all the required system software like HCI, virtualization suite and operating systems on the Hyper Converged Infrastructure.
  - iii. Configuring all the software associated with the HCI management.
  - iv. Imparting necessary Training / Demonstration to the IT staff and users of the Bank.
- c. **Uptime:** The Bidder will ensure an uptime of more than 99.9% for the Data Centre.
- d. **Warranty:** The equipment offered should be robust and reliable. All the hardware must be supplied with 05 years comprehensive warranty and OEM support.
- e. **Operation and Maintenance:**
  - i. The operation and technical maintenance of the HCI at on-site/off-site locations provided by the Bank will be the responsibility of the Bidder. Therefore, to manage the same effectively, the vendor is required to deploy competent IT professionals conversant with the Data Centre on full time basis. The resources deployed in the DC are expected to be present on 24x7x365 days basis.
  - ii. The L1 support provided from remote back office is also expected to be made available on 24x7 basis.
  - iii. The operation and maintenance shall commence from the actual date of successful installation, commissioning, and rollout of all the hardware, software and services by the vendor and further accepted and certified by the Bank and Consultants.
  - iv. The charges towards the same shall be borne by the Bank as quoted by the bidder in their commercial bid. In case of non-performance and unsatisfactory services, the Bank reserves the rights to impose suitable penalty and deduct applicable amount.

#### 5.3.2 TECHNICAL SPECIFICATIONS



S No	Item Description	Quantity Needed
1.	<p><b>Hyper Converged Infrastructure</b></p> <p><b>General:</b></p> <ul style="list-style-type: none"> <li>Proposed HCI solution must be present in at least 5 banking customers in India, and must be running the production workload of banks.</li> <li>All the infrastructure software provided should be of the highest tier available by the OEM. This includes, HCI software, Management of HCI, Micro-segmentation, Cloud management platform.</li> </ul> <p><b>HCI Architecture:</b></p> <ul style="list-style-type: none"> <li>The proposed HCI software &amp; hardware should be factory integrated by the OEM, License proposed should have flexibility to decouple the HCI software from hardware, in order to run HCI software on any certified hardware</li> <li>Proposed solution must support at least two hypervisors amongst the mainstream HCI hypervisors, namely Acropolis, ESXi &amp; Hyper-V</li> <li>The proposed HCI solution should be fully software defined and should not leverage any specialized (proprietary) hardware for providing data services such as de-duplication and compression</li> <li>The proposed solution should independently scale storage and compute Nodes as and when needed without any downtime. HCI should support storage expansion either scaling out or scaling up storage space in the HCI Cluster.</li> <li>The proposed solution must allow the mixing of different CPU families within a cluster, to allow for continual replacement of old hardware by "rolling forward" the cluster over time. Must allow mixing different configuration of HCI nodes in the same cluster, namely All-Flash with Hybrid (SSD and SAS/SATA)</li> <li>The proposed solution must offer the ability to add nodes of different sizes, both in physical dimensions and in the quantity of RAM, Storage and Cores, to take account of the changing needs of the bank over time</li> <li>The proposed HCI solution must support Data Compression, Deduplication &amp; Erasure coding natively and licenses for this feature should be factored in the bill of material.</li> <li>The HCI storage must have integrated wizard to schedule snapshot for hourly / daily / weekly / monthly snapshot policies. Any additional software or license required to achieve this functionality must be provided on day 1.</li> <li>The Solution should allow for taking clones of individual Virtual Machines for faster provisioning.</li> <li>The Solution should allow for taking snapshots of individual Virtual Machines to be able to revert back to an older state.</li> <li>Must support Instant space optimized point-in-time Snapshots. Should support unlimited snapshots</li> <li>The proposed solution must provide the automated rolling upgrades of hypervisor, storage software, and firmware with no VM or storage down time</li> </ul>	03*2



	<p>without requiring the VMs to be relocated to other cluster or storage platform to accomplish these non-disruptive upgrades, all from a single GUI interface</p> <ul style="list-style-type: none"><li>• The solution design should have features like zero data loss and near zero downtime in case of disk, host, network, rack and site failure.</li><li>• No Single Point of Failure with complete redundancy at all levels (including but not limited to Power supply, Caching disks etc.). Nodes should be configured to have at least two copy of data available in cluster, in order to support data &amp; cluster availability in event of One Node Failure</li><li>• The solution should be able to work on latest x86 server hardware available from all the leading vendors in the industry and should not be restricted to a particular vendor/make/model</li><li>• All servers in the HCI cluster must contribute Compute &amp; Storage.</li><li>• The proposed solution must offer native File Services, supporting SMB, NFS 3.0/4.0, with the ability to scale-out. This is required for any future requirement that may arise. At least 20TB of scale-out NAS space must be provided in the HCI cluster from day 1</li></ul> <p><b>Virtualization:</b></p> <ul style="list-style-type: none"><li>• The proposed virtualization software shall provide a virtualization layer that sits directly on the bare metal server hardware with no dependence on a general purpose OS for greater reliability and security</li><li>• The solution shall provide the ability to add Memory , storage disks and NICs (provided the same is supported by the guest operating system) without the need to reboot the workload</li><li>• The solution shall provide zero-data loss against physical host failures. The solution should also store a redundant copy of the data which is accessible immediately by the Hypervisor and application.</li><li>• The proposed solution's Hypervisor(s) must offer "Live VM Migration", "High Availability" and intelligent placement of workloads on nodes best suited to their execution.</li><li>• Hypervisor shall provide automated live migration for initial placement and balancing of available resources with the rules to define affinity and / or anti-affinity of workloads</li></ul> <p><b>Replication:</b></p> <ul style="list-style-type: none"><li>• Proposed solution should provide synchronous and asynchronous, local and remote replication to any x86 platforms as long as HCI SW is same. Bank expects 5-10 mins RPO. Bidder must provision for the same. WAN bandwidth will be provided by the bank</li><li>• Provide the ability to carry simultaneous bi- directional replication between two data centers.</li><li>• The solution should provide orchestration layer to have automated disaster recovery.</li><li>• Unlimited VMs licenses should be provided for covering all the VM's &amp; any new VMs organization will deploy in future.</li><li>• The ability to replicate bi-directional data center deployment of more than 2 DC's</li></ul>	
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	<ul style="list-style-type: none"> <li>• The solution must allow changing of IP address of recovered Virtual Servers to match target datacenter.</li> <li>• The solution must allow the option to test DR failover to separate network with no impact to production workloads.</li> <li>• The solution should have feature to assist in failback process to Primary datacenter.</li> <li>• Replication &amp; DR automation licenses to be included. There should not be any restriction in number of VM's that can be enabled for replication.</li> </ul> <p><b>Security:</b></p> <ul style="list-style-type: none"> <li>• Proposed solution should have the feature of encrypting data-at-rest at SDS/Hard disk level, Third Party Key Management solution, if needed, should be provisioned from Day 1</li> <li>• The proposed solution must offer Micro segmentation for VM-level security (at the vNIC).</li> <li>• The solution should provide a stateful distributed firewall such that the firewall for Virtual Machines can be provided closest to the application within the server itself without traffic going to a Physical Firewall.</li> </ul> <p><b>Management:</b></p> <ul style="list-style-type: none"> <li>• The proposed solution must be managed through an HTML5 web based console that provides a single pane of glass view for the entire environment</li> <li>• The solution should provide prebuilt &amp; customizable operations dashboards &amp; reports to provide real time insight into infrastructure behavior, upcoming problems &amp; opportunities for efficiency improvements.</li> <li>• The solution should provide explanations, recommended solutions to performance, capacity &amp; configuration problems. It should also associate workflows with alerts to automatically initiate corrective measures at critical thresholds.</li> <li>• The solution should provide capacity analytics which can identify over-provisioned resources so they can be right-sized for most efficient use of virtualized resources.</li> <li>• The solution shall provide assistance in troubleshooting and operational management in the virtualized environment.</li> <li>• Capacity planning must be integrated into the proposed solution, showing both efficiency savings available to the deployed system (such as right-sizing workloads) and the predicted time remaining for RAM, CPU and Storage on the cluster (given "current" demand). Additionally, the planning should advise on what resources need to be added and allow administrators to model the behavior of the platform given additional (configurable) workloads</li> </ul> <p><b>Cloud Management Platform:</b></p> <ul style="list-style-type: none"> <li>• The solution should have catalogue of private as well as public cloud services, and should support self-service provisioning capabilities not limited to only HCI based solution but also for public cloud</li> <li>• The proposed solution should provide application lifecycle management with automated orchestration across multiple hypervisor and cloud.</li> </ul>	
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	<ul style="list-style-type: none"> <li>• The solution should provide authentication, authorization and accounting (AAA) out of the box like VM Access rights, Edit Rights, Delete Rights etc.</li> <li>• The solution should provide ability to orchestrate third-party integrations via APIs to simplify the use of complementary IT service management tools and products</li> <li>• The solution should have Life Cycle Management Work flows: Provisioning</li> <li>• The Solution should have the capabilities for customization of dashboards</li> <li>• The solution should provide capability of generating reports for usage &amp; performance</li> <li>• The proposed solution should have capability to create VPC (virtual private cloud) with capability to use same subnets/CIDR in different VPC's</li> <li>• The solution shall provide an orchestration engine with ready workflows and ability to create custom workflows based on SOAP, REST operations and PowerShell scripts</li> <li>• Should be able to do cost and show/charge back to cloud users tenants</li> </ul> <p><b>Warranty:</b></p> <ul style="list-style-type: none"> <li>• 5 Years onsite comprehensive warranty including all other accessories, Licenses related to smooth proposed HCI infrastructure from the date of successfully installation, commissioning, integration and final acceptance.</li> </ul> <p><b>The Node Configuration at each Site (DC-1 / DC-2):</b></p> <ul style="list-style-type: none"> <li>• Cluster1 at DC1 <ul style="list-style-type: none"> <li>- Total Cores - 24 @ 3.2 GHZ each</li> <li>- RAM - 384 GB</li> <li>- Usable Storage - 9 TB</li> <li>- ToR Swtich - 2*24 Port Each</li> </ul> </li> <li>• Cluster2 at DC1 <ul style="list-style-type: none"> <li>- Total Cores - 190 @ 2.4 GHZ each</li> <li>- RAM - 1152 GB</li> <li>- Usable Storage = 70 TB</li> </ul> </li> <li>• Cluster3 at DC1 <ul style="list-style-type: none"> <li>- Total Cores - 36 @ 2.1 GHZ each</li> <li>- RAM - 384 GB</li> <li>- Usable Storage - 4 TB</li> <li>- ToR Swtich - 2*12 Port Each</li> </ul> </li> <li>• Cluster1 at DC2 <ul style="list-style-type: none"> <li>- Total Cores - 24 @ 3.2 GHZ each</li> <li>- RAM - 384 GB</li> <li>- Usable Storage - 9 TB</li> <li>- ToR Swtich - 2*24 Port Each</li> </ul> </li> </ul>	
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	<ul style="list-style-type: none"><li>• Cluster2 at DC2<ul style="list-style-type: none"><li>- Total Cores - 32 @ 2.1 GHZ each</li><li>- RAM - 384 GB</li><li>- Usable Storage = 14 TB</li></ul></li><li>• Cluster3 at DC2<ul style="list-style-type: none"><li>- Total Cores - 36 @ 2.1 GHZ each</li><li>- RAM - 384 GB</li><li>- Usable Storage - 4 TB</li><li>- ToR Switch - 2*12 Port Each</li></ul></li></ul>	
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## 5.4 SOFTWARE DEFINED WIDE AREA NETWORK

