

REQUEST FOR PROPOSAL (RFP)

FOR

SELECTION OF SYSTEM INTEGRATOR FOR SUPPLY, INSTALLATION, INTEGRATION, IMPLEMENTATION, MAINTENANCE AND FACILITY MANAGEMENT SERVICES OF HARDWARE, SOFTWARE, NETWORK FOR CORE BANKING SYSTEM (FINACLE 10.2.25) FOR FIVE YEARS (RE-TENDER) (E –TENDER)



PASCHIM BANGA GRAMIN BANK

DEPARTMENT OF INFORMATION TECHNOLOGY, HEAD OFFICE
NATABAR PAL ROAD, CHATTERJEE PARA MORE
HOWRAH – 711101

RFP Ref. No: PBGB/HO/DIT/746/2023-24 Date: 23/06/2023

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Abbreviations and Acronyms

The following abbreviations and acronyms defined in this RFP are as under:-

1	ABH	After Business Hours
2	AMC	Annual Maintenance Contract
3	API	Application Program Interface
4	ATS	Annual Technical Support
5	BFSI	Banking and Financial Service Institution
6	BPD	Business Process Definition
7	CBS	Core Banking Solution
8	CCU	Central Clearing Unit
9	CPU	Central Processing Unit
10	CSS	Current System Study
11	DC	Data Center
12	DR	Disaster Recovery Site
13	DRG	Detailed Requirement Gathering
14	EMD	Earnest Money Deposit
15	IPR	Intellectual Property Right
16	ISO	International Standard Organization
17	ITB	Instruction to Bidder
18	MIS	Management Information System
19	OEM	Original Equipment Manufacturer
20	NDR	Near Disaster Recovery Site
21	PBGB	Paschim Banga Gramin Bank
22	PSB	Public Sector Bank
23	PSE	Public Sector Enterprise
24	PSU	Public Sector Unit
25	RAC	Retail Asset Center
26	RFP	Request for Proposal
27	RPU	Regional Processing Unit
28	SRS	Software Requirement Specification
29	SIT	System Integrated Testing
30	UAT	User Acceptance Testing

Bid Schedule and Address :

Tender Reference	RFP Ref No: PBGB/HO/DIT/746/2023-24 Date: 23/06/2023
Cost of Tender Document	Rs.10,000/- (Rupees Ten Thousand Only)
Date of issue of RFP	23/06/2023
Earnest Money Deposit (EMD)	Rs. 30,00,000/- (Rupees Thirty Lacs Only)
Date of commencement of sale of tender document	23/06/2023
Last date for submitting queries for the Pre-bid Meeting	On or before 29/06/2023 up to 05:00 PM
Pre bid Meeting and Venue	30/06/2023 at 3:30 PM Paschim Banaga Gramin Bank, Head Office Department of Information Technology Natabar Pal Road, Tikiapara Howrah - 711101
Last Date and Time for receipts of tender bids	14/07/2023 at 03:00 PM
Opening of Technical Bids	14/07/2023 at 04:00 PM
Opening of Commercial/Price Bid	Will be informed subsequently to eligible & technically qualified bidders.
Website for Online RFP	https://www.pbgbank.com & https:// www.tenderwizard.com/eproc
Address of Communication	General Manager, Paschim Banaga Gramin Bank, Head Office Department of Information Technology Natabar Pal Road, Tikiapara Howrah - 711101
Address for support for Online RFP/Process of submission of tender documents	<p>This Tender will follow e-Tendering process [e-bids] as under which will be conducted by Bank's authorized e- Tendering Service Provider M/s Antares Systems Ltd through Website https:// www.tenderwizard.com/eproc</p> <p>Following activities will be conducted online through above website:</p>

- a) Submission of Technical Bid & Commercial Bid by the Vendor
- b) Opening of Technical Bid & Commercial Bid by the Bank
- c) Clarification, if any, sought by the Bank.
- d) On-line evaluation by the Bank.

Representatives of Vendors will be given training, if any, for e- Tendering by the Service Provider, M/s Antares Systems Ltd.

Bidders who wish to participate in online tenders will have to register with the website (<https://www.tenderwizard.com/eproc>) through the "Register" link provided on the home page. Bidder will create login id & password on their own in registration process.

Following facilities shall be provided to registered bidders/ vendors by the service provider M/s Antares Systems Ltd:

- a) Support to the Bidders for participating in the bids through e-tendering Website.
- b) Call center support/ email/ phone/mobile etc. in all possible medium.
- c) Registration with the e-tendering website.
- d) User Manual / Training Kit to the Bidder.
- e) Any no. of users of Vendor/ Bidder organization can take support on the e-tendering system.
- f) Bidder who wish to participate in this tender need to procure Digital Signature Certificate (for Signing and Encryption) as per Information Technology Act-2000 and CVC guidelines using that they can digitally sign their electronic bids. Bidders can procure the same from any of the CCA approved certifying agencies, or they may contact M/s Antares Systems Ltd. at below mentioned address and they will assist them in procuring the same. Bidders who already have a valid Digital Signature Certificate need not to procure the same. In case bidders need any clarification regarding online participation, they can contact

	<p>Antares Systems Ltd. # 137/3 , 'Honganasu' Kengeri, Bangalore Mysore Road, Bangalore – 560 060, India Ph: - 080-49352000 / 40482000 Fax: - 080-49352034 Help Desk:1800-3096630 / 9073677150/ 151 / 152 / 033 4604 6611 Contact Person: Mr. Kushal Bose/ Mr. Subrata Sheet Mobile no. 09674758719 / 09674758723 (On working days-0900 hours–1800 hours) e-mail: kushal.b@antaressystems.com subrata.s@antaressystems.com g) Bidders who wish to participate in e-Tender need to fill data in predefined forms of RFP, Technical, Price bid available in respective tender only. h) Bidder should upload scanned copies of reference documents in support of their eligibility of the bid and as per the instructions given in tender documents After filling data in predefined forms bidders need to click on final submission link to submit their encrypted bid.</p>
Email address	pbgbfin10@pbgb.co.in
Contact Telephone/Fax Numbers	Tel : 033-26679478/2477
Note: Bank reserves the right to accept or reject in part or full, any or all tenders without assigning any reason whatsoever and without any cost and compensation therefore. Any decision of Bank in this regard shall be final, conclusive and binding on all the Tenderers	

Note :-

If last day of submission of bid is declared a holiday under NI Act by the Government or any restriction imposed by Government, subsequent to issuance of RFP the next working day will be deemed to be the last day for submission of the RFP. The Bid/s which is/are deposited after the said date and time shall not be considered.

Part I - INTRODUCTION

1. About PBGB :

Paschim Banga Gramin Bank (hereinafter referred to as 'Bank or PBGB') is one of the leading Regional Rural Bank in West Bengal with 230 branches in rural areas across five districts viz. Howrah, Hooghly, Purba Bardhaman, Paschim Bardhaman and Birbhum. The Bank has implemented **Core Banking Solution (CBS)** with Finacle 7.0.18 at the branches and all offices and has been automating all operations in the controlling offices/branches. Bank intends to select system integrator for Core Banking Solution Finacle 10.2.25.

1.1 Introduction :

The PBGB intends to engage SI (System Integrator) for required servers, licenses, Network equipment, Network link, support service and manage the entire Finacle 10 set up for a period of 5 years from date of Go-Live of the Finacle 10 project.

Presently Finacle 7.0.18 Application Core Banking Software in the Bank is being managed by System Integrator under OPEX Model.

As a part of continuous technology upgrade, the selected bidder is expected to utilize various new features / technological advancement of the newer version of the CBS and to provide better and enhanced service to its customers through re-engineering of its existing business processes.

The scope of the System Integrator can be enhanced as per requirements of Bank. The Solution offered must be horizontally scalable to cater to these requirements also. The detailed scope of work has been defined Section – 3 (Scope of Work) of this RFP.

1.2 Objective of RFP:

Paschim Banga Gramin Bank invites Request for Proposal (hereinafter referred to as "RFP" or "Tender") for Selection of System Integrator (hereinafter referred to as "SI" or "Vendor") for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years.

The SI will be required to co-ordinate with vendor(s), Bank for Finacle version migration activity from Finacle 7.0.18 to Finacle 10.2.25.

Eligibility Criteria

The eligibility criteria to participate in bidding process are mentioned below. Only those bidders, who satisfy all the eligibility criteria as mentioned herein below, may respond. Document in support of all eligibility criteria are required to be submitted in Eligibility Bid. Offers received from the bidders who do not fulfil any of the following eligibility criteria are liable to be rejected.

Sl. No.	Eligibility Criteria	(Proof of documents required / must be submitted)
1	<p>Bidder should be a limited company (Public/Private) registered in India under the Companies Act, 1956 or 2013 and amendments thereafter or Companies registered as MSME Entrepreneur & still categorized as MSME for the last 3 years as on RFP issuance date.</p> <p>In case of wholly owned subsidiary, parent company should have been registered in India for at least 3 years.</p> <p>Bidder & Parent Company/ Partner/ Investor must adhere cross border sharing/FDI/FEMA and other regulatory guidelines of Govt of India.</p>	<ol style="list-style-type: none">1. Certificate of Incorporation issued by Registrar of Companies along with2. Copies of Memorandum of Association3. Copies of Articles of Association4. Shareholding pattern5. PAN, TAN, GSTIN Certificate and any other tax related document if applicable is required to be submitted along with the eligibility bid.6. Registration from DIC, KVIB, NSIC, KVIC, DIHH, UAA or any other body specified by Ministry of MSME.
2	<p>The bidder must have minimum annual turnover of Rs. 300 Crore each in last three financial years i.e. 2019-20, 2020-21 & 2021-22. This must be the individual company turnover and not that of any group companies. In case of wholly owned subsidiary, the parent company should comply with above criteria.</p>	<p>Copy of Audited Balance sheet for the financial years i.e. 2019-20, 2020-21 & 2021-22 should be submitted. Also a Certificate signed by the Chartered Accountants regarding company's financial capability to be submitted.</p>
3	<p>The Bidder should have operating Profit in the last three financial years (2019-20, 2020-21 & 2021-22). In case of wholly owned subsidiary,</p>	<p>Copy of Audited balance sheet of the financial years i.e. (2019-20, 2020-21 & 2021-22) should be submitted.</p>

	the parent company should comply with above criteria.	
4	The bidder should be Original Equipment Manufacturer (OEM) of Hardware or their authorized representative or System Integrator (SI) in India.	The bidder needs to submit Manufacturer Authorization Form (MAF), having reference of this RFP, from respective OEMs as per Annexure-C stating that bidder is authorized partner/ System Integrator of OEM and is authorized to participate in this RFP. In case of OEM, self-declaration on Company Letter Head as per Annexure-C format duly signed & stamped to be submitted.
5	Proposed x86 Enterprise Class Server OEM should have installation base in at least one Public Sector Bank / Regional Rural Bank in India having minimum 20 nos. of x86 Enterprise Class Servers with minimum 400 cores with Red hat Linux Operating System and running successfully on Finacle 10.x environment at least one year as on date submission of RFP.	Copy of purchase order and reference letters/ completion certificates mentioning details of hardware used along with Finacle 10.x environment to be enclosed containing contact details of the signing authority of the masked purchase order / authorization letter.
6.	Proposed OEMs for storage, load balancer, SAN switch, NAS Tool, Core Router, Core Switch, Core Firewall should have been supplied, integrated and running successfully as on date in at least one Public Sector Bank / Regional Rural Bank in India.	Copy of purchase order and reference letters/ completion certificates to be enclosed containing contact details of the signing authority of the masked purchase order / authorization letter.
7	Proposed OEMs for Anti-Virus, EMS Tool & Biometric Solutions should have been running successfully as on date in at least one Scheduled Commercial Bank in India.	Copy of purchase order and reference letters/ completion certificates to be enclosed containing contact details of the signing authority of the masked purchase order / authorization letter.