### 5.4.1 SCOPE OF WORK

- a. Supply, installation and commissioning, operation and maintenance of the secured software defined wide area network of the Bank across its two data centres and about 250 other locations in accordance with the technical specifications and scope of work mentioned in the RFP.
- b. **Installation and Configuration:**
  - i. Deploying and setting up the secured software defined wide area network devices and software at the Head Office of the Bank at Dharamshala, at the Disaster Recovery Site of the Bank in Bengaluru and at the other locations of the Bank. The vendor is required to handover a fully functional and well configured infrastructure.
  - ii. Installing all the required system software like controllers and configurations of the software as may be required.
  - iii. Configuring all the software associated with the requirement.
  - iv. Imparting necessary Training / Demonstration to the IT staff and users of the Bank.
- c. **Uptime:** The Bidder will ensure an uptime of more than 99.9% for the Data Centre.
- d. **Warranty:** The equipment offered should be robust and reliable. All the hardware must be supplied with 05 years comprehensive warranty and OEM support.
- e. **Operation and Maintenance:**
  - i. The operation and technical maintenance of the network devices and their associated software at on-site/off-site locations provided by the Bank will be the responsibility of the Bidder. Therefore, to manage the same effectively, the vendor is required to deploy competent IT professionals conversant with the Data Centre on full time basis. The resources deployed in the DC are expected to be present on 24x7x365 days basis.
  - ii. The L1 support provided from remote back office is also expected to be made available on 24x7 basis.
  - iii. The operation and maintenance shall commence from the actual date of successful installation, commissioning, and rollout of all the hardware, software and services by the vendor and further accepted and certified by the Bank and Consultants.
  - iv. The charges towards the same shall be borne by the Bank as quoted by the bidder in their commercial bid. In case of non-performance and unsatisfactory services, the Bank reserves the rights to impose suitable penalty and deduct applicable amount.

### 5.4.2 TECHNICAL SPECIFICATIONS



S No	Item Description	Quantity Needed
1.	<p><b>Solution</b></p> <p><b>General:</b></p> <ul style="list-style-type: none"><li>Proposed SD-WAN should belong Class A make in India Category.</li><li>The SD WAN should have the ability to bind multiple links.</li><li>The SD WAN should support IPv4 and IPv6 from day one.</li><li>The SD WAN should support QOS features.</li><li>The SD WAN should support streaming telemetry and RTP protocol for real time monitoring and report purpose.</li><li>The SD WAN must include the ability to support network topologies like Hub and Spoke, Full mesh and Partial mesh</li><li>Based on network analysis of the current setup the solution must select best path based on link quality, policy and link capacity.</li><li>The solution needs to be a True SD-WAN that is purpose built right from the foundation based on SDN architecture and should not be a simple feature activated through license activation on a generic UTM like solution.</li><li>Solution needs to provide real-time streaming analytics like health status, WAN links status, application wise bandwidth utilization status</li><li>The solution should be able to load balance across multiple discrete links simultaneously through per packet or per session load sharing</li><li>The SDWAN solution should support single pane of glass management.</li><li>The solution must provide Remote diagnostics tools to validate reachability of both WAN and LAN side, Packet Capture, Packet flow CLI tracer etc.</li><li>NAT- The branch SDWAN devices should have the ability to do address translation between private and public IP address spaces and support source based NAT and destination based NAT</li><li>The SDWAN Controller should support integration with third party ITSM tool for the workflow management for audit and compliance to review, approve and audit policy changes from the controller</li><li>There should not be any impact on SDWAN data forwarding capability in case of complete disconnection of controllers</li><li>Configurational changes made at the individual CPE devices locally through the management / console port of the device should be replicated to the controller</li><li>The software defined network controller should be capable of running as a virtual machine in the data center</li><li>The data plane at the branch locations, data center should be programmable from the central software defined network controller.</li><li>The architecture should allow for internet break out at the local at branch, centralized location, remote entity (remote location) and cloud based on the application and the policy defined in the software defined network controller.</li></ul>	01



	<ul style="list-style-type: none"> <li>• The tunnel creation should be automatic without any manual configuration on the edges and the controller.</li> <li>• The WAN path selection should be dynamically selected based on the policy set from the software defined network controller.</li> <li>• The system architecture should allow the use the most preferred link based upon Link characteristics (Latency, Hop Count, Packet Loss, Jitter) for critical applications as defined in policy</li> <li>• The SD WAN should support if the bandwidth of a single session exceeds the availability on any link, the link must be able to use multiple links simultaneously.</li> <li>• The SD WAN should be able to build connections dynamically between two SDWAN devices leveraging multiple links and apply logic for best path selection, traffic switching, QOS and dynamic link bonding.</li> <li>• The SD WAN device should have the capability to forward traffic via specific WAN paths depending on predefined application policies and performance needs.</li> <li>• The SD WAN solution should not add any latency for the current traffic path.</li> <li>• The SD WAN should continuously check the link flaps and link quality parameters and traverse the traffic accordingly. i.e. if the link is not stable then put the link in monitor state, once the link is stable for particular time then start sending traffic on that link. Link flaps or link up/down must not affect the traffic as long as other link is available.</li> <li>• The SD WAN should support one way latency and traffic loss monitoring.</li> <li>• The SD WAN must integrate transparently into the existing routing infrastructure. The solution must be completely transparent to existing routing protocols (eg:- OSPF, BGP etc.). All routing functions, including “dynamic path selection” or any other network routing decisions.</li> <li>• The SD WAN must be able to perform priority queuing in order to prioritize packet flows for each traffic class.</li> <li>• The SD WAN should support hybrid secured connectivity across the WAN i.e Data flowing from DC to Site office devices and within the branch to branch communication should be encrypted by using industry standard protocol.</li> <li>• The SD WAN solution should support encryptions for end to end communication. The solution should use standard encryption technology, such as AES256/above to provide secure connectivity over any type of WAN link. Rekeying functionality should be available in the solution for encryptions.</li> <li>• The SD WAN solution must be able to apply QOS policies to all the traffic seen in network, including both optimized and non-optimized traffic flows, including TCP, UDP and other non-TCP traffic types.</li> <li>• If a failure of one or more network links occur and there isn't enough remaining bandwidth to serve all current sessions, current sessions should be adjusted to confirm with the QOS policies.</li> </ul> <p><b>VPN Security:</b></p> <ul style="list-style-type: none"> <li>• The system should implement a secure virtual private network that connects the branch locations, and data centers on one single managed network.</li> <li>• The system should allow creation of an encryption policy.</li> </ul>	
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	<ul style="list-style-type: none"> <li>• The system should allow an encryption policy to be attached per virtual private network</li> <li>• The system should allow centralized generation of the encryption policy is required</li> <li>• The system should allow dynamic tunnels to be created without any static overlays between branch and the hub.</li> <li>• The system should allow for full mesh connectivity between the Data Center and the branch locations</li> <li>• The system should allow for hub-and-spoke connectivity between the data center (hub) and the branch, (spokes).</li> <li>• The system should ensure that any change in connectivity (Link 1 to Link 2 connectivity in case of multiple links being terminated on the branch device) does not require any change in virtual private network configuration in the controller or physical/virtual device at location</li> <li>• The system should be able to automatically pick the tunnel encapsulation type based on the application and based on the policy specified in the software defined network controller.</li> <li>• The system should support the encryption algorithms for Data Security</li> <li>• The system should ensure that virtual private network configuration and policy is performed in the controller. The addition of one or more branch devices in to the network should not require any changes in the virtual private network configuration in software defined network controller</li> </ul> <p><b>Centralized Management, Monitoring and Configuration</b></p> <ul style="list-style-type: none"> <li>• All central controller &amp; analytics platform shall be provided, deployed &amp; management by bidder at the data center.</li> <li>• The centralized management appliance installed at DC must provide a single, unified platform for network service provisioning, monitoring and assurance, change and compliance management.</li> <li>• The centralized management platform must have web based GUI.</li> <li>• The solution must support zero touch provisioning</li> <li>• The solution must provide guided workflows for deployment and management of SD-WAN infrastructure.</li> <li>• All network wide configurations shall be from the centralized management platform.</li> <li>• All application forwarding policies shall be configured from the centralized management platform.</li> <li>• The centralized management platform shall have NMS capabilities and must support network wide device and network visibility for all the devices in the scope of the solution.</li> <li>• The solution must be able to collect and aggregate traffic statistics for all WAN paths on real time. Traffic statistics should include path utilization, application specific utilization and path performance and device health.</li> <li>• The solution must store historical traffic and performance information to assist with trouble analysis, traffic forecasting and SLA compliance.</li> </ul>	
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	<ul style="list-style-type: none"> <li>The solution must support syslog and email/SMS based alarm to notify the administrators when any device/link fault or network performance degradation happens</li> </ul> <p><b>SD-WAN Reports and Analytics</b></p> <ul style="list-style-type: none"> <li>The SD WAN should support granular Real-Time Monitoring and Historical Reporting like: <ul style="list-style-type: none"> <li>Statistic bandwidth usage of all available links.</li> <li>Network Statistics including continuous performance monitoring of loss, latency, and packet ordering for all network paths and link utilization.</li> </ul> </li> <li>The SD WAN should be able to generate report for: <ul style="list-style-type: none"> <li>Traffic statistics of all the included path</li> <li>Specific application utilization</li> <li>Path performance</li> </ul> </li> <li>The SD WAN should be able to generate system events/logs for events that have taken place in the system such as login, changes to configuration and system related errors or warnings.</li> <li>The SD WAN should have GUI (Graphical User Interface) for report generation.</li> <li>The SD WAN must provide following reports of Individual link quality/ Virtual link quality on daily, weekly, monthly, yearly etc.: <ul style="list-style-type: none"> <li>Packet loss in the links</li> <li>Hop Counts</li> <li>Latency of links</li> </ul> </li> <li>The SD WAN controller should contain single dashboard which includes all other device status like CPU, Link Status, event logs etc.</li> <li>The solution should provide option for scheduling reports.</li> </ul> <p><b>Operations and Maintenance Services:</b></p> <ul style="list-style-type: none"> <li>The Successful bidder shall ensure the maintenance of the connectivity during the hiring period and should ensure data security.</li> <li>Should have 24 X 7 facilities to raise trouble tickets and customer support on Remote.</li> <li>Escalation matrix along with contact details to be provided within 07 days of commissioning the connectivity.</li> <li>Should intimate about planned events and service outages through alerts.</li> <li>Should provide online performance monitoring reporting indicating bandwidth utilization, network latency, packet loss, jitter, link availability parameters.</li> <li>The solution needs to be flexible enough to support customization in case of any unique requirements with the availability of the OEM engineering/support team in India</li> <li>On detection of change of WAN IP/ISP of the device, there should be an alarm functionality to lock the device &amp; OTP based SMS to activate the device.</li> </ul>	
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	<ul style="list-style-type: none"> <li>• Device should support app based ZTP.</li> <li>• Bulk upload for Activation and first time configuration of edge devices.</li> <li>• Policy deployment on multiple devices at one time.</li> <li>• Solution should support controller based summarized view of device and link status along with notification.</li> </ul>	
2.	<p><b>SD WAN Management Controller</b></p> <p><b>Functional Requirements:</b></p> <ul style="list-style-type: none"> <li>• The solution should comprise of a centralized single plane of Controller/ Manager system which should be placed in DC/ DRC/ Head Office/ Any other site decided by XX-ORGANISATION-XX for automation, device configuration, Policy Orchestration, Software updates etc.</li> <li>• The solution should come with a web-based administration interface and GUI Console for Monitor/ Control/ Management.</li> <li>• The centralized controller should support Role Based Access Control that provides only relevant information to the user based on their roles and privileges.</li> <li>• The solution should able to define the Custom roles in addition to redefined roles.</li> <li>• The upgrade of SD-WAN CPE devices should be centrally done using the Controller/ Management/ Orchestrator platform.</li> <li>• The DC/ DRC/ Head Office management console should have the capacity and scalability to manage all SD-WAN edge devices.</li> <li>• Appliance should be able to integrate with central authentication solutions such as <ul style="list-style-type: none"> <li>- Active Directory/ TACACS/ Radius</li> <li>- Solution should have privilege level of users like L-1, L-2 and L-3 to control and to manage deployed SD-WAN devices.</li> </ul> </li> <li>• The solution should be able to perform time synchronization with NTP server</li> <li>• The appliance should support Real Time telemetry to monitor the system Health (CPU, memory utilization, Ethernet port bandwidth, Link utilization) on real time</li> <li>• Management or Controller shall be able to monitor the Network statistics including CPU, memory utilization, Ethernet port bandwidth, Link utilization, all network paths/ link utilization.</li> <li>• Solution should support API enabling easy third-party product and service integration using REST architecture where data can be XML or JSON coded,</li> <li>• The SDWAN controller must have REST APIs available for 3rd party integration or integration with custom automation tools</li> <li>• The controller must be able to be configured in HA mode to avoid single point of failure</li> <li>• The solution should provide Customer Dashboard/ Customer Portal for,</li> <li>• Detailed visibility of the applications being accessed, its usage.</li> </ul>	01



	<ul style="list-style-type: none"> <li>• Link visualization: Device / Link Up and Down, Link Quality and BW utilization should get captured in the dashboard.</li> <li>• The Controller/ Management console should support Zero Touch Provisioning (ZTP) deployment at sites. The plug &amp; play installation/ one touch provisioning through Mobile APP.</li> <li>• The solution will allow administrator to forward alerts from the system using email, SMS.</li> <li>• The solution must support flexible hierarchical group management, including for group-based configuration changes and software updates. Appliances may be grouped according to a hierarchical structure that affords easy management of hundreds of appliances.</li> <li>• The solution should provide capability of remote diagnostics like Ping, trace route, testing VPN connectivity, Speed test, MTR etc. through a centralized GUI without the requirement of login into CLI of individual branches.</li> <li>• Management solution should record and maintain the history of all configuration changes made over time.</li> </ul> <p><b>SD-WAN Reporting</b></p> <ul style="list-style-type: none"> <li>• The SD-WAN should have GUI (Graphical User Interface) for Report Generation.</li> <li>• The SD-WAN controller should contain single dashboard which includes all other device status like CPU, Link status, event logs etc.</li> <li>• The SD-WAN should support report generation for Network statistics link utilization and path performance including latency, jitter, throughput</li> <li>• The SD-WAN must provide continuous performance monitoring reports of individual Link Quality/ Virtual Link Quality on daily, weekly, monthly, yearly etc.,</li> <li>• The SD-WAN should support option to go back in time and check for things like average throughput of the link, latency, jitter, etc.</li> <li>• The SD-WAN should be able to generate system events/ historical logs for events that have taken place in the system such as a login, changes to configuration and system related errors or warnings.</li> <li>• The SD-WAN will provide automated real time event alert mechanism.</li> <li>• The SDWAN solution should have the ability to export/customize reports as CSV format / PDF format.</li> <li>• The solution should have filtering and search capabilities</li> <li>• The SD-WAN should support granular Real-Time Monitoring and Historical Reporting like</li> <li>• Statistics of bandwidth usage of each application.</li> <li>• Flow of each application.</li> <li>• Link Utilization</li> <li>• Tunnel Utilization</li> </ul>	
3.	SD-WAN Router for DC / DR	02*2