8.	<p>The proposed OEMs hardware/software like servers, storage, load balancer, SAN switch/director, Network Equipment, and backup solution, NAS, operating system, EMS Tool, Anti-virus solution, Biometric solutions, operating system and any other license software required for implementation of Finacle 10.x should have a clear support roadmap for minimum Seven (7) years from date of submission of RFP and upgrades (if required) must be made available during the contract period.</p>	<p>A written confirmation to be provided from the OEM on OEM's letterhead (signed & stamped by OEM) as per Annexure-C</p>
9.	<p>The bidder should have experience in delivery, integration, installation, management & maintenance of Hardware & Network Infrastructure in at least one Public Sector Bank / Regional Rural Bank in India as on date having more than 500 branches operation in the last 5 years along with the following areas of Banking setup:</p> <ul style="list-style-type: none"> a) IT Infrastructure like Management of Servers, Storage, Network & security Equipment, SAN Switch, Backup solution. b) Database & Operating System administration & management 	<p>A copy of Purchase Order and the necessary experience certificate along with reference letter having delivery, integration, installation, management and maintenance of Server Infrastructure experience in Public / Regional Rural Bank to be enclosed with the bid documents.</p>
10.	<p>Bidder should have a tie-up arrangement with external agencies (Maximum two agencies) having experience in below mentioned area for Finacle 10.x migration in Scheduled Commercial Bank in India as on date having more than 500 branches</p> <ul style="list-style-type: none"> a. Functional Testing & UAT of all modules, Interface & automation experience b. Security testing c. Performance Testing d. Pre and post Data Migration checking & testing 	<p>Relevant Credential letters having name of proposed testing agency along with Purchase Order, Contract Copy with the Bank's confirmation on having executed the PO/Contract having name of proposed testing agency.</p>

11.	The Bidder/OEM should have service / support infrastructure in Kolkata and Bengaluru for after sale support and maintenance of offered hardware and software.	List of branch / support offices full details of Name, Address / Telephone Numbers on the company's letter head should be submitted.
12.	Bidder and OEM should not have been black-listed by any Public sector bank / government institution in India as on RFP date.	An undertaking to this effect must be submitted in their respective letter head.
13	The bidder should ensure that there are no legal proceedings / inquiries / investigations have been commenced / pending against selected bidder by any statutory or regulatory agencies which may result in liquidation of company / firm and / or deterrent on continuity of business.	Declaration in the letterhead of the bidder's company to that effect should be submitted.

Note: - In this tender process, either authorized representative / distributor in India on behalf of Principal OEM (Original Equipment Manufacturer) or Principal OEM itself can bid but both cannot bid simultaneously. In such case OEM bid will only be accepted. If an agent / distributor submits bid on behalf of the Principal OEM, the same agent / distributor shall not submit a bid on behalf of another Principal OEM in the same tender for the same item or product. Bank right to verify the credential letter submitted by bidder directly from respective client. Credential letter should be undersigned with the rank of DGM/VP or above.

Bidder must comply with all above-mentioned criteria. Non-compliance of any of the criteria will entail rejection of the offer summarily. **Photocopies of relevant documents / certificates should be submitted as proof in support of the claims made.** BANK reserves the right to verify /evaluate the claims made by the bidder independently. Any decision of BANK in this regard shall be final, conclusive and binding upon the bidder. The Bank may accept or reject an offer without assigning any reason whatsoever.

Part –II: INVITATION FOR BIDS AND INSTRUCTIONS TO BIDDERS

1. Invitation for Bids

The PBGB invites sealed tenders comprising of Eligibility Bid, Technical bid and Commercial bid from experienced prospective bidders having proven capabilities for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years.

The prospective bidder is required to adhere to the terms of this RFP document and any deviations to the same shall not to be acceptable to Bank. Sealed offers / Bids (Bid) prepared in accordance with this RFP should be submitted as per details given in the Bid Control sheet. The criteria and the actual process of evaluation of the responses to this RFP and subsequent selection of the successful bidder will be entirely at Bank's discretion.

2. Due Diligence

The Bidder is expected to examine all instructions, forms, terms and specifications in this RFP and study the RFP document carefully. Bid shall be deemed to have been submitted after careful study and examination of this RFP with full understanding of its implications. The Bid should be precise, complete and in the prescribed format as per the requirement of this RFP. Failure to furnish all information required by this RFP or submission of a Bid not responsive to this RFP in each and every respect will be at the Bidder's own risk and may result in rejection of the Bid and for which Bank shall not be held responsible.

3. Tender Document and & Fee

A complete set of tender document can be obtained from the following address during office hours on all working days on submission of a written application along with a non-refundable fee of **Rs.10,000/- (Rupees Ten Thousand Only)**.

A complete set of tender documents can also be downloaded from Bank's website www.pbgbank.com. The Cost of tender documents shall be paid through NEFT mode or by Demand Draft / Banker's Cheque / Pay Order drawn in favour of Bank payable at Kolkata. The bidder has to provide the Bank the UTR no. generated after the NEFT (hard copy of the receipt generated should be submitted along with the bid documents), failing which the bid of the concerned bidder will be rejected. The Cost of tender document is non-refundable.

In case of bidders being an MSME under registration of any scheme of Ministry of MSME, they are exempted from the submission of EMD and the Tender Cost / Fee. A valid certificate in this regard issued by the Ministry of MSME has to be submitted along with the bid.

The Bank details are as below:

Bank details for Tender Fee	Address for Obtaining printed copy of RFP
Account Number-10011082030033 Account Name- TENDER FEES Branch- HEAD OFFICE IFSC- UCBAORRBPBG	Paschim Banga Gramin Bank Head Office : Natabar Pal Road, Chatterjee Para More, Tikiapara, Howrah, West Bengal -711101

4. Earnest Money Deposit

The Bidder(s) must submit Earnest Money Deposit along with Eligibility Bid in the form of Bank Guarantee valid for a period of 180 days, with a further claim period of 30 days from the date of opening of Eligibility/Technical Bid in the format given in **Annexure J**, in favour of Paschim Banga Gramin Bank payable at Kolkata for an amount mentioned hereunder:

Particulars of Job to be undertaken	EMD
RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years.	Rs.30,00,000/- (Rupees thirty Lakhs Only)

Non-submission of Earnest Money Deposit will lead to outright rejection of the Offer. The EMD of unsuccessful bidders will be returned to them on completion of the procurement process. The EMD (Earnest Money Deposit) of successful bidder(s) will be returned on submission of Performance Bank Guarantee. The EMD will not bear any interest and it may be forfeited under the following circumstances:

- a. If the bidder withdraws its bid during the period of bid validity (180 days from the date of opening of bid).
- b. If the bidder makes any statement or encloses any form which turns out to be false, incorrect and / or misleading at any time prior to signing of contract and/or conceals or suppresses material information; and / or
- c. The selected bidder withdraws his tender before furnishing an

unconditional and irrevocable Performance Bank Guarantee.

- d. The bidder violates any of the provisions of the terms and conditions of this tender specification.
- e. In case of the successful bidder, if the bidder fails:
 - To sign the contract in the form and manner to the satisfaction of BANK.
 - To furnish Performance Bank Guarantee in the form and manner to the satisfaction of BANK within the stipulated time period or before the execution of Service Level Agreement (SLA).

5. Rejection of the Bid

The Bid is liable to be rejected if:

- a. The document does not bear signature of authorized person on each page signed and duly stamp.
- b. It is received through Fax/E-mail.
- c. It is received after expiry of the due date and time stipulated for Bid submission.
- d. Incomplete Bids /Conditional Bids/ incorrect information in bid / Bids not conforming to the terms and conditions stipulated in this Request for proposal (RFP) are liable for rejection by the Bank.
- e. Non-submission of Integrity pact or any other documents mentioned in the RFP shall be liable for rejection
- f. Bidder should comply with all the points mentioned in the RFP. Noncompliance of any point will lead to rejection of the bid.
- g. Any form of canvassing/lobbying/influence/query regarding short listing, status etc. will be a disqualification.
- h. Non-submission of Pre Contract Integrity Pact as per format given in **Annexure – H.**

6. Pre Bid Meeting

The queries for the Pre-bid Meeting should be reached by email on or before the date mentioned in the Bid Control Sheet by e-mail to **pbgbfin10@pbgb.co.in**. It may be noted that no query from any bidder shall be entertained or received after the above mentioned date. Queries raised by the prospective bidder and the Bank's response will be hosted at Bank's web site and sent to each individual bidder. The Pre-Bid Meeting schedule is mentioned in bid control sheet.

Only authorized representatives of bidder will be allowed to attend the Pre-bid meeting. Pre-bid queries raised by the bidder(s) are to be submitted in the format given in **Annexure – I.**

7. Modification and Withdrawal of Bids

No bid can be modified by the bidder subsequent to the closing date and time for submission of bids. In the event of withdrawal of the bid by successful bidders, the EMD will be forfeited by the Bank.

8. Information Provided

The RFP document contains statements derived from information that is believed to be reliable at the date obtained but does not purport to provide all of the information that may be necessary or desirable to enable an intending contracting party to determine whether or not to enter into a contract or arrangement with Bank in relation to the provision of services. Neither Bank nor any of its employees, agents, contractors, or advisers gives any representation or warranty, express or implied as to the accuracy or completeness of any information or statement given or made in this RFP document.

9. Clarification of Offer

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

10. Late Bids

Any bid received by the Bank after the deadline (Date and Time mentioned in Bid Details table / Pre Bid / subsequent addenda / corrigenda) for submission of bids will be rejected and / or returned unopened to the bidder.

11. Issue Of Corrigendum

At any time prior to the last date of receipt of bids, Bank may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the RFP document by a Corrigendum. Any such corrigendum shall be deemed to be incorporated into this RFP.

12. For Respondent Only

The RFP document is intended solely for the information to the party to whom it is issued ("the Recipient" or "the Respondent") and no other person or organization.