	<ul style="list-style-type: none"> <li>Proposed SDWAN appliance must be rack mountable with minimum of Universal 6 x 1GbE LAN/WAN 2 x USB, 1 x Console, 16 GB RAM, 4 SFP+ Ports, 128 GB SSD</li> <li>The appliance should have hot swappable redundant power supply.</li> <li>The SDWAN appliance must be able to change the role of any ports using system configurations and without re-imaging the software</li> <li>SDWAN appliance must be capable of terminating broadband, ILL, MPLS, 3G/4G, PPPoE connectivity</li> <li>SDWAN solution must be able to use minimum 2 WAN links together at same time</li> <li>The appliance should support minimum 7.5 Gbps SD-WAN throughput</li> <li>Should include the dynamic routing protocols like BGP &amp; OSPF etc.</li> <li>Should be able to support VoIP traffic</li> <li>Should support IPV6 from day one</li> <li>Should support the IPsec VPN deployment modes: Gateway-to-gateway, hub-and-spoke, full mesh, redundant-tunnel, VPN termination in transparent mode</li> <li>Should include IPsec Configuration Wizard for termination with popular third-party devices</li> <li>Should support Built-in DHCP, NTP.</li> <li>Vendor should have R&amp;D centre &amp; Support centre in India.</li> <li>The product should fall in class 1 make in India category.</li> </ul>	
4.	<b>SD-WAN Router for Branches</b> <ul style="list-style-type: none"> <li>Proposed SDWAN appliance must be of desktop form factor with minimum of 4 Universal ports that can be configured as WAN, LAN (10/100/1000 RJ-45) Ports, 8GB RAM, 64 GB SSD and 2 USB ports, HDMI port.</li> <li>The appliance should be desk mount, energy friendly with fanless design with heat sink for heat dissipation</li> <li>The SDWAN appliance must be able to change the role of the RJ45 ports using system configurations and without re-imaging the software</li> <li>Proposed device should have single inbuilt SIM SLOT</li> <li>SDWAN appliance must be capable of terminating broadband, ILL, MPLS, 3G/4G, PPPoE connectivity</li> <li>SDWAN solution must be able to use minimum 2 WAN links together at same time</li> <li>The appliance should have minimum 800 mbps of Aggregated SD-WAN throughput.</li> <li>Should include the dynamic routing protocols like BGP &amp; OSPF etc.</li> <li>Should be able to support VoIP traffic</li> <li>Should support IPV6 from day one</li> <li>Should support the IPsec VPN deployment modes: Gateway-to-gateway, hub-and-spoke, full mesh, redundant-tunnel, VPN termination in transparent mode</li> </ul>	02 * 250



	<ul style="list-style-type: none"><li>• Should include IPsec Configuration Wizard for termination with popular third-party devices</li><li>• Should support Built-in DHCP, NTP.</li><li>• Vendor should have R&amp;D centre &amp; Support centre in India.</li><li>• The product should fall in class 1 make in India category.</li></ul>	
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## 5.5 NETWORK SWITCHES

### 5.5.1 SCOPE OF WORK

- a. Supply, installation and commissioning, operation and maintenance of the switches including peripherals at on-site / off-site locations provided by the Bank across its two data centres and about 250 other locations in accordance with the technical specifications and scope of work mentioned in the RFP.
- b. **Installation and Configuration:**
  - i. Fixing and setting up the switches including mounting them on the racks provided by the Bank at the Head Office of the Bank at Dharamshala, at the Disaster Recovery Site of the Bank in Bengaluru and at the other 250 locations of the Bank. The vendor is required to handover a fully functional and well configured infrastructure.
  - ii. Configuring all the software associated with the switches excluding the Network Management Software but includes all the plugins needed.
  - iii. Imparting necessary Training / Demonstration to the IT staff and users of the Bank.
- c. **Uptime:** The Bidder will ensure an uptime of more than 99.9% for the switches at all locations.
- d. **Warranty:** The equipment offered should be robust and reliable. All the hardware must be supplied with 05 years comprehensive warranty and OEM support.
- e. **Operation and Maintenance:**
  - i. The operation and technical maintenance of the network devices and their associated software at on-site/off-site locations provided by the Bank will be the responsibility of the Bidder. Therefore, to manage the same effectively, the vendor is required to deploy competent IT professionals conversant with the Data Centre on full time basis. The resources deployed in the DC are expected to be present on 24x7x365 days basis.
  - ii. The L1 support provided from remote back office is also expected to be made available on 24x7 basis.
  - iii. The operation and maintenance shall commence from the actual date of successful installation, commissioning, and rollout of all the hardware, software and services by the vendor and further accepted and certified by the Bank and Consultants.
  - iv. The charges towards the same shall be borne by the Bank as quoted by the bidder in their commercial bid. In case of non-performance and unsatisfactory services, the Bank reserves the rights to impose suitable penalty and deduct applicable amount.

### 5.5.2 SPECIFICATIONS

S No	Item Description	Quantity Needed
1.	<b>Spine Switches</b> <b>Solution Requirement</b> The Switch should support non-blocking Layer 2 switching and Layer 3 routing.	02 * 2



	<p>There switch should not have any single point of failure like power supplies and fans etc. should have 1:1/N+1 inbuilt level of redundancy.</p> <p><b>Hardware and Interface Requirement</b></p> <p>Switch should have 32 x 40/100G QSFP28 Ports loaded with required optics. Switch should have 16GB DRAM and 32GB internal Flash / Storage. Switch should support Configuration roll-back. Switch should support for different logical interface types like loopback, VLAN, SVI / RVI, Port Channel, multi chassis port channel / LAG etc. The switch should support 100,000 IPv4 unicast routes and 100,000 IPv6 unicast routes entries in the routing table including 64,000 multicast routes. The switch should support hardware based load sharing at wire speed using LACP and multi chassis ether channel / LAG. Switch should support minimum 6.4 Tbps of switching capacity.</p> <p><b>Layer2 Features</b></p> <p>Spanning Tree Protocol (IEEE 802.1D, 802.1W, 802.1S). Switch should support minimum 280,000 no. of MAC addresses. Switch should support 8 Nos. of link or more per Port channel (using LACP) and support 64 numbers of ports per Link Aggregation Group. Support for broadcast, multicast and unknown unicast storm control to prevent degradation of switch performance from storm due to network attacks and vulnerabilities. The Switch should Multihoming ESI-LAG.</p> <p><b>Virtualization Features</b></p> <p>Switch should support network virtualisation using Virtual Over Lay Network using VXLAN / NVGRE. Switch should support VXLAN &amp; EVPN for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data centre.</p> <p><b>Layer3 Features</b></p> <p>Switch should support static and dynamic routing like Static, OSPF and BGP. Should support BGP, MBGP, IS-IS for IPv4 and IPv6. Switch should support multicast traffic reachability using PIM-SM and SSM. Switch should support RSVP, LDP, 6PE and L3 VPN.</p> <p><b>Availability</b></p> <p>Switch should provide gateway level of redundancy in IPv4 and IPv6 using HSRP/ VRRP. Switch should support for BFD For Fast Failure Detection.</p> <p><b>Quality of Service</b></p> <p>Switch system should support 802.1P classification and marking of packet CoS, DSCP etc. Switch should support for different type of QoS features for real time traffic differential treatment using WRED and SP Queuing. Switch should support Flow control of Ethernet ports to control traffic rates during congestion by allowing congested nodes to pause link operation at the other end for receiving traffic as per IEEE 802.3x.</p> <p><b>Security</b></p> <p>Switch should support for deploying different security for each logical and physical interface using Port Based access control lists of Layer-2 to Layer-4 in IP V4 and IP V6 and logging for fault finding and audit trail. Switch should support control plane i.e. processor and memory Protection from unnecessary or DoS traffic by control plane protection policy. Switch should support for external database for AAA using TACACS+ / Radius. Switch should support for Role Based access control (RBAC) for restricting host level network access as per policy defined.</p>	
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	<p>Switch should support to prevent edge devices in the network from becoming Spanning Tree Protocol root nodes.</p> <p><b>Manageability</b> Switch should support for embedded RMON/RMON-II for central NMS management and monitoring. Switch should provide remote login for administration Telnet, SSHv2. Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP V2 and V3. Switch should support for basic administrative tools like Ping and traceroute. Switch should support central time server synchronization using Network Time Protocol NTP V4.</p> <p><b>Certification</b> The Switch should be EAL 3 / NDPP / NDcPP certified under Common Criteria.</p>	
2.	<p><b>Top of Rack Switches</b></p> <p><b>Solution Requirement</b> The Switch should support non-blocking Layer 2 switching and Layer 3 routing. There switch should not have any single point of failure like power supplies and fans etc. should have 1:1/N+1 inbuilt level of redundancy.</p> <p><b>Hardware and Interface Requirement</b> Switch should have the 48 x 1/10G/25G SFP fiber ports and should have 8 x 40G/100G QSFP28 ports. Switch should have 16GB DRAM and 32GB internal Flash / Storage. Switch should support Configuration roll-back. Switch should support for different logical interface types like loopback, VLAN, SVI/RVI, Port Channel, multi chassis port channel/LAG etc. The switch should support 100,000 IPv4 unicast routes and 100,000 IPv6 unicast routes entries in the routing table including 64,000 multicast routes. The switch should support hardware based load sharing at wire speed using LACP and multi chassis ether channel/LAG. Switch should support minimum 4Tbps of switching capacity.</p> <p><b>Layer2 Features</b> Spanning Tree Protocol (IEEE 802.D, 802.1W, 802.1S). Switch should support minimum 250,000 no. of MAC addresses. Switch should support 8 Nos. of link or more per Port channel (using LACP) and support 64 numbers of ports per Link Aggregation Group. The Switch should support 64-way ECMP. Support for broadcast, multicast and unknown unicast storm control to prevent degradation of switch performance from storm due to network attacks and vulnerabilities. The Switch should Multihoming ESI-LAG.</p> <p><b>Virtualization Features</b> Switch should support network virtualisation using Virtual Over Lay Network using VXLAN / NVGRE. Switch should support VXLAN &amp; EVPN for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data centre.</p> <p><b>Layer3 Features</b> Switch should support static and dynamic routing like Static, OSPF and BGP Should support BGP, MBGP, IS-IS for IPv4 and IPv6. Switch should support multicast traffic reachability using PIM-SM and SSM. Switch should support RSVP, LDP, 6PE and L3 VPN.</p> <p><b>Availability</b></p>	04 * 2