13. Disclaimer

Subject to any law to the contrary, and to the maximum extent permitted by law, Bank and its officers, employees, contractors, agents, and advisers disclaim all liability from any loss or damage (whether foreseeable or not) suffered by any person acting on or refraining from acting because of any information, including forecasts, statements, estimates, or projections contained in this RFP document or conduct ancillary to it whether or not the loss or damage arises in connection with any negligence, omission, default, lack of care or misrepresentation on the part of Bank or any of its officers, employees, contractors, agents, or advisers.

14. MSME Bidder

Any enterprise registered under Udyam registration as Micro and Small Enterprise (MSEs), having valid Udyam registration certificate and/or Udyog Aadhaar (UAM) and category valid as on bid submission date are eligible to avail the benefits under the policy. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service.

A. Exemption:

To reduce transaction cost of doing business, MSEs will be facilitated by providing them tender documents free of cost, exempting MSEs from payment of earnest money deposit, adopting e-procurement to bring transparency in tendering process. However, exemption from paying Performance Bank Guarantee is not covered under the policy. MSEs may also be given relaxation in prior turnover and prior experience criteria during the tender process, subject to meeting of quality and technical specifications. However, there may be circumstances (like procurement of items related to public safety, health, critical security operations and equipment, complex and critical services, procurement of product of high importance and urgent products etc.) where procuring entity may prefer the vendor to have prior experience rather than giving orders to new entities.

B. Purchase preference to Micro and Small Enterprises (MSEs):

Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered

Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service.

15. Costs Borne by Respondents

All costs and expenses incurred by Recipients / Respondents in any way associated with the development, preparation, and submission of responses, including but not limited to attendance at meetings, discussions, demonstrations, etc. and providing any additional information required by Bank, will be borne entirely and exclusively by the Recipient / Respondent.

16. No Legal Relationship

No binding legal relationship will exist between any of the Recipients / Respondents and Bank until execution of a contractual agreement.

17. Cancellation of Tender Process

PBGB reserves the right to accept or reject in part or full any or all offers at its sole discretion at any stage without assigning any reason thereof and without any cost or compensation therefor. Any decision of PBGB in this regard shall be final, conclusive and binding upon the bidders.

The Bank reserves the right to accept or reject any Bid in part or in full, and to cancel the Bidding process and reject all Bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for Bank's action.

18. Corrupt And Fraudulent Practices

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

“Corrupt Practice” means the offering, giving, receiving or soliciting of anything of values to influence the action of an official in the procurement process or in contract execution

and

“Fraudulent Practice” means a misrepresentation of facts in order to influence a procurement process or the execution of contract to the detriment of the Bank and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Bank of the benefits of free and open competition.

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

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

19. Non-Transferrable Offer

This Request for Proposal (RFP) is not transferable. Only the bidder who has purchased this document in its name or submitted the necessary RFP price (for downloaded RFP) will be eligible for participation in the evaluation process.

20. Address of Communication

Offers / bid should be addressed to the address given in bid control sheet and uploaded on e-tendering website.

21. Period of Bid Validity

Bids shall remain valid for one year after the date of bid opening prescribed by BANK. BANK holds the rights to reject a bid valid for a period shorter than 90 days as non-responsive, without any correspondence. In exceptional circumstances, BANK may solicit the Bidder's consent to an extension of the validity period. The request and the response thereto shall be made in writing. Extension of validity period by the Bidder should be unconditional and irrevocable. The Bid Security provided shall also be suitably extended. A bidder acceding to the request will neither be required nor be permitted to modify its bid. A bidder may refuse the request without forfeiting its bid security. In any case the bid security of the bidders will be returned after completion of the process.

22. No Commitment To Accept Lowest or Any Bid

Bank shall be under no obligation to accept the lowest or any other offer received in response to this RFP and shall be entitled to reject any or all offers including those received late or incomplete offers without assigning any reason whatsoever. Bank reserves the right to make any changes in the terms and conditions of purchase. Bank will not be obliged to meet and have discussions with any vendor, and or to listen to any representations.

23. Errors and Omissions

Each Recipient should notify Bank of any error, omission, or discrepancy found in this RFP document in the form of pre-bid queries within time as given in control sheet.

24. Acceptance of Terms

A Recipient will, by responding to Bank RFP, be deemed to have accepted the terms as stated in the RFP.

Failure of the successful bidder to agree with the Draft Legal Agreement and Terms & Conditions of the RFP shall constitute sufficient ground for annulment of the award, in which event, bank may award the contract to the next best value bidder or call for new proposals from the interested bidders.

In such a case, Bank shall appropriate the EMD/invoke the PBG of the successful bidder.

25. RFP Response

If the response to this RFP does not include the information required or is incomplete or submission is through Fax or through e-mail, the response to the RFP is liable to be rejected.

All submissions will become the property of Bank. Recipients shall be deemed to license, and grant all rights to, Bank to reproduce the whole or any portion of their submission for the purpose of evaluation, to disclose the contents of the submission to other Recipients who have registered a submission and to disclose and/or use the contents of the submission as the basis for any resulting RFP process, notwithstanding any copyright or other intellectual property right that may subsist in the submission or Banking documents.

26. Preliminary Scrutiny

Bank will scrutinize the offers to determine whether they are complete, whether any errors have been made in the offer, whether required technical documentation has been furnished, whether the documents have been properly signed, and whether all the necessary information supported by documentary evidences are submitted as per prescribed method. Offers not meeting the prescribed guidelines and or with incorrect information or not supported by documentary evidence, wherever called for, would summarily be rejected. However, Bank, at its sole discretion, may waive any minor non-conformity or any minor irregularity in an offer. Bank reserves the right for such waivers and this shall be binding on all vendors.

27. Notification

Bank will notify the Respondents in writing as soon as possible about the outcome of the RFP evaluation process, including whether the Respondent's RFP response has been accepted or rejected. Bank is not obliged to provide any reasons for any such acceptance or rejection.

28. Erasures or Alterations

The Bid should contain no alterations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case corrections should be duly stamped and initialed / authenticated by the person/(s) signing the Bid.

29. Clarifications on and Amendments to RFP Document

Prospective bidders may seek clarification on the RFP document by letter/fax/e-mail till the date mentioned in the bid control sheet. Further, at least 7 days' time prior to the last date for bid-submission, the Bank may, for any reason, whether at its own initiative or in response to clarification(s) sought from prospective bidders, modify the RFP contents by amendment. Clarification /Amendment, if any, will be notified on Bank's website.

30. Language of Bids

The bid as well as all correspondence and documents relating to the bid exchanged by the bidder and the Bank shall be in English language only.

31. Authorized Signatory

The bid shall be signed by a person or persons duly authorized by the Bidder with signature duly attested. In the case of a body corporate, the bid shall be signed by person who is duly authorized by the Board of Directors / Competent Authority of the bidder or having Power of Attorney.

The bidder shall indicate the authorized signatories who can discuss, sign negotiate, correspond and any other required formalities with the bank, with regard to the obligations. The selected bidder shall submit, a certified copy of the resolution of their Board, authenticated by Company Secretary along with Power of Attorney duly stamped, authorizing an official or officials of the company to discuss, sign with the Bank, raise invoice and accept payments and also to correspond.

The bidder shall furnish proof of signature identification for above purposes as required by the Bank.

32. Submission of Offer – Two Bid System

Bank will follow Two Bid System i.e., Separate Eligibility & Technical bid. **Eligibility Bid** – containing Eligibility Information, Tender Fee, Earnest Money Deposit in the form of Bank Guarantee OR certificate from Ministry of MSME (wherever required) and Integrity Pact, **Technical Bid** – containing Technical Information, Masked Commercial Bid & Technical Bill of Materials and **Commercial Bid** – containing Price Information.

The Eligibility and Technical Offers should be complete in all respects and contain all information asked for, in the exact format of eligibility and technical specifications given in the RFP, except prices along with the Tender Fee, Earnest Money Deposit in the form of Bank Guarantee and the Integrity Pact on a non-judicial stamp paper of requisite value. Tender Offer forwarding letter prescribed in Annexure – A should be submitted with the Eligibility / Technical Offer. The Eligibility and Technical offers must not contain any price information. Bank, at its sole discretion, may not evaluate Eligibility or Technical Offer in case of non-submission or partial submission of eligibility or technical details. Any decision of Bank in this regard shall be final, conclusive and binding upon the Bidder. The Technical bid should have documentary proof in support of Eligibility Criteria and Annexures.

The entire RFP, Pre-bid responses along with all the Addenda and Corrigenda should be stamped & signed by the authorized signatory of the participating Bidder and to be submitted to the Bank with all other documents as part of the Eligibility bid. The envelopes separately should contain the documents in the order mentioned in the following diagram.

The Commercial Offer (Soft copies) should contain all relevant price information as per **Annexure E**

All pages and documents in individual bids should be numbered as page no. – (Current Page No.) of page no – (Total Page No.) and should contain tender reference no. and Bank 's Name.

Note:

- 32.1 The Technical bid should be complete in all respects and contain all information asked for, except prices. The documentary proof in support of all Eligibility Criteria should be submitted along with Eligibility Bid.
- 32.2 Hard copy of Tender Fee, Earnest Money Deposit, Integrity Pact and documents executed on non-judicial stamp paper should be sent on the address given in the control sheet on or before bid submission date.

- 32.3 Bidders to submit a **masked commercial Bid** i.e., by hiding price commercial bid as per Annexure S with technical bid envelope to be submitted.
- 32.4 The Bank reserves the right to resort to re-tendering without providing any reason whatsoever. The Bank shall not incur any liability on account of such rejection.
- 32.5 Canvassing of any kind or Bid submitted with false information will be a disqualification.
- 32.6 The bidder is required to guarantee that exchange rate fluctuations, changes in import duty and other taxes will not affect the Rupee value of the commercial bid over the price validity period.
- 32.7 Prices quoted by the Bidder shall be in Indian Rupees, firm and not subject to any price escalation, if the order is placed within the price validity period.
- 32.8 Further, subsequent to the orders being placed, the Bidder shall pass on to Bank all fiscal benefits arising out of reductions in Government levies /taxes.
- 32.9 The Bank reserves the right to modify any terms, conditions and specifications of this request for submission of offer and to obtain revised bids from the bidders with regard to such changes. The Bank reserves the right to accept or reject any bid.
- 32.10 Printed literature (for specific product and version numbers) describing configuration and functionality should be provided to the Bank for the products proposed to be supplied for the project. It should be noted that the product proposed will have to be supplied with all the software updates/fixes, if any, and associated documents. The bidder shall not quote for the products, whose End of sale/ End of Support/End of License has been declared by the OEM.
- 32.11 The Bank reserves the right to resort to re-tendering without providing any reason whatsoever. The Bank shall not incur any liability on account of such rejection.
- 32.12 Bids once submitted shall not be returned to the Bidder in future. The selected bidder must adhere to the terms of this RFP document.

33. Preference to Make in India

The policy of the Govt. of India to encourage "Make in India" and promote manufacturing and production of goods and services in India, "Public Procurement (Preference to Make in India), Order 2017 and the revised order issued vide GOI, Ministry of Commerce and Industry, Department for Promotion of Industry and Internal trade, vide Order No. P-45021/2/2017-PP (BEII) dated 04.06.2020 will be applicable for this tender.

Purchase Preference: In procurement of all goods, services or works in respect of which Nodal Ministry/Department has communicated that there is sufficient

local capacity and local competition, only "Class-I Local Supplier", as defined under the order, shall be eligible to bid irrespective of purchase value.

In procurements of goods or works which are divisible in nature, the "Class-I Local Supplier" shall get purchase preference over "Class-II Local Supplier" as well as "Non-Local Supplier", as per following procedure:

- Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.
- If L1 bid is not a 'Class-I local supplier', 50% of the order quantity in total shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price for remaining quantity and so on , and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers then such balance quantity may also be ordered on the L1 bidder.

In procurement of goods or works which are not divisible in nature and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get Purchase Preference over 'Class-II Local Supplier' as well as 'Non Local Supplier' as per following procedure:

- Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class – I Local Supplier ', the contract will be awarded to L1.
- If L1 is not 'Class –I Local Supplier, the lowest bidder among the 'Class-I Local Supplier ', will be invited to match the L1 price subject to Class –I local suppliers quoted price falling with in the margin of purchase preference and the contract shall be awarded to such 'Class -I Local Supplier' subject to matching the L1 price.
- In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier ' with the next higher bid within the margin of Purchase Preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case of none of the 'Class-I Local Supplier' within the margin of Purchase Preference matches the L1 price, the contract may be awarded to the L1 bidder.
- "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.

33.1 For the purpose of Preference to Make in India, Order 2017 (PPP-MII Order):

- “Local content” means the amount of value added in India which shall be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- “**Class-I Local supplier**” means a supplier or service provider whose product or service offered for procurement has local content equal to or more than 50%.
- “**Class-II local supplier**” means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%.
- “**Non-Local Supplier**” means a supplier or service provider , whose goods , services or works offered for procurement , has local content less than or equal to 20%.
- “**Margin of purchase preference**” means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference. The margin of purchase preference shall be 20%.

33.2 VERIFICATION OF LOCAL CONTENT:

- a. The ‘Class-I local supplier’/‘Class-II Local Supplier’ at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self –certification that the item offered meets the local content requirement for ‘Class –I Local Supplier’/‘Class –II Local Supplier’, as the case may be. They shall also give details of the location(s) at which the local value addition is made.
- b. In case of procurement for a value in excess of Rs 10 Crores , the ‘Class-I Local Supplier/ ‘Class-II Local Supplier ‘ shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in case of companies)or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

The local supplier at the time of submission of bid shall be required to provide a certificate as per **Annexure-W** from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content

The Bank shall follow all the guidelines/notifications for public procurement.

34. Restriction On Procurement Due to National Security

Any bidder from a country sharing a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT). A copy of the valid Certificate to be attached with the Bid. Certificate as per the Annexure U to be attached along with the Bid. Vide Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

Reference is made to Government of India order F. No. 7/86/2020/BOA-I dated 07.08.2020 on restrictions on procurements from bidders from a country or countries, on grounds of defence in India, or matters directly or indirectly, related thereto, including national security.

- i. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- iii. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -
 - a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- iv. The beneficial owner for the purpose of (iii) above will be as under:

In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation:

- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
- b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
 1. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 2. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
 3. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 4. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- v. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

35. Purchase preference to Micro and Small Enterprises (MSEs)

Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity.

36. Adoption of Integrity Pact

Bank has adopted practice of Integrity Pact (IP) as per CVC guidelines. The Integrity Pact essentially envisages an agreement between the prospective vendors / bidders / sellers, who commit themselves to Integrity Pact (IP) with the Bank, would be considered competent to participate in the bidding process. In other words, entering into this pact would be the preliminary qualification. In case of bids for the purchase of Goods, Services, and Consultancy etc. not accompanied with signed IP by the bidders along with the technical bid, the offers shall be summarily rejected. The essential ingredients of the Pact include:

- i. Promise on the part of the principal not to seek or accept any benefit, which is not legally available.
- ii. Principal to treat all bidders with equity and reason
- iii. Promise on the part of bidders not to offer any benefit to the employees of the Principal not available legally
- iv. Bidders not to enter into any undisclosed agreement or understanding with other bidders with respect to prices, specifications, certifications, subsidiary contract etc.
- v. Bidders not to pass any information provided by the Principal as part of business relationship to others and not to commit any offence under PC/IPC Act.
- vi. Foreign bidders to disclose the name and address of agents and representatives in India and Indian Bidders to disclose their foreign principals or associates.
- vii. Bidders to disclose any transgressions with any other company that may impinge on the anti-corruption principle.

- viii. For Joint Ventures (JV) entities, Integrity Pact should be signed by all partners.
- ix. In case of foreign contractor, details of their Indian counterpart should be submitted to Bank by the vendor.

Integrity Pact, in respect of a particular contract, shall be operative from the date IP is signed by both the parties till the final completion of the contract. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings. IP shall cover all phases of contract i.e. from the stage of Notice Inviting Tenders (NIT)/Request for Proposals (RFP) till the conclusion of the contract i.e. final payment or the duration of warrantee/guarantee. Format of IP is attached as **Annexure H** for strict compliance.

37. Other Terms and Conditions

- a. **Cost of preparation and submission of bid document:** The bidder shall bear all costs for the preparation and submission of the bid. Bank shall not be responsible or liable for reimbursing/compensating these costs, regardless of the conduct or outcome of the bidding process.
 - b. The Bank reserves the right to modify any terms, conditions and specifications of this request for submission of offer and to obtain revised bids from the bidders with regard to such changes. The Bank reserves its right to negotiate with any or all bidders. The Bank reserves the right to accept any bid in whole or in part.
 - c. The Bank reserves the right to reject any or all offers based on its own evaluation of the offers received, or on the basis of stability, capabilities, track records, reputation among users and other similar features of a bidder. When the Bank makes any such rejection, the Bank will not be bound to give any reason and/or justification in this regard to the bidder. The Bank further reserves the right to reject any or all offers or cancel the whole tendering process due to change in its business requirement.
 - d. **Response of the Bid:** The Bidder should comply all the terms and conditions of RFP.
 - e. The bidder is solely responsible for any legal obligation related to licenses during contract period for the solution proposed and Bidder shall give indemnity to that effect.
 - f. Bank shall be under no obligation to accept the lowest or any other offer received in response to this offer notice and shall be entitled to reject any or all offers without assigning any reason whatsoever. Bank has the right to re-
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issue tender/bid. Bank reserves the right to make any changes in the terms and conditions of purchase that will be informed to all bidders. Bank will not be obliged to meet and have discussions with any bidder, and / or to listen to any representations once their offer/bid is rejected. Any decision of Bank in this regard shall be final, conclusive and binding upon the bidder.

- 37.1 The Bank reserves the right to resort to re-tendering without providing any reason whatsoever. The Bank shall not incur any liability on account of such rejection.
- 37.2 Canvassing of any kind or Bid submitted with false information will be a disqualification.
- 37.3 The bidder is required to guarantee that exchange rate fluctuations, changes in import duty and other taxes will not affect the Rupee value of the commercial bid over the price validity period.
- 37.4 Prices quoted by the Bidder shall be in Indian Rupees, firm and not subject to any price escalation, if the order is placed within the price validity period.
- 37.5 Further, subsequent to the orders being placed, the Bidder shall pass on to the Bank all fiscal benefits arising out of reductions in Government levies /taxes.
- 37.6 The Bank reserves the right to modify any terms, conditions and specifications of this request for submission of offer and to obtain revised bids from the bidders with regard to such changes. The Bank reserves the right to accept or reject any bid.
- 37.7 Printed literature (for specific product and version numbers) describing configuration and functionality should be provided to the Bank for the products proposed to be supplied for the project. It should be noted that the product proposed will have to be supplied with all the software updates/fixes, if any, and associated documents. The bidder shall not quote for the products, whose End of sale/ End of Support/End of License has been declared by the OEM.
- 37.8 The Bank reserves the right to resort to re-tendering without providing any reason whatsoever. The Bank shall not incur any liability on account of such rejection
- 37.9 Bids once submitted shall not be returned to the Bidder in future.

Part –III: BID OPENING AND EVALUATION CRITERIA

1. Stages of Evaluation

There would be Three (3) stages for evaluation process.
The Stages are:

- I) Eligibility Criteria Evaluation
- II) Technical Evaluation
- III) Commercial Evaluation

2. Evaluation Methodology

The objective of evolving this evaluation methodology is to facilitate the selection of the most cost-effective solution (Total Cost of Ownership) over contract period that appropriately meets the requirements of the Bank.

2.1 Eligibility Evaluation:

The Eligibility would be evaluated first for the participating bidders. The bidders, who would qualify all Eligibility Criteria as mentioned in **Part-1, Clause 3**, will be shortlisted for the Technical bid evaluation.

2.2 Technical Evaluation:

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

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

Parameter	Maximum Marks	Minimum Passing %	Minimum Passing Marks
Bidder Credential Strengths	30	50%	15
Technical and Functional features evaluation	30	100%	30
Bidder validation of sizing based on their own current installations, workloads and	10	100%	10

performances			
Bidder Manpower Credentials (Quality of manpower proposed submitted along with biodata)	10	50%	5
Bidder Technical Presentation by Program Manager for Infrastructure Program Manager for Overall Solution	20	50%	10
Total	100		70

The evaluation/selection process will involve assessment of technical competence as detailed here below.

- i. A maximum of 100 marks will be allocated for the technical bid.
- ii. The evaluation of functional and technical capabilities of the bidders of this RFP will be completed first as per the following guidelines. The technical proposals only will be subjected for evaluation at this stage.

The bidders scoring less than 70% marks (cut-off score) out of 100 marks in the technical evaluation shall not be considered for further selection process and their offers will be rejected at this stage. Bidders should score 100% in Compliance Technical features and for rest of the evaluation Parameters, bidders should score a minimum as mentioned in the above table. Bidder fulfilling the parameters stated above shall be considered as technically qualified. Once the evaluation of technical proposals is completed, the bidders who score more than the prescribed cut-off score will be shortlisted for further tender process.

In case none of the participating bidders qualify on technical criteria by reaching or exceeding the cut off score of 70%, then the bank, at its sole discretion, may relax the cut-off score to a lower value.

The evaluation of technical proposals, among other things, will be based on the following. Bidder should provide all relevant supporting documents, certification from client and Bio-data for L1, L2 and Program manager should be submitted along with bid.