	<p>Switch should provide gateway level of redundancy in IPv4 and IPv6 using HSRP / VRRP.</p> <p>Switch should support for BFD For Fast Failure Detection.</p> <p><b>Quality of Service</b></p> <p>Switch system should support 802.1P classification and marking of packet CoS, DSCP etc.</p> <p>Switch should support for different type of QoS features for real time traffic differential treatment using WRED and SP Queuing.</p> <p>Switch should support Flow control of Ethernet ports to control traffic rates during congestion by allowing congested nodes to pause link operation at the other end for receiving traffic as per IEEE 802.3x.</p> <p><b>Security</b></p> <p>Switch should support for deploying different security for each logical and physical interface using Port Based access control lists of Layer-2 to Layer-4 in IP V4 and IP V6 and logging for fault finding and audit trail.</p> <p>Switch should support control plane i.e. processor and memory Protection from unnecessary or DoS traffic by control plane protection policy.</p> <p>Switch should support for external database for AAA using TACACS+ / Radius.</p> <p>Switch should support for Role Based access control (RBAC) for restricting host level network access as per policy defined.</p> <p>Switch should support to prevent edge devices in the network from becoming Spanning Tree Protocol root nodes.</p> <p><b>Manageability</b></p> <p>Switch should support for embedded RMON / RMON-II for central NMS management and monitoring.</p> <p>Switch should provide remote login for administration Telnet, SSHv2.</p> <p>Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP V2 and V3.</p> <p>Switch should support for basic administrative tools like Ping and traceroute.</p> <p>Switch should support central time server synchronization using Network Time Protocol NTP V4.</p> <p>The switch should support Automation features using OpenStack Neutron plugin, Python, in band flow analyser.</p> <p><b>Certification</b></p> <p>The Switch should be EAL 3 / NDPP / NDcPP certified under Common Criteria.</p>	
3.	<p><b>Stackable PoE Switches</b></p> <p><b>Hardware Architecture</b></p> <p>It should have non-blocking wire-speed architecture.</p> <p>In a standalone mode, the switch should provide minimum 24 usable ports.</p> <p>The switch should support IEEE 802.3af and IEEE 802.3at standard.</p> <p>1 U Rack mountable and should support stacking of minimum 4 switches with 40Gbps of dedicated stacking/ equivalent bandwidth.</p> <p>The Switch should have 2GB DRAM and 2GB internal Flash.</p> <p>The switch should support Modular OS.</p> <p><b>Port Densities Needed and Supported</b></p> <ol style="list-style-type: none"> <li>1. Minimum 24 ports of 10 / 100 / 1000 base T.</li> <li>2. Minimum 2 ports of 10G populated with required transceiver modules.</li> <li>3. The PoE budget should be 370W.</li> </ol> <p><b>Performance</b></p> <p>Switching fabric of each switch should be minimum 128 Gbps or more.</p> <p>Packet forwarding throughput should be 95 Mpps for packet size of 64 Bytes.</p> <p>Minimum 16K MAC addresses.</p>	02 * 250



	<p>It should support minimum 2000 Active VLANs and should be possible to configure port based VLAN.</p> <p><b>Features</b></p> <p>The switch should support IGMP snooping and MLD v2.</p> <p>The switch should have static IP routing from Day 1 and should be upgradable to support OSPF and PIM.</p> <p>The switch should support 8 hardware queues per port.</p> <p>Dynamic Host Configuration Protocol (DHCP) snooping.</p> <p>The switch should support LLDP capabilities.</p> <p>The switch should support IP Source Guard, DAI and IPv6 Security features.</p> <p>The switch should have IPv6 RA Guard and IPv6 Neighbour Discovery Inspection.</p> <p>The switch should support Secure Shell (SSH) Protocol and Simple Network Management Protocol Version 3 (SNMPv3).</p> <p>The switch needs to have console port for administration &amp; management. Management using CLI, GUI using Web interface should be supported.</p> <p>FTP / TFTP for upgrading the operating System.</p> <p>The switch should support Energy Efficient Ethernet.</p> <p>IEEE 802.1x support, IEEE 802.1D Spanning-Tree Protocol, IEEE 802.1p class-of-service (CoS) prioritization, IEEE 802.1Q VLAN, IEEE 802.3 10BASE-T specification, IEEE 802.3u 100BASE-TX.</p> <p>The switch should be able to support management via CLI, Web interface SNMP v1, v2, v3.</p> <p>The switch should be manageable through both IPv4 &amp; IPv6.</p> <p><b>Certifications</b></p> <p>The switch should be UL-UL60950-1, FCC Part 15, VCCI Class A, EN 55022, EN 55024, EN 300386, CAN/CSA 22.2 No.60950-1, Reduction of Hazardous Substances (ROHS) certified.</p> <p>Switch should be IPv6 (IPv6 Logo ready/ USGv6) certified.</p> <p>Switch Should be Common Criteria EAL3 / NDPP / NDcPP certified.</p> <p><b>Quality of service</b></p> <p>It should support advanced L2 features.</p> <p>It should support 802.1p, DSCP marking.</p> <p>It should support Flow-based QoS for traffic prioritization.</p> <p>It should support Eight hardware-based queues per port with Weighted Round Robin (WRR).</p> <p>It should support Flow-based bandwidth management, ingress policing; egress rate shaping per port.</p> <p>It should have Static routes and support RIP, OSPFv3 in future.</p> <p><b>Standards</b></p> <p>RoHSv6 Compliant.</p> <p>IEEE 802.1x support.</p> <p>IEEE 802.3x full duplex on 10BASE-T and 100BASE-TX ports.</p> <p>IEEE 802.1D Spanning-Tree Protocol.</p> <p>IEEE 802.1p class-of-service (CoS) prioritization.</p> <p>IEEE 802.1Q VLAN.</p> <p>IEEE 802.3x be on 10 BaseTx / 100 Base Tx / 1000 Base Tx.</p> <p>IEEE 802.3u 10 BaseT / 100 Base Tx / 1000 Base Tx.</p> <p>EAL3 certified or equivalent.</p>	
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## 5.6 SECURITY APPLIANCES

### 5.6.1 SCOPE OF WORK



- a. Supply, installation and commissioning, operation and maintenance of the security appliances including peripherals at on-site / off-site locations provided by the Bank across its two data centres in accordance with the technical specifications and scope of work mentioned in the RFP.
- b. **Installation and Configuration:**
  - i. Fixing and setting up the security appliances including mounting them on the racks provided by the Bank at the Head Office of the Bank at Dharamshala and at the Disaster Recovery Site of the Bank in Bengaluru. The vendor is required to handover a fully functional and well configured infrastructure.
  - ii. Configuring all the software associated with the security appliances according to the latest practices prevalent in BFSI industry and as mandated by the regulators of the Bank.
  - iii. Imparting necessary Training / Demonstration to the IT staff and users of the Bank.
- c. **Uptime:** The Bidder will ensure an uptime of more than 99.9% for the security appliances at all locations.
- d. **Warranty:** The equipment offered should be robust and reliable. All the hardware must be supplied with 05 years comprehensive warranty and OEM support.
- e. **Operation and Maintenance:**
  - i. The operation and technical maintenance of the network devices and their associated software at on-site/off-site locations provided by the Bank will be the responsibility of the Bidder. Therefore, to manage the same effectively, the vendor is required to deploy competent IT professionals conversant with the Data Centre on full time basis. The resources deployed in the DC are expected to be present on 24x7x365 days basis.
  - ii. The L1 support provided from remote back office is also expected to be made available on 24x7 basis.
  - iii. The operation and maintenance shall commence from the actual date of successful installation, commissioning, and rollout of all the hardware, software and services by the vendor and further accepted and certified by the Bank and Consultants.
  - iv. The charges towards the same shall be borne by the Bank as quoted by the bidder in their commercial bid. In case of non-performance and unsatisfactory services, the Bank reserves the rights to impose suitable penalty and deduct applicable amount.