SI	Technical Evaluation	Evaluation Approach
1	Bidder's Credential Strengths (Max Marks 30)	1. Bidder should have successfully executed at least one supply, Installation, implementation and maintenance of hardware, network & security equipment during the last five years in at least one Public/Private Sector bank/RRB in India having a minimum of 500 branches in India - 15 Marks

		<p>2. For the second project bidder should have successfully executed at least one Finacle 10.x Application Support services along with supply, Installation, implementation and maintenance of hardware, network & security equipment during the last five years in at least one Public/Private Sector bank/RRB in India having a minimum of 500 branches in India - Additional 10 Marks</p> <p>3. For the third project bidder should have successfully executed at least one Finacle version migration with OSD, UAT/testing, along with supply, Installation, implementation and maintenance of hardware, network & security equipment during the last five years in at least one Public/Private Sector bank/RRB in India having a minimum of 500 branches in India- Additional 5 Marks</p>
2	Technical and features evaluation (Max Marks 30)	<p>The Bidder is required to submit the compliance for Annexure D and Scope of work Technical and functional requirements. Bidders should score 100% in Compliance to Annexure D and SOW. Note: Bidder should ensure that the all compliance against Annexure D and SOW non-compliance may lead to disqualification.</p>
3	Bidder validation of sizing based on their own current installations, workloads and performances (Max Marks 10)	<p>Bidders should score 100%</p> <p>Bank has given the year wise baseline data points and corresponding required sizing and hardware infrastructure. Bidder is required to validate given sizing including upgrade base on their own current installation, workload and performance and submit details document with justification.</p>
4	Manpower Credentials (Quality of manpower proposed) (Max Marks 10)	<p>Experience of the Program Manager: - Should have Minimum 1 no. of Project Manger having 3 years of relevant experience in BFSI as Program Manager and out of which 1 years should have experience in Managing Implementation and Operations in Finacle Core Banking Solution in one or more Public/Private Sector bank/ RRB in</p>

		<p>India having a minimum of 500 branches in India – (2 Marks)</p> <p>Experience of the L2 Resources:- Should have more than 5 no. of L2 resources having more than two years of relevant experience in Systems out of which 1 years should be in L2 Support for Hardware, RHEL OS, Oracle DBA, Middleware including load balancer in at least one Public/Private Sector bank/ RRB in India having a minimum of 500 branches in India – (2 marks)</p> <p>Experience of the L1 Resources:- Should have more than 10 L1 resources having two years of relevant experience in L1 Support for Systems out of which 1 years should be in L1 Support for RHEL OS, Oracle DBA in at least one Public/Private Sector bank/ RRB in India having a minimum of 500 branches in India – (2 marks)</p> <p>Experience of the L2 Network Resources:- Should have more than 5 no. of L2 resources having more than two years of relevant experience in Networking out of which 1 years should be in L2 Support for managing core Networking including Router & Firewall in at least one Public/Private Sector bank/ RRB in India having a minimum of 500 branches in India – (2 marks)</p> <p>Experience of the L1 Resources:- Should have more than 10 L1 resources having two years of relevant experience in L1 Support for branch networking & Link management services in in at least one Public/Private Sector bank/ RRB in India having a minimum of 500 branches in India – (2 marks)</p>
5	Bidder Technical Presentation (Max Marks 20)	<p>The bidders of this RFP have to give presentation/ interactions before the panel of representatives of Bank on the methodology/approach, time frame for various activities, strengths of the bidders on such projects</p> <p>The technical competence and capability of the bidder should be clearly reflected in the</p>

		<p>presentation. If any short-listed bidder fails to make such presentation, they will be disqualified from the selection process. Bank will confirm the veracity of the claim in the presentation during the site visit and if not satisfied, bidder will be disqualified from the selection process.</p> <ul style="list-style-type: none"> ▪ Understanding of Bank's business and Operating environment (4 Marks) ▪ Demonstration of organization capability for the proposed initiative (1 Marks) ▪ Service Model demonstration (2 Marks) ▪ Achieving Project timelines (2 Marks) ▪ Demonstration of value addition for the proposed solution that brings in distinct solution advantage or implementation time or savings in efforts (2 Marks) ▪ Offered database Management Solution demonstration (3 Marks) ▪ Offered Finacle 10.X Infrastructure management Solution demonstration (2 Marks) ▪ Offered Networking solution demonstration (2 Marks) ▪ Offer EMS tools demonstration (2 Marks) <p>Note: Bank may conduct presentation through Video Conference, if required.</p>
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2.3 Commercial Evaluation

The format for quoting commercial bid set out in **Annexure – E**. The commercial bids of only technically qualified bidders will be opened and evaluated by the Bank and the evaluation will take into account the following factors:

- a. The Bill of Material must be attached in Technical Proposal as well as Commercial Bid. The format will be identical for both Technical Proposal (masked Commercial Bid) and Commercial Proposal, except that the (masked Commercial Bid) should not contain any price information (with Prices masked). Technical Proposal without masked Bill of Materials may be liable for rejection. Any deviations from the Bill of material/ non submission of prices as per the format shall make the bid liable for rejection.

- b. The L1 bidder will be selected on the basis of the amount quoted in the Commercial bid for the proposed solution. Lowest quote based on Total Cost of Ownership (TCO) in the commercial bid, will be considered as the L1 bidder. However, in case of any discrepancy in calculation, unit cost for components & services shall prevail and TCO will be calculated accordingly.
- c. The bidder will be solely responsible for complying with any applicable Export / Import Regulations. The Bank will no way be responsible for any deemed Export benefit that may be available to the bidder.
- d. The quoted TCO (Total Cost of Ownership) identified in the commercial bid would be the basis of the entire outflow of the Bank for undertaking the scope of work.
- e. In case there is a variation in value between numbers and words; the value mentioned in words would be considered.
- f. In the event the vendor has **not quoted / not mentioned / left blank** item(s) in the commercial bid, for evaluation purposes the highest value for that item(s) among other submitted bids would be used to calculate the TCO, based on which the L1 bidder will be selected. However, for the purposes of payment and finalization of the contract, **the value of zero cost** in the unfilled item(s) would be used.

3 Normalization of bids:

The Bank has discretion to go through a process of Eligibility evaluation followed by the technical evaluation and normalization of the bids to the extent possible to ensure that eligible bidders are more or less on the same technical ground. After the normalization process, if the Bank feels that any of the bids needs to be normalized and that such normalization has a bearing on the price bids; the Bank may at its discretion ask all the eligible bidders to re-submit the technical and commercial bids once again for scrutiny.

The resubmissions can be requested by the Bank in the following two manners:

- Incremental bid submission in part of the requested clarification by the Bank.
- Revised submissions of the entire bid in the whole.

The Bank can repeat this normalization process at every stage of bid submission or till the Bank is satisfied. The eligible bidder/s have to agree that they have no reservation or objection to the normalization process and all the technically short listed bidders will, by responding to this RFP, agree to participate in the normalization process and extend their co-operation to the Bank during this

process. The shortlisted bidder/s, by submitting the response to this RFP, agrees to the process and conditions of the normalization process.

4 Award of Contract

The contract shall be awarded to and the order shall be placed with selected L1 bidder based on the price quoted by the bidder in Commercial Evaluation process. The selected bidder shall submit the acceptance of the order within seven days from the date of receipt of the order. Conditional or qualified acceptance shall be rejected. The effective date for start of provisional contract with the selected bidder shall be the date of acceptance of the order by the bidder. Bank reserves its right to consider at its sole discretion the late acceptance of the order by selected bidder.

Part IV - SCOPE OF WORK

1. Introduction

The bidder is required to supply & installation of required Hardware, Network & security equipment at DC, DR & Branches, Software, Licenses, other applications, facility management support for Hardware, Network Equipment for five years, as per the scope of services mentioned below.

2. Broad Scope

- a. Supply, installation, commissioning and maintenance of hardware, operating system, 3rd party software and Middleware software for Finacle 10 at HTTP, J2EE and C/C++ layer at Primary site (DC), Disaster Recovery site (DR).
- b. Primary Site at UCO Bank Data Centre, at Kolkata and Secondary site at UCO Bank Data Centre, Bangalore.

Existing	Proposed
PBGB Data Centre Sify technologies Ltd, 76, Cyber Park Electronics City, 3 rd Floor, Plot No. 76 & 77, 3 rd Cross Rd, Phase 1, Electronic City, Bengaluru, Karnataka 56010	UCO DR Site 3 & 4 DD Block, Sector -1, Saltlake, Kolkata 700064
PBGB DR site Sify technologies Ltd, 6 th floor, plot number K-10, Reliable Plaza, Thane Belapur Road, Airoli, Navi Mumbai, 400708	UCO DC Tata communications, No.2, KEB layout, Sanjay Nagar Main Road, Near Geddalahalli Bus Stop, Bangalore, Karnataka - 560094.

Please note that for operational convenience during Finacle 10. Migration, DC site will be UCO Dc at Bangalore, however after 1st Dr drill, the DC site will be changed to UCO DR at Kolkata.

- c. Supply, installation, commissioning and maintenance of Network Equipment & Network Link at Primary site (DC), Disaster Recovery site (DR) and Branches / Offices.
- d. Facility Management services Including L1 & L2 Support for Hardware, software, Database, operating system, Network Equipment & Network Links for five years.
- e. Backup and Restoration solution implementation & Management.

- f. Supply, Implementation & management of Enterprise management Solution (EMS) mainly covering Monitoring & Reporting of system & Network, Server & Database monitoring & reporting, SLA management, Service desk manager, Call Management, Change Management and Patch Management system for servers.
- g. Performance testing, load testing of proposed hardware infrastructure, UAT/ functional testing, security testing & Pre and post data migration checking & testing using reliable testing tools through external testing agency.
- h. Integration of all proposed hardware & software for Finacle 10.x implementation.
- i. Integration of Finacle 10.x database with its application server & web server.
- j. Work closely with vendor(s) and Bank for smooth migration of the database from Finacle 7.x database to Finacle 10.x database.
- k. Bidder needs to factor Enterprise premium Support (24X7) for RHEL, JBOSS EAP and standard support other 3rd party for DC and standard support for DR location respectively.
- l. After Go live of Finacle 10.x application, selected bidder needs to maintain environment (Production, Report, UAT, Training, development) of Core banking System for five years.
- m. Bank has taken SMS alert services through M/s. Netcore. An

3. Hardware Capacity Sizing

- a) Supply, installation, commissioning and maintenance of following hardware, software and operating system (as per technical specification in Annexure D and below mentioned table A) at Primary site (DC), Disaster Recovery site (DR).

Table A: Summary Sheet for minimum Hardware/Software/Solution requirement for Finacle 10.x					
Sl. No.	Used for	Processor Type and Platform/Type of Hardware / Type of solution	Hardware/Software/Solution	Quantity	
				DC	DR
1	Servers for Finacle 10.x Production, CSIS, UAT, Training &	Processor for DB layer X86 platform Intel Xeon Gold 63xx @ 2.8 GHz or above with	Production Database for Finacle 10.x Enterprise Class Rack Servers to host Core Banking Database in 2 node Active Passive Cluster	2	2

Migration system	HT, Turbo Boosting OS Platform Red Hat Enterprise Linux (RHEL) Server 8.6 (64 bit on Intel) or above	CSIS database for Finacle 10.x Enterprise Class Rack Servers to host CSIS DB in 2 node Active Passive node	2	2
	Processor for App and Web layers including C24, CSIS & Uniser Intel Xeon Gold 63xx @ 2.8 GHz or above with HT, Turbo Boosting OS Platform Red Hat Enterprise Linux (RHEL) Server 8.6 (64 bit on Intel) or above	Production Application & Web layers for Finacle 10.x Virtual platform based on Enterprise Class Rack Servers to host production C/C++ & J2EE Application layers, Web layer HTTPS, Web layer, C24 App, CSIS (App)	3 Nos. Physical server shall contains 3 (C/C++) virtual node 3(J2EE) virtual node 3(HTTP) virtual node Each physical server should host 1 no. C/C++, 1 no. J2EE and 1 no. HTTP virtual node	3 Nos. Physical server shall contains 3(C/C++) virtual node 3(J2EE) virtual node 3(HTTP) virtual node Each physical server should host 1 no. C/C++, 1 no. J2EE and 1 no. HTTP virtual node
			2 Nos. Physical server shall contains 2 (Uniser) virtual Node 2(C24) virtual Node 2(CSIS APP) virtual Node	2 Nos. Physical server shall contains 2 (Uniser) virtual Node 2(C24) virtual Node 2(CSIS APP) virtual Node

				Each physical server should host 1 no. C24, 1 no. CSIS APP and 1 no. Uniser APP virtual node	Each physical server should host 1 no. C24, 1 no. CSIS APP and 1 no. Uniser APP virtual node
		<p>Processor for UAT/Training/Migration etc. Application and Web for Finacle 10.x</p> <p>Intel Xeon Gold 63xx @ 2.8 GHz or above with HT, Turbo Boosting OS Platform</p> <p>Red Hat Enterprise Linux (RHEL) Server 8.5 (64 bit on Intel) or above</p>	<p>UAT/Training/Migration etc. Application and Web for Finacle 10.x</p> <p>Mid-range servers Servers to host Non-production UAT, Training, Migration, SIT etc.</p>		<p>UAT 1 DB (Physical)</p> <p>UAT 1 CSIS DB (Physical)</p> <p>Migration 1 DB & APP (Physical)</p> <p>UAT 2 Physical server contains 2(C/C++) 2(J2EE) 2(HTTP)</p> <p>Training 1 Physical server contains 1DB 1(C/C++) 1(J2EE) 1(HTTP)</p> <p>UAT 1 Physical server contains 1 C24, 1 CSIS App, 1</p>

				UNISER
			<p>3rd Party Software & Middleware license and its support service for Finacle 10.x</p> <p>For Finacle 10.x application server J2EE JBOSS EAP 7.4 (64 bit) with java-1.8.0-openjdk-1.8.0.191.b12-o.el6_10.x86_64 rpm with developer package</p> <p>For Finacle 10.x Web Server JBCS or Apache HTTP server version 2.4.52 with mod cluster 1.3.5 Final & Software load balancer between web and J2EE layer from JBCS or Apache HTTP</p> <p>Other subscription: Premium Enterprise support for RHEL, subscription with RED Hat to gain access of respective tar/zip download and Premium Enterprise support for above mentioned 3rd party software.</p>	Bidder need to quote as per requirement
2	Servers and required hardware for Active Directory		Servers are to be factored in High availability mode in each DC & DR sites.	Bidder need to quote Hardware to comply with all requirement and as per scope as specified for respective applications.

	system, Centralised Anti Virus System, Biometric System and Enterprise Management System			The hardware sizing should be done in such a way, the peak utilization should not go beyond 70% at any time.	
3	Storage for Finacle 10.x, etc.	All Flash type Storage	Enterprise Class Storage with RAID 6 support 50000 IOPS or above from day 1 for DC & DR Storage Usable Storage Space: DC:50 TB DR:60 TB In all sites mentioned above, effective usable capacity should NOT include effect of compression, de-duplication or thin provisioning for storage capacity and its scalability. The usable capacity should be clearly available.	1	1
4	NAS for Finacle App layer	Enterprise Network Attached Storage (NAS) having all flash drives	All flash drives to support 50000 NFS IOPS/concurrent connection or above with response time of < 2 milliseconds having usable 2 TB (RAID 6) and minimum 65534 subdirectories for a given directory from day 1	1	1
5	Backup software for	Online backup of	Online Backup Software for the	1	1

	taking backup	databases namely Oracle, SQL, and OS and namely Windows, Linux, etc	proposed web, application and database server for CBS system and other applications.		
6	Backup Server	Online backup of databases	Bidder need to quote to comply with all requirement	1	1
6	Tape Library for taking backup	Tape Library built with custom rack hosting accessory, tape drives and cartridge slots	Enterprise Tape Library with 50 LTO 9 Tape and Minimum No. of tape drives: 2 X LTO 9 FC drives	1	1
7	SAN Switch/Director for servers and Storage connectivity	Latest generation 32/16 Gbps SAN switch/Director or FC Switches with, enterprise-class, high availability features	SAN Switches for DC and DR Site	2	2
8	Web and APP layer Application Delivery Controller (ADC) and Load Balancer Devices	Appliance base Citrix/RADWARE/F5 Application Delivery Controller (ADC) and Load Balancer appliance	High End Application Delivery Controller (ADC) and Load Balancer appliance for Finacle 10 (Web & App) in Active-Active mode.	1 pair (HA) for production Web & C++ app layer.	1 pair (HA) for production Web & C++ app layer 1 for UAT
9	EMS tool	EMS tool solution			
10	Active Directory	Active Directory	Windows Active Directory	As per requirement at DC-DR	

	solution	solution		
11	Anti-Virus Solution	Anti-Virus Solution for windows & RHEL	Anti-Virus for Windows & REHL for all nodes as per requirement in this RFP	As per requirement at DC-DR
12	Biometric Solution	Fingerprint Based Biometric solution	Fingerprint based Biometric solution compatible with Morpho 1300 devices	As per requirement at DC-DR

- 3.1 System Integrator will be required to supply, install and maintain hardware as per minimum sizing, configuration and business data-point with recommended application response time mentioned in Annexure D. If required, System Integrator can propose hardware sizing over and above minimum sizing mentioned in Annexure D as stated above. System Integrator should achieve successful benchmarking based on 5th year data points (Table Q, Annexure D) with Recommended Application Response Time (Table P) and during the benchmarking exercise for the all proposed hardware components the resource utilization should be less than 60%.
- 3.2 The performance testing, load testing of proposed hardware infrastructure, UAT/functional testing security testing & data migration testing will be conducted.
- 3.3 For any performance issue, any requirement of Hardware up-gradation, change / updation/ up-gradation of software, etc. should be done by the System Integrator without any additional commercial implication to the Bank.
- 3.4 All the servers as specified above must be physically separate servers, unless otherwise specified. Partitioning of any sort in the same machine will not be treated as separate server for this purpose.
- 3.5 Proposed DB, application and web service should be x86 architecture-based servers and should also support multiple logical/virtual partitioning of servers, based on Bank's requirement from time to time.
- 3.6 System Integrator needs to provide, install and integrate all hardware (Server, Storage, SAN, NAS, Load balancer, backup solution, necessary cable), related OS , database and third-party software , SSL certificate (WEB layer) for app & web (as per Application vendor recommended) for deployment of above-mentioned database, application and web servers, UAT, Training, Development and migration purpose. System Integrator needs to provide SSL certificate for Finacle 10.x Web(HTTP) service.

- 3.7 System Integrator should supply, install, integrate, maintain, support and upgrade/update of hardware, related OS, database and application, 3rd party software use for deployment of production, UAT, Training, Development and migration as mentioned tables in SOW and Annexure D.
- 3.8 System Integrator should take premium support care service for DC and standard support for DR & UAT form respective hardware and software OEM during Warranty and AMC/ATS period.
- 3.9 System Integrator should supply, install new setup & integrate with old setup for migration of data.
- 3.10 System Integrator has to install and configure NAS box in consultation with application OEM. System Integrator has to make sure seamless integration of proposed NAS solution with the newly proposed servers and storage, to support Finacle 10.x requirements, at Primary (DC) and Disaster Recovery (DR) sites. System Integrator to extend necessary support to application vendor for the same.
- 3.11 System Integrator has to install oracle database 19c or higher version of Oracle database in all proposed databases used for Finacle 10.x at all the locations as per recommendation by Application vendor during contract period. The required License for Oracle database as per the hardware sizing of will be provided by Bank. System Integrator needs to upgraded Oracle database to higher version as and when required by Bank during the contract period without any additional cost to bank. System Integrator needs to coordinate and migrate from Oracle 11g (Active - Passive DB) in existing Finacle 7.x environment (Solaris 11.4) to Oracle 19C (Active -Passive DB) for Finacle 10.x environment (RHEL 8.5 or above). All required Oracle database licenses will be provided by Bank.
- 3.12 System Integrator need to setup proposed hardware for Finacle 10.x production DB database along with DBA activity and maintain same during contract period. The broad scope is mentioned below:
- a. Setting up a UAT environment using 19c or higher Grid Infrastructure
 - b. Database Migration testing in UAT environment.
 - c. Support for Application team to carry out UAT testing.
 - d. Setting the production DB setup and work closely with application vendor for Finacle 10.x for smooth migration of the database from Finacle 7 database to Finacle 10.x database
 - e. Work with application vendor for Finacle 10.x in optimizing and tuning the environment.
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- f. DBA activity and Facility Management services for all the Databases as mentioned in the RFP.
- 3.13 System Integrator should supply, install, configure, fine-tune all the software & hardware at DC and DR sites that include instances of Production, Development, UAT, Report & Training environments as mentioned below:
- 3.14 Third-party/middleware services/software required for Finacle 10 Application layers approved by Application vendor on x86 platform.
- 3.15 Third-party Web services/software required for Finacle 10 Web layer approved by Application vendor on x86 platform
- 3.16 Hardware Load Balancer for HTTP web server layer and Finacle core application server (C/C++) layer. Same Load balancer can be used with different zoning configuration.
- 3.17 Software Load Balancer for application server (J2EE).
- 3.18 System Integrator should supply Backup Software Solution for web servers, application servers, database servers for Core Banking system and other applications as proposed. Backup of database servers should be taken on daily basis while Web, application and other servers weekly basis. Further milestone backup on monthly, quarterly, half-yearly and yearly should be taken. Full and Incremental, online & offline backup having capability of taking backups on LTO 9 Tape Drives at DC & DR location. Backup Software solution should have Industry standards encryption (256 bit or higher). System Integrator has to install Backup software solution on all Production Database servers (DC & DR)
- 3.19 System Integrator should supply, install & maintain Enterprise class tape libraries at Primary site (DC) and Disaster Recovery site (DR) as per Annexure D.
- 3.20 System Integrator has to migrate existing 200 nos. of LTO 4/ LTO 6 tapes to LTO 9 tapes to preserve all data files.
- 3.21 System Integrator needs to deploy backup solution such a way that Core Banking database & other database should be always up during daily, weekly, monthly & quarterly backup process. To achieve this if any additional hardware and software required, then System Integrator need to factor as part of this RFP.