#### 5.6.2 SPECIFICATIONS

S No	Item Description	Quantity Needed
1.	<b>Next Generation Firewalls Architecture</b> <ul style="list-style-type: none"><li>• The appliance based security platform shall be capable of providing firewall, IPS and VPN (IPSec) functionality simultaneously.</li><li>• The Firewall should have Application Security / AVC.</li><li>• The Firewall should support Advanced Threat Protection like malware and zero-day threats.</li><li>• The platform should be based on real time, secure, embedded operating system.</li><li>• Should provide Stateful failover.</li><li>• HA configuration that uses dedicated 10G HA/ control interface apart from the mentioned traffic interfaces.</li><li>• Should provide active/active and active/standby failover.</li></ul>	02 * 2



	<p><b>Sessions</b></p> <ul style="list-style-type: none"> <li>Should support upto 4.5 Million Concurrent sessions and at least 250,000 sessions per second.</li> </ul> <p><b>System Throughput</b></p> <ul style="list-style-type: none"> <li>Should provide 35 Gbps Firewall Throughput and 20Gbps IMIX throughput.</li> <li>Should provide 9 Gbps IPSec throughput (Large Packet).</li> <li>Should provide 12 Gbps IPS throughput.</li> <li>Should provide 9Gbps NextGen firewall throughput including Firewall, Application security/ AVC, IPS and URL Filtering.</li> </ul> <p><b>Memory</b></p> <ul style="list-style-type: none"> <li>At least 64GB or higher and 200GB storage</li> </ul> <p><b>Supports</b></p> <ul style="list-style-type: none"> <li>IKEv1 and v2, IPSec VPN standards, 56-bit DES, 168-bit 3DES, 256-bit AES encryption.</li> <li>Authentication, Authorization and Accounting (AAA) support: RADIUS or TACACS+.</li> <li>Support for: Network and application-level attacks ranging from malformed packet attacks to DoS attacks, Support RSA and Diffie-Hellman, MD-5, SHA-1, SHA-128, SHA-256.</li> </ul> <p><b>Provides</b></p> <ul style="list-style-type: none"> <li>Rich dynamic NAT and PAT services.</li> <li>Static NAT and PAT services.</li> <li>Stateful and stateless and Zone-based firewall.</li> <li>Denial of service (DDoS) protection.</li> <li>Traffic anomaly protection.</li> </ul> <p><b>Management</b></p> <ul style="list-style-type: none"> <li>Web based management to support for remote monitoring.</li> <li>Accessible through variety of methods including Telnet, Console Port, SSH.</li> <li>Dedicated Out-of-Management interface.</li> <li>Support SNMPv1, v2, v3 &amp; Support for syslog.</li> <li>Should have the ability to create customizable administrative roles/profiles (monitoring only, read-only access to configuration).</li> </ul> <p><b>Software features</b></p> <ul style="list-style-type: none"> <li>Support for IPv4, RIPv2, OSPF, BGP, VLAN, DHCP, Support for IPv6 RIPng, OSPFv3.</li> </ul> <p><b>Power Supply</b></p> <ul style="list-style-type: none"> <li>Internal Redundant Power supply and redundant hot swappable fans tray.</li> </ul> <p><b>Minimum Interfaces Required</b></p> <ul style="list-style-type: none"> <li>8 x 1/10Gig Ports loaded with required optics.</li> </ul> <p><b>Certification</b></p> <ul style="list-style-type: none"> <li>The Firewall should be EAL 3 / NDPP / NDcPP certified under Common Criteria.</li> </ul>	
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## BID PROPOSAL PROFORMAE

### 6.1 TECHNICAL BID RESPONSE

Bidders are advised to kindly adhere to the following Table of Contents and attach all the relevant documents in the given order with their Technical Bid:

S No	Description of the Document / Enclosure to be attached	Enclosed (Yes/No)	Page No.
1.	Bid Covering Letter		
2.	Letter of Authority to be stated on the Letter Head of the Company		
3.	General Profile of the Bidder		
4.	Details about the Tender Fee and Earnest Money Deposit (EMD)		
5.	Copy of company incorporation certificate.		
6.	Copies of valid GST Registration and PAN number allotted by the respective authorities.		
7.	An undertaking that your firm is not involved in any Bankruptcy filing or for protection from it.		
8.	An undertaking that your firm has not been blacklisted.		
9.	Consolidated certificate (single page) duly certified by the Chartered Accountant (CA) of the company regarding turnover made by the firm during last three financial years. Copy of audited balance sheet may also be attached.		
10.	Details pertaining to fully functional Helpdesk along with Escalation Matrix so as to provide 24*7 support.		
11.	Deviation Sheet (as per the format) so as to specify the deviations from the Terms and Conditions of the RFP.		
12.	Deviation Sheet (as per the format) so as to specify the deviations from the detailed Technical Specifications/scope as requested in the RFP.		
13.	Compliances to detailed Technical Specifications duly signed and stamped		
14.	Manufacturing Authorization Certificate duly signed and stamped by the concerned OEM(s) as per the format given in the Bid Document.		
15.	All the relevant documents in support of the General, Technical and Commercial eligibility criteria as requested under Section 4.1, 4.2 and 4.3 of the RFP may be attached here in the given order.		
16.	Bill of Material-cum-Compliance Sheet for Hardware		
17.	Any other document / information related to Bid		

Note: Kindly note that it is the sole responsibility of the bidder to attach and upload all the relevant and requisite documents in the technical bid. However, the Bank reserve its absolute right to seek any



THE KANGRA CENTRAL COOPERATIVE BANK LTD.,  
DHARAMSHALA

other/ additional document(s) or any other clarification during technical evaluation provided the same may not affect and results in any change in the outcome of the Tendering process.

(Signatures)

Name:

Designation:

Seal

Date:

Place:



## 6.2 BID COVERING LETTER

To:

The Managing Director,  
The Kangra Central Cooperative Bank Ltd,  
Dharamshala-(HP)  
176 215.

**Reference: RFP Notice No. KCCB/IT/2022/01(A)**

Dear Sir,

**Supply, Installation, Implementation, Configuration, Integration, Testing, Commissioning and Maintenance of Compute / Storage and Ancillary Infrastructure, Networking Devices and SDWAN Services at the Data Centre, Disaster Recovery Site and Branch Locations**

### 1 Terms & Conditions

- 1.1 I / We, the undersigned Bidder(s), having read and examined in detail the specifications and all bidding documents in respect of this Request for Proposal do hereby propose to provide goods and services as specified in the bidding document.
- 1.2 I / We, the undersigned Bidder(s) having submitted the qualifying data as required in your Request for Proposal, do hereby bind ourselves to the conditions of your Request for Proposal. In case any further information/documentary proof in this regard before evaluation of our bid is required, I / We agree to furnish the same on demand to your satisfaction.

### 2 Rates & Validity

- 2.1 All the rates mentioned in our proposal are in accordance with the terms as specified in bidding documents. All the rates and other terms and conditions of this proposal are valid for a period of 180 days from the last date of bid submission.
- 2.2 I / We have studied the Clauses relating to Indian Income Tax Act and hereby declare that if any Income Tax, surcharge on Income Tax and any other Corporate Tax is altered under the law, I / we shall pay the same.

### 3 Deviations

I / We declare that all the goods and services shall be performed strictly in accordance with the Technical specification, Time Schedule and other terms of the Request for Proposal Document except the deviation as mentioned in the Technical Deviation Proforma. Further, I/We agree that additional conditions, if any, found in the proposal documents, other than those stated in deviation proforma, shall not be given effect to.

### 4 Bid Pricing

I / We further declare that the rates stated in our proposal are in accordance with your terms and conditions in the bidding document.

### 5 Earnest Money

I / We have enclosed the earnest money as required under Section 4.12 of the Request for Proposal Document. In case of default, it is liable to be forfeited in accordance with the provisions enumerated therein.



THE KANGRA CENTRAL COOPERATIVE BANK LTD.,  
DHARAMSHALA

**6 Performance Bank Guarantee**

I / We shall submit a Bank Guarantee as required under Section 4.17 of the Request for Proposal Document.

**7 Declaration**

I / We hereby declare that my / our proposal is made in good faith, without collusion or fraud and the information contained in the proposal is true and correct to the best of my / our knowledge and belief and nothing has been concealed therefrom. We hereby also confirm that our firm will supply all the goods & services as per the technical specifications, scope of work given in the RFP and as per the requirement and full satisfaction of the Bank.

Thanking you,

Yours faithfully,

(Signatures)

Name:

Designation:

Seal

Date:

Place:





### 6.3 PROFORMA FOR LETTER OF AUTHORITY

Letter of authority for attending pre-Bid Conference, Technical & Financial Bid opening and other communication / correspondence relating to Bid.

Ref. No. \_\_\_\_\_

Dated \_\_\_\_\_

To

The Managing Director,  
The Kangra Central Cooperative Bank Ltd,  
Dharamshala-(HP)  
176 215.

**Reference: RFP Notice No. KCCB/IT/2022/01(A)**

Dear Sir,

I / We \_\_\_\_\_ hereby authorize following representative (s) to attend Technical and Financial Bid opening and to make any representation or communication with the The Kangra Central Cooperative Bank Ltd, Dharamshala in reference to the stated tender:

1. Name & Designation \_\_\_\_\_ Signature \_\_\_\_\_

2. Name & Designation \_\_\_\_\_ Signature \_\_\_\_\_

I / We confirm that our firm shall be liable to fulfil all the commitments as given and assured by the above-mentioned representatives in writing or verbal.

Yours faithfully,

Signature

Name & Designation:

For and on behalf of:

Note: This letter of authority should be on the letter head of the company and should be signed by a competent authority.



#### 6.4 BIDDER'S PROFILE

S.No.	Description	Response
1	Bidder's Proposal Reference No. and Date	
2	Registered Name of the Company / Bidder	
3	Address of the Head Office / Registered Office	
4	Registration Number and Registration Authority	
5	Year of Incorporation / Establishment	
6	Legal Status (Govt./PSU/Public/Private etc.)	
7	<b>Complete Business Address for Correspondence</b>  Location: Street: City: Pin Code:	
8	Name of the <b>Head of the Organization</b>  Designation Telephone Number Fax Number e-Mail Address	
9	Name of the <b>Contact /Authorized Person</b>  Designation Telephone Number Fax Number e-Mail Address	
10	Official Website of the Company	
12	Quality Certification, if any	

(Signatures)

Name:  
Designation:  
Seal

Date:  
Place:



## 6.5 DETAILS ABOUT TENDER FEE AND EARNEST MONEY DEPOSIT

Reference: RFP Notice No. KCCB/IT/2022/01(A)

### TENDER COST OF RS. 10,000/- (RUPEES TEN THOUSAND ONLY)

Name of the Bank	
Demand Draft/Bankers Cheque/ Cash Receipt No. / Detail about Online Transactions	
Dated	
Amount	

### EARNEST MONEY DEPOSIT (EMD) OF RS. 20,00,000/- (RUPEES TWENTY LACS ONLY):

Name of the Bank	
Demand Draft/Bankers Cheque/ FDR No. etc.	
Dated	
Amount	

Note: Demand Draft / Bankers Cheque / Copy of Cash Receipt and Online Transactions needs to be put up in a sealed envelope and must be submitted in physical to the Bank. For ready reference, scanned copies may also be uploaded along with the bid on the e-procurement portal.