- 3.22 System Integrator/ OEM should study existing environment and prepare detailed design documents for the deployment/installation of the proposed hardware & software. System Integrator has to submit following documents:
- 3.23 Installation / standard configuration documents of the proposed hardware and software.
- 3.24 Architecture diagram of proposed deployment with rack layout.
- 3.25 Installation document of the monitoring software & patch management software.
- 3.26 Application flow diagram.
- 3.27 Standard Operating Procedure documents for performing regular activities.
- 3.28 System Integrator should deploy skilled engineers for the installation and maintenance of the proposed hardware and software at DC and DR. The System Integrator has to ensure the availability of implementation team till the installation and commissioning of the equipment/software has been completed and sign off is given by the Bank.
- 3.29 Post installation and commissioning activity at primary (DC), Disaster (DR) and Near sites, all respective validations should be checked, and reports need to be submitted to Bank for sign off successful installation.
- 3.30 All passive cablings between server-to-server, server-to-tape, storage-to-tape, server -to -SAN, Storage-to SAN (including and all other combinations connected) (for connecting between new-to-new or new-to-existing setup) will be provided and installed/ configured by the System Integrator. The management of these cabling (including replacement whenever required) to be provided by the System Integrator during the tenure of the contract without any additional cost to the Bank.
- 3.31 Post implementation, scope includes support and implementing of the following activities from time to time: (a) Firmware Upgrades, (b) Faulty Parts replacement, (c) Hardware System monitoring, (d) Troubleshooting & Performance Tuning, (e) Operating System patches & Upgrades, (f) patches & Upgrades of supplied software, (g) Advisories on software upgrades & vulnerabilities, (h) Support during DR Drills, (i) Any support required to make systems & software up and running.

- 3.32 Scope includes resolving supplied hardware and software related issues during warranty and AMC/ATS period, including installation/reinstallation of OS and any other software supplied by the System Integrator, due to any reason what-so-ever for the above-mentioned hardware and software. It also includes installation / reinstallation of NAS during contract period without extra cost to Bank.
- 3.33 The support during warranty and post warranty period should be provided directly by respective OEM for server, storage and software. System Integrator needs to provide MAF to the Bank for having back-to-back support arrangement with OEM, on OEM's letterhead for providing hardware and software support directly by OEM under both warranty and AMC/ATS period.
- 3.34 System Integrator's installation team has to ensure all the necessary connectivity (networking/cabling/zoning etc) for installation of new setup & integration of proposed servers and enterprise storage for migration from Finacle 7 to 10.X.
- 3.35 All hardware and software provided under this tender should support IPv4 and IPv6 addressing from day one.
- 3.36 Bank has implemented two site Core Banking data replication using Oracle data guard between DC & DR. The same data replication has to be achieved by the System Integrator in all the two sites by implementing through ODG (Oracle Data Guard) between DC & DR. Regarding this any additional license & hardware if required will be borne by System Integrator.
- 3.37 Multiple instances of data e.g. Business copy in DC & DR sites, separate Report copy and separate MIS copy in DR site at database & storage level should be implemented by the System Integrator in the proposed enterprise storage solution both at Primary (DC) and Disaster Recovery (DR) sites to create multiple business/point-in-time copies.
- 3.38 The System Integrator should deliver the proposed hardware and software at respective delivery locations at Kolkata & Bangalore. Delivery, installation, commissioning of the hardware / software at all the two sites should be completed within 8 weeks from the date of purchase order.
- 3.39 System Integrator has to make skilled resources available for installation, configuration and deployment of certified patches on proposed servers as and when they are released by OEM after taking proper precaution/approvals, as per Bank's requirement during the contract period without any additional cost to Bank.

- 3.40 System Integrator has to provide certificate of assurance to Bank, on OEM's letter head for supply and upgrade of proposed hardware and software over a period of five (5) years and support for period of minimum seven (7) years.
- 3.41 All the parts of hardware items and software (OS and any other software provided under this contract) would be covered under comprehensive warranty/AMC/ATS except consumables. If there is any gap between Bank's requirement and OEM warranty/AMC/ATS, then it will be the responsibility of OEM to fill up the gap without any extra cost to the Bank.
- 3.42 Facility Management Service is to be provided at Bank's premises on 24x7x365 basis deployed for this purpose shall act as single point of contact with the bank for any matter pertaining to scope of work specified in the RFP.

4. Testing

- 4.1 Performance testing, load testing, of proposed hardware infrastructure, UAT/functional testing security testing & data migration testing using reliable testing tools through external testing agencies (maximum 2 agencies).

The following points to be considered by the System Integrator (through external testing agency) for testing:

- A. Up-gradation & Migration testing of the DB should be carried out from the existing server to the proposed new setup.
- B. Load testing of Finacle 10.X CBS application would be performed with migrated Database on the new proposed hardware to ensure no deterioration happened in the performance due to the server/platform change.
- I. The System Integrator will be responsible for providing all tools required to perform testing with appropriate licenses.
 - II. The analysis must be carried out on all servers indicating
 - ✓ Resource utilizations like CPU/memory/swapping
 - ✓ Load testing application & hardware
 - ✓ Transaction loads
 - ✓ Success/Failure analysis
 - ✓ Response time measurements
 - ✓ Network throughput

- C. Get the application thoroughly tested on performance parameters of load through concurrency etc. using reliable testing tools. The said test results shall be submitted to the Bank indicating the outer boundary of load and performance.
- D. To ensure that the application sustains a load of 1200 concurrent users
- E. Simulate the targeted load with the agreed load profile for the shortlisted scenarios on the applications from the front end through performance testing tool and measure performance of the application and its systems under test.
- F. To validate the application system stability and ensure there is no memory leaks and degradation over time when exposed to prolonged peak user/targeted transaction load.
- G. To validate the server hardware capacity to handle current and future workload (peak hourly and daily user/transaction load).
- H. Independent Testing Services Vendor will put Load on Front End branch module with help of Load simulator tool.
- I. All other channel transaction will be tested by hitting ISO Packets & other message format.
- J. Bank & vendor will initiate EOD & BOD and System Integrator will be monitoring hardware utilization in backend.
- K. Functional testing Finacle Migration testing for 10.x version.
- L. Functional testing Number of interfaces (25 interfaces during the engagement)
- M. Functional testing approx. 1500+ customization scripts and finacle menus approx. 200 numbers.
- N. Interfaces (Internal+ External) testing. Maximum 25 interfaces during the engagement.
- O. Independent Testing Services Vendor will share the already prepared test cases to Bank, which can be used to initiate execution. Main Activities during testing should be
- Test Strategy Document
 - Test Case Development in UAT Environment
 - Test Calendar and timeline development
 - Deciding entry and exit criteria for each stage
 - Training and testing Bank team for Test Case Development and automation adoption
 - Execution of all test cases
 - Test Case result output with screenshot
 - Result vs. Test Case mapping
 - Bug tracking and documentation
 - Co-ordinating with application vendors to fix bugs
 - Re-test the gaps, errors and bugs after rectification.
 - Assist in Sign – off on the customization
 - Assist in Sign – off on user acceptance test.

- Maintain a track of errors, bugs and customization requests and their resolutions.
- Explain bugs, errors and gaps to the Bank and application vendors.
- Re-test the gaps, errors and bugs after rectification
- Submit all documents on methodology, strategy, test cases, test documentation etc. to the Bank.
- Conduct unit testing, integration testing of the entire functionality of the solution.
- External testing agency and the System Integrator together will be responsible for end-to-end testing and UAT activities within scheduled timelines.
- All testing will be carried out with resources provided by the External agency in coordination with the bank.
- Acceptance testing shall broadly cover the testing of functionalities, migrated data (pre and post migration), and all interfaces to verify that the proposed solution conforms to the business & technical requirements and Gap analysis Report, Bandwidth and response time.
- System Integrator must fix the bugs, carry out necessary rectifications and deliver patches/version towards changes which would be reported by external agency and the bank.
- Bank shall accept the application software (provided by the System Integrator) only after critical or major Bugs are fixed and are ready for production Implementation. However System Integrator needs to fix bugs and problem with consultation of application OEM/OSD of Finacle 10.x after GO live of Finacle 10.x during application L2 support period.

4.2 The Bank proposes to conduct “User Acceptance Testing” (“UAT”) for the Solution for the purpose of ensuring that all the functionalities requested for by the Bank are available and are functioning accurately. The UAT would be carried out for the Core Banking Solution and all the allied applications Upgraded by the System Integrator.

4.3 Any deviations/discrepancies/errors observed during the testing phase will be formally reported to the bank and the System Integrator will have to resolve them in co-ordination with Bank / Vendor team immediately or within the UAT approach and guidelines formulated between the System Integrator and the Bank. The resolution timelines will be completely aligned to the project timeline of this RFP.

- 4.4 The System Integrator will be responsible for maintaining appropriate program change control and version control for all the modifications/enhancements carried out during the implementation/testing phase.
- 4.5 The System Integrator will be responsible for providing and updating system & user documentation as per the modifications.
- 4.6 The System Integrator should integrate the software with the existing systems as per requirement of the Bank and carry out thorough system integration testing.
- 4.7 The System Integrator should also conduct the functional testing to verify that each function of the software application operates in conformance with the requirement specification.
- 4.8 System integration testing will be followed by user acceptance testing for all applications.
- 4.9 Data testing with the help of automation tool on pre & post migration state of data is part of the scope of the testing agency. Testing agency will have to report on field level variances, if any.
- 4.10 Based on the contents of the RFP, the testing agency will be required to arrive at Test Methodology in consultation with the bank, based on a standard which is suitable for the Bank and perform UAT on behalf of the Bank.
- 4.11 The external testing agency will completely be responsible for end-to-end UAT.
- 4.12 System Integrator has to study the load compute wise and during the load testing and generate the same load according to the projections provided by the bank to benchmark the hardware.
- 4.13 During load testing, the load generated by the System Integrator has to be in accordance with the transaction mix and the current setup of the bank. The sign off should be taken from the bank.
- 4.14 System Integrator needs to conduct load on proposed hardware as per data input given in Annexure D Table Q.

5. Security

- 5.1 Any suspicious activities related to application & database should be immediately informed to the Bank and corrective actions have to be taken by the System Integrator in concurrence with the security team to resolve the issue.
- 5.2 System Integrator is required to perform security baselining, hardening, implementation of security related patches in OS or firmware before putting the application into production.
- 5.3 Bank will conduct VA & PT (Vulnerability Assessment & Penetration Testing) and Information Security audit on quarterly basis. The System Integrator/OEM needs to comply with the findings of the VA & PT. Accordingly, hardening activity or any other activity required for compliance of security audit should be carried out by the System Integrator/OEM as per the requirement of the Bank without any additional cost to the Bank.
- 5.4 VA-PT and Application Security Testing would be done post implementation. In case of there is an observation by testing agency, System Integrator is required to perform the necessary changes to comply to the security parameters and Requirement as identified by testing agency within stipulated timelines.
- 5.5 The System Integrator is required to bridge the security gaps after taking appropriate approvals and concurrence from the Bank.
- 5.6 System Integrator along with the OEM needs to implement the recommendations provided by application Vendor after discussion with the bank.
- 5.7 The System Integrator will deploy engineers of the hardware and software for the installation. The System Integrator to ensure the availability of implementation team till the installation and commissioning of the equipment's/software has been completed.
- 5.8 Supply and integrate other applications/tools/solutions for configuration management, change management, release and deployment management, application performance monitoring, service level monitoring etc.

- 5.9 The warranty of hardware will start after completion of successful installation of operating system and middleware and after obtaining sign off from Bank. AMC/ATS will start post completion of warranty period of three/one years.
- 5.10 System Integrator has to guarantee minimum uptime as per SLA for all systems supplied under this tender and should be ready to execute service level agreement for the same.
- 5.11 The Bank reserves the right to shift the equipment to a suitable location during the contract period within Data Centre depending upon the need. The System Integrator will arrange to shift the equipment and install and commission the same without any additional cost to the Bank. However shifting the equipment to a suitable location outside datacenter during the contract period will be decided with mutually agreed terms and condition at that point of time. The de-commissioning and commissioning activity is required to be carried out by System Integrator Engineers only.
- 5.12 System Integrator has to provide soft copies of User & Technical Manuals, Configuration Documents, Standard Operating Procedure, Deployment architecture for all the supplied hardware and software for this RFP.
- 5.13 System Integrator has to follow worldwide practice and international standard for documentation for the entire system development life cycle. The documents and manuals should be kept up to date with proper version control during the entire contract period. Bank may require the System Integrator to deliver the following documents in hard and soft copy to Bank during development and implementation of the solution.
- Detailed System Requirements Specification Document
 - High Level architecture document
 - High Level Design document
 - Low Level Design document
 - Test cases with results during UAT, SIT and any other test cases
 - Deployment plan document
 - Change management methodology document
 - Security guide
 - User management guide
 - Release notes
 - Impact matrix

- Standard Operating Procedure document for all processes mentioned in this RFP.

5.14 The System Integrator shall ensure seamless integration of the upgraded Core Banking Solution with other existing applications/utilities, network, security, platform and storage infrastructure in the Bank's Data Center, Near Site and Disaster Recovery Site.

5.15 System Integrator will do the partitioning of the production Finacle core banking application database with help/recommendation of Application vendor as and when required, however System Integrator needs to relook the same and need to maintain and perform activities to increase the performance of the database and application.

5.16 System Integrator has to provision adequate number of technically qualified and experience resources for this project and the same needs to be provided in the Bill of material.

5.17 System Integrator has to ensure that these resources are well versed with the Bank's specific functionality / Interface and customizations for the smooth rollout Support.

5.18 As per the new architecture of the Finacle 10x bank intend to put Application Delivery controller (ADC) & load balancer at web and app layer of Finacle 10x . Proposed load balancer configures such a way that its will be used for load balance of traffic of web and application layer both in same appliance in HA mode.

- System Integrator should supply, install and maintain 1 pair of hardware load balancer with Application Delivery controller (ADC) at DC & DR each site, used for HTTP & C/C++ Application layer for Finacle 10.x.
- Load balancer should be a physical box and not any kind of rapper of software installed on any web or application server.
- Load Balancer should support all the algorithms like Round Robin, Weighted Round Robin, Least Requests, Session Persistence, server load, all other algorithms, if any.
- Load balancer propose by the System Integrator must compliance with the technical specification mentioned in the Annexure D

- Load balancer should be capable of handling concurrent traffic request as mentioned in Annexure D.
- System Integrator has to supply, install, commission, implement and maintain the devices and the license procure till the end of the contract period.
- It should not be a single point of failure at any point of time and System Integrator need to factor load balancers in HA mode.

5.19 System Integrator should make do necessary server setup to enable Monthly MIS/Report and daily MIS/Report for data extraction for various peripheral systems like Audit MIS, AML etc.

5.20 All the hardware provided by the System Integrator for Finacle 10 to be fully redundant & scalable. All the components within the server should be hot swappable or pluggable and should incur no downtime due to component failure.

5.21 All the hardware should have dual power supplies, redundant NIC, IPv6 Compliant, and redundant HBA card, as applicable. The power input to the power supplies will be from separate UPS. In case of failure of one power supply, the second power supply should be able to take the full load without causing any interruption in services.

5.22 System Integrator should provide Knowledge transfer (KT) to Bank's team quarterly basis. Bank will review same as and when required.

5.23 According to the new enhance functionality of the Finacle 10x a Network Attached Storage is required to leverage the continuous session functionality even if any of the app or web server goes down. System Integrator needs to provide NAS considering following factor:

- NAS has to be sized according to the number of concurrent user of 1200.
- NAS will be used for locating all the user level file (download / upload, trace files, reports etc) in worst condition no file should take more than 2 ms time.
- NAS has to connect with app server through 10 Gbps card
- NAS has to be factor for both DC and DR location.
- The max retention period for the user level files will be 180 days so System Integrator need to size the NAS accordingly.

- Meta Data of NAS has to be store on SSD for better throughput.

6. FM Services for Core Banking Services

6.1 After Finacle 10.x GO LIVE System Integrator need to perform the DC DR Drill in totality in coordination with all other application vendor of the bank. Following points should be cover:

- System Integrator need to perform minimum of 4 DC-DR drill in each year (at least once in a quarter) during the contract period and as per the discretion of the bank as and when required.
- System Integrator needs to allocate adequate resources, do project management and work closely with the Bank's team for performing the DR Drills whenever planned by the Bank.
- Any configuration level changes which can impact the DC-DR drill needs to be informed to Bank team before hand to avoid issues during the Drill.
- During DC-DR drill, System Integrator need to allocate appropriate resources onsite to avoid any failure and delays which will be penalized appropriately as mentioned in the Service Level of RFP.
- System Integrator need to perform project management and all reporting and pre and post environment preparation to avoid any failure in the drill.
- Maintain and update Business Continuity plan Maintaining updated disaster recovery plan.
- Maintain and update disaster recovery plan.
- Notifying Bank promptly if a Disaster recovery scenario/condition arises
- Assisting Bank in execution of DR plan in such scenario
- Perform periodic recovery testing
- Developing and executing test plans as per defined periodicity or as and when required
- Documentation for Business continuity plan, Business continuity strategy plan & Roles and responsibility matrix for System Integrator's DC and DR team
- Coordinate with all the users involved in DR testing
- Track and report DR test results.
- Develop an action plan and timeline to address DR testing results.
- Implement DR action plans and provide ongoing status reporting until completion of all action items.
- Initiate the DR plan for Bank in the event of Bank declared DR situation as per Bank Disaster Recovery policies and procedures.
- Coordinate with Bank and third parties during a DR situation as per Bank Disaster Recovery policies and procedures.
- Bank can also do an unplanned DR Drill which System Integrator needs to support and design the system accordingly.

6.2 DC DR Locations

- Bank's existing data centre is at Sify data centre Bangalore and DR site is at Sify data centre, Mumbai.
- It is proposed to have rack space for Finacle 10.x implementation in UCO Bank's data centre at Bangalore & DR site at Kolkata.
- The implementation of Hardware, Network infrastructure and Network connection to branches from proposed DC & DR site is the responsibility of System Integrator.
- Data transfer from existing data centre to proposed data centre for Finacle 10.x migration shall be done by SI.

6.3 Facilities Management (including L1, L2 support and other support services)

- The System Integrator will be the Single Point of Contact and responsible for Facilities Management Services, supplied in this RFP. Facilities Management Services should cover
 - System & Database Administration and maintenance.
 - Database performance tuning every 6 months during the contract period.
 - FM support for Core Banking DB, CSIS DB, MIS/Report DB, Tools DB and all UAT & training DBs for Finacle 10.x from day one.
 - FM support Mobile Banking DB.
 - Backup and Restoration Management and FM support
 - Hardware, Servers & Storage, SAN, NAS, Load balancer, Finacle 10 Middleware and OS Management, and FM support
 - EMS tool software management and FM support
 - Management and FM support of all other hardware and software supplied under this project.
 - The personnel being deployed by the System Integrator for critical, key activities of Facilities Management Services at the Bank should be employees of the System Integrator's firm. In any case, the System Integrator is completely responsible and should duly meet the SLA requirements of the Bank as stated in the RFP.
 - The support coverage would be for all the application / Solution / Hardware, Network & security items supplied by the System Integrator through this RFP.
 - The System Integrator should act as a Single Point of Contact for all internal users whether for service requests, incidents or problems for all the applications / solutions / hardware provided / taken over / supported by the System Integrator by way of this RFP.
 - System Integrator should deploy competent resources for the team to provide necessary maintenance and support as per the requirement of the Bank. System Integrator has to deploy adequate resources to ensure that the systems are up and customer service is not impacted. To ensure that the SLAs are met, the System Integrator if required will need to deploy
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additional resources during the contract period including implementation schedule without any additional cost to the Bank. The Bank has a right to interview and reject resources deployed by the System Integrator.

- Facility Management team should be available on-site and would resolve day-to-day production issues reported in all in applications / hardware by debugging and analyzing the same.
- Upon intimation of the issue from the Banks' Team, the Facility Management team would analyze the issue and provide the necessary solution /Patch as per the SLA.
- System Integrator's support team would liaison with OEM System Integrator to report product related bugs, parameters and obtain & apply the fixes (if applicable) for the same in consultation with Bank.
- System Integrator needs to note that the products and solutions proposed by the System Integrator by way of this RFP should come with warranty of 3 Years for Hardware and 1 Year for Software. Thereafter, the System Integrator should provide AMC/ATS for these products and solutions during contract period.
- In case, the resource deployed by the System Integrator is unable to continue during contract period, it will be the responsibility of System Integrator to provide similar resource within 7 days.
- All engineers must be in the payroll of awarded System Integrator.
- Third-party background verification must be done before engagement to this project and the report should be submitted to Bank before engagement.
- On-Demand engineers must visit the respective sites as