(Signatures)

Name:

Designation:

Seal

Date:

Place:



## 6.6 DEVIATIONS FROM THE DETAILED TECHNICAL SPECIFICATIONS

Reference: **RFP Notice No. KCCB/IT/2022/01(A)**

Bidder is required to comply with the requirements of the Bid Document and not to stipulate any exceptions or deviations. In case it is unavoidable, Bidder may stipulate exceptions and deviations to Bid requirements only as per the format below and enclose this with technical Bid.

Following are the Deviations and Variations from the detailed specifications and scope of work given in this Tender. These deviations and variations are exhaustive. Except for these deviations and variations, all the goods and services shall be provided as per the specifications mentioned in the RFP Document.

S No	Bid Document Reference		Subject	Statement of Deviations and Variations
	Page No	Clause No		

Any exceptions / deviations expressed or included elsewhere in the Bid Document will not be valid. I/We, therefore, certify that we have not taken any exceptions/deviations anywhere in the Bid and I/we agree that if any deviation/exception is mentioned or noticed, our Bid may be rejected.

Further, I/We confirm that our Bid complies with the total techno-commercial requirements of bidding document without any deviation

(Signatures)

Name:  
Designation:  
Seal

Date:  
Place:



## 6.7 DEVIATIONS FROM THE TERMS AND CONDITIONS

Reference: **RFP Notice No. KCCB/IT/2022/01(A)**

Bidder is required to comply with the requirements of the Bid Document and not to stipulate any exceptions or deviations. In case it is unavoidable, Bidder may stipulate exceptions and deviations to Bid requirements only as per the format below and enclose this with technical Bid.

Following are the Deviations and Variations from the terms & conditions of this Tender. These deviations and variations are exhaustive. Except for these deviations and variations, all the goods and services shall be provided as per the terms and conditions mentioned in the Tender Document.

S No	Bid Document Reference		Subject	Statement of Deviations and Variations
	Page No	Clause No		

Any exceptions / deviations expressed or included elsewhere in the Bid Document will not be valid. I/We, therefore, certify that we have not taken any exceptions/deviations anywhere in the Bid and I/we agree that if any deviation/exception is mentioned or noticed, our Bid may be rejected.

Further, I/We confirm that our Bid complies with the total techno-commercial requirements of the Bidding document without any deviation

(Signatures)

Name:  
Designation:  
Seal

Date:  
Place:



THE KANGRA CENTRAL COOPERATIVE BANK LTD.,  
DHARAMSHALA

## 6.8 PRFORMA FOR MANUFACTURER'S / DEVELOPER'S AUTHORIZATION

Ref. No \_\_\_\_\_

Date: \_\_\_\_\_

To:

The Managing Director,  
The Kangra Central Cooperative Bank Ltd,  
Dharamshala-(HP)  
176 215.

Reference: RFP Notice No. RFP Notice No. KCCB/IT/2022/01(A)

**Supply, Installation, Implementation, Configuration, Integration, Testing, Commissioning and Maintenance of Compute / Storage and Ancillary Infrastructure, Networking Devices and SDWAN Services at the Data Centre, Disaster Recovery Site and Branch Locations**

Dear Sir,

We \_\_\_\_\_ [Name of the OEM] who are established and reputed Manufacturers / Developers of \_\_\_\_\_ [Name of Products] having Factory / Development Centre at \_\_\_\_\_ do hereby authorize M/s \_\_\_\_\_ [Name and Address of Vendor] to submit a bid and sign the contract with you for the goods Manufactured / Products developed by us against the above stated RFP.

We hereby agree to supply the goods & services as per the specifications mentioned in the RFP and further undertake to extend our full Guarantee and Warranty to The Kangra Central Cooperative Bank Ltd, Dharamshala as per the Terms & Conditions of the RFP Notice No. KCCB/IT/2022/01(A).

Yours faithfully

Name of the Manufacturer / Developer

Authorized Signatory  
(Signature and Stamp)

Note:

This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. It should be included by the bidder in its bid.



**6.9 BILL OF MATERIAL CUM COMPLIANCE SHEET FOR HARDWARE**

**Reference: RFP Notice No. KCCB/IT/2022/01(A)**

Following is the exhaustive bill of material with makes and part numbers. Further we abide ourselves by the compliances indicated as per the desired specifications.

S No	Description	Make	Part Number if any	Quantity	Compliance (Yes/No)

(Signatures)

Name:

Designation:

Seal

Date:

Place:



THE KANGRA CENTRAL COOPERATIVE BANK LTD.,  
DHARAMSHALA

#### 6.10 PROFORMA COMMERCIAL BID

Kindly refer to the MS Excel Sheet uploaded on the [e-procurement portal](#) for the purpose. A sample format is given below:

S No	Description of goods/equipment as per specifications and scope of work mentioned in the RFP (a)	Unit (u)	Qty. (q)	Base Price in ₹ (p)	Gross Price in ₹ (g)= (p)x(q)	GST + other levies, as applicable on (g) in ₹ (t)	TOTAL Price including GST and other levies in ₹ (g) + (t)
<b>A</b>	<b>Infrastructure at DC and DR including 03 years warranty</b>						
1	Modular Data Centre	Nos.	01				
2	Uninterrupted Power Supply	Nos.	02				
3	Hyper Converged Infrastructure	Nos.	3 * 02				
4	Software Defined Wide Area Network	Nos.	01				
5	SD WAN Management Controller	Nos.	01				
6	SD-WAN Router for DC / DR	Nos.	2 * 02				
7	SD-WAN Router for Branches	Nos.	2*250				
8	Spine Switches	Nos.	2 * 02				
9	Top of Rack Switches	Nos.	4 * 02				
10	Stackable PoE Switches	Nos.	2*250				
11	Next Generation Firewall	Nos.	4 * 02				
<b>B</b>	<b>Annual charges towards Operation of DC and DR sites for next 05 years after successful testing and sign off.</b>	Year	05				
<b>C</b>	<b>Annual charges towards providing maintenance and support for next 02 years after standard warranty</b>	Year	02				
<b>Grand Total (i.e. Criterion for declaring L1)</b>							

Note:

1. Quote on any other format or any other way shall not be evaluated by the Bank and will be summarily rejected. The bidders are advised to quote in INR only.
2. The rate offered under this work order shall not change during contract period and for any default or delay at the part of the firm, the penalty shall be deducted as per the terms & conditions of the RFP.





## ANNEXURES

### A.1 DRAFT SERVICE LEVEL AGREEMENT

*(To be executed on non-judicial stamp paper of appropriate value)*

BE it known to all that **M/s** \_\_\_\_\_, hereinafter referred to as the Vendor and The Kangra Central Cooperative Bank Ltd, Dharamshala (KCCB), hereinafter referred to as the Bank, agree to enter into this mutually binding contract in order to afford best support and preventive and on call maintenance services to the Bank as per the following terms and conditions:

#### Definitions:

<b>Bank</b>	The Kangra Central Cooperative Bank Ltd, Dharamshala (HP) - 176 215, India. Official Website: <a href="http://www.kccb.in">www.kccb.in</a>
<b>Consultant</b>	National Institute of Technology Hamirpur. H.P. 177 005. <a href="http://www.nith.ac.in">http://www.nith.ac.in</a>
<b>Name and Address of the Vendor</b>	
<b>Name of the Work</b>	

#### 1. Purpose:

The purpose of this Support Service Level Agreement (SLA) is to formalize an arrangement between the Vendor and the Bank to deliver specific support services, at specific levels, and at an agreed-upon cost. This document is intended to provide details of the provision of support services to the Bank. This SLA will evolve over time, with additional knowledge of the client requirements, as well as the introduction of new applications and services into the support portfolio provided to the Bank.

#### 2. Scope of Agreement:

The following services must be provided in response to the transfer of trouble tickets from the Bank to the Vendor in accordance with the Bank's case management process:

- The firm/service provider will ensure operation and comprehensive maintenance of critical IT Infrastructure and Services on 24x7x365 basis during the contract period. The firm is also supposed to attend, troubleshoot and restore the faults, technical issues/bugs/errors etc. even during holidays or at odd hours depending upon the gravity of the problem and SLA desired by the Bank.
- The representatives and technical team locally deployed by the firm at Bank will maintain a complete log about the status of all the hardware, software and network equipment/resources during the AMC period.
- For the smooth functioning, operation and day-to-day technical support/maintenance of hardware and services, the vendor is expected to setup and establish a help desk in the space as allotted by the Bank.



After this, the service provider needs to notify and circulate the contact details of their staff along with dedicated phone nos./emails as well as escalation matrix among the users of KCCB.

- iv. The firm or their staff shall also keep record of all the complaints/tickets/service requests as raised by the users and the authorities of the Bank. The customer support engineers assigned the job by the firm shall attend, fix and resolve all such issues/complaints in a time bound manner as given in the SLA.
- v. The service provider must ensure the uninterrupted operation and maintenance of Data Centre and all its crucial components without any down time. They also need to repair and replace the faulty hardware and allied components at the earliest. Therefore, in order to maintain the uptime of more than 99%, the firm is advised to reserve spares and keep reasonable stock with them at all times as a standby/backup and carry out the preventive and pro-active maintenance & troubleshooting of all the hardware listed in the PO at frequent time intervals during the contract.
- vi. All payments towards renewal of software licenses shall be paid by the Bank upon verification of the valid proofs / certificates issued by the respective OEMs. The ownership of all such licenses should be in the name of Bank. However, in the event of premature termination of contract by the Bank, the firm shall be paid the pending amount of the licenses for full year. All updates/upgrades of software and IT services also be provided by the firm to the Bank free of cost during the AMC. In case of any major change or alteration in the policy/procedure or release of new technology, the service provider will train and make aware all the stake holders in the Bank.
- vii. The firm shall maintain and update the OS & security patches of all the Servers as per the requirement of the Bank. The safety and security of IT infrastructure, data and other allied services is also the responsibility of the firm. In the event of theft of any of the hardware component, misuse of resources or occurrence of any other untoward incident related to IT systems/services, they need to report the same immediately to the kind information of the Consultants (i.e. NIT Hamirpur) or the concerned authorities of the Bank.
- viii. The firm and their personnel are liable to follow, implement and adhere to the instructions/guidelines/compliances related to usage of ICT as directed by GoI or Himachal Pradesh Government. In addition to this, the firm will maintain the log of Internet surfing and other activities in respect of all the users for at least 02 months in the Data Centre.

The technical team of the firm shall help and assist the Bank during IT audit. During the contract, the authorities of the Bank or the Consultants may assign any other work related to operation & maintenance of IT infrastructure or services to the staff or representatives of the firm.

#### ***Services Automatically Provided Under This Agreement***

- a. **Corrective maintenance:** Defined as activities associated with root-cause analysis and bug-fix isolation and resolution:
  - **Root-cause analysis:** Analysis of the root causes of problems. Problems will be reviewed to determine their root causes, measures will be taken to correct the sources of the problems, and reports will be prepared and distributed in a timely fashion.
  - **Bug fixes:** Defined as the emergency repair of any system operation that does not comply with the current signed and approved system specification. This includes system errors, "hung" or halted screens, or unexpected results within the system that render it unusable for the purpose for which it was designed.
- b. **Ticket status updates:** The Vendor will provide direct input into the Bank's problem tickets from its Chandigarh Office, or remotely from other satellite e-Support Centers.

#### ***Requests for Support Specifically Covered Under This Agreement***

- a. **System monitoring:** Every effort will be made to conduct periodic monitoring of production systems to assess their health.



- b. **Preventative maintenance:** The Vendor agrees to physically inspect the systems for potential problems at least once a quarter.
- c. **Level 1 and Level 2 Support:** Level 1 (help desk) and level 2 (infrastructure support) shall be provided by the Vendor for each system supported, and they shall perform their assigned duties. To the extent possible by the Vendor, their support staff shall assist the Bank's level 2 support team members with diagnosing problems and working in partnership to their resolution, including configuration changes if so needed.
- d. **Status Reporting:** Monthly status reports will be compiled by the Vendor support specialists and submitted to the Bank for each production system supported. Monthly status reports will be discussed by the Vendor support manager with the Bank management to ensure that the Bank is aware of the support issues and risks faced by the support team.
- e. **Knowledge Management:** Recording, storing, and retrieval of information to assist in the resolution of problems will be established and maintained. Using this approach, the need for the Bank to transfer problems to the Vendor for level 3 support will be reduced, thus saving money and resources, and increasing satisfaction and quality.

***Requests for Support NOT Covered Under This Agreement***

This agreement does not cover the following requests. However, the Vendor would be pleased to provide a separate statement of work in proposing services to address any of the following:

- a. **Evaluation of new Systems:** Evaluation or approval of new software or hardware for use within the Bank. This includes third-party systems, or systems developed by the Bank or any agency employed by them.
- b. **Specific Trainings:** The Bank will suitably compensate the Vendor if they intend to train their staff in any technologies not covered in this contract.
- c. **Adaptive maintenance:** Defined as activities relating to upgrades or conversions to a system due to new technologies being adopted by the Bank.

**3. Changes to the Agreement:**

- a. **Termination of Agreement:** The Bank at its sole discretion can terminate this agreement in case the vendor fails to provide the satisfactory services to the client Bank as laid down in the Purchase Order. In such a circumstance, a 90-day written notice of intent to terminate the contract shall be delivered by the Bank to the Vendor.
- b. **Amendment to Agreement:** Any amendment to this agreement would require the approval of the Bank and the Vendor. The amendment of the agreement would take place through an addendum to this agreement. There will be an opportunity on an yearly basis to make adjustments to this SLA. The Bank and the Vendor should work together to make changes at that time.
- c. **Levels of Effort** to address problem tickets will be reviewed and adjusted accordingly for all new systems implemented, or decommissioned, during the term of this agreement. All changes will be conducted by the Vendor and the Bank jointly, with an addendum made to this agreement.
- d. **Renewal of Agreement:** This agreement will be renegotiated by the Bank and the Vendor at the end of the term of this contract for the following year if found appropriate by the Bank.

**4. Call Management Process:**

The Bank shall log the problem ticket to the Vendor's problem ticket management system through either of the following gateways:

- a. **Toll Free Number:**
- b. **eMail:**
- c. **Postal Address:**



The Vendor shall immediately acknowledge the same. The time of such acknowledgement shall be taken as the time the complaint is lodged.

**5. Term of Agreement:**

This agreement shall come into effect upon the date of acceptance of this agreement and ends at the end of five years thereafter.

**6. Levels of Support:**

There are three levels of support, level 1, 2 and 3. These levels, which are integrated into the Bank's support process, are defined as follows:

- a. **Level 1:** This is support provided by the appropriate Vendor help desk when it receives the Support Request from the Bank. This represents generalist support. If this level of support cannot resolve the problem, the Support Request is passed to the Vendor's level 2 support, which is the infrastructure support specialist.
- b. **Level 2:** This is support provided by an infrastructure support or subject matter specialist. This level of support does not perform system reconfiguration etc., if required to resolve the problem. Operational issues will be resolved at this level. If resolution requires system configuration etc., the Support Request is passed to the Vendor's level 3 support.
- c. **Level 3:** This is the final expert support including that from the OEM if needed.

**7. Service Level Definitions:**

This agreement binds the Vendor to meet the following expected levels of support services.

Priority	Description	Response Time	Resolution Time
1 – Critical	Fatal Production Issue Calls that have severe impact on business affecting large number of users like Data Centre / Servers / Storage failures etc.	30 minutes.	2 Hrs.
2 – High	Loss of critical business function Modular Data Centre malfunctioning	2 hours.	4 Hrs.
3 – Medium	Loss of critical function where a work around is possible Network outages issues	4 hours.	1 days.
4 – Low	Loss of non-critical function Patch upgrades for security appliances etc.	1 day.	2 days.

The above service levels will be applicable for problems logged within local business hours (09:00 AM to 06:00 PM), Tuesday to Friday.

The Service Level commences from the time the call is acknowledged by the Vendor. The SLA clock will end with the delivery of the solution and restoration of business.



**8. Service Performance standards and Penalty Applicable**

Measurement	Definition	Performance Target
System Availability	Percentage of time Systems are available outside of maintenance window of scheduled outages.	99% availability each month
Client Response / Resolution Time	Response and resolution times for any support issue	Meeting 95% performance of standards mentioned in section above
Number of Unscheduled Outages	Number of outages during the Core Availability Time	12 times in a year, but within the system availability of 99.5% for the month of occurrence of the outage/s
Scheduled outages	Outages planned for system maintenance with minimum 48 hours' notice to the Customer	Normal scheduled outages should be between 21:00-06:00. Maintenance outages if needed during 06:00-21:00 periods must not exceed 60 minutes per outage

***Penalty clause for not meeting SLA terms:***

That one instance of failure in SLA terms will be penalized to the Vendor as one week warranty extension of the products or applicable amount of penalty as mentioned in the PO will be deducted while verifying and making the payment to the vendor.

However, if the problem is not rectified even after one week of raising the fault ticket, the Consultant / Bank will recommend suitable penalty which will be binding on the Vendor.

THE VENDOR BY ITS SIGNATURE ACKNOWLEDGES THAT IT HAS READ THIS AGREEMENT (INCLUDING THE TERMS AND CONDITIONS, UNDERSTANDS THEM AND AGREES TO ABIDE BY THEM.

**SIGNED FOR AND ON BEHALF OF M/s** \_\_\_\_\_

Authorized Signatory

NAME & TITLE:

Date:

**ACCEPTED FOR AND ON BEHALF OF THE KANGRA DISTRICT CENTRAL CO-OPERATIVE BANK LTD.,  
DHARAMSHALA.**

Authorized Signatory

NAME & TITLE:

Date:



THE KANGRA CENTRAL COOPERATIVE BANK LTD.,  
DHARAMSHALA

**WITNESSED BY THE CONSULTANT**

Authorized Signatory

NAME & TITLE:

Date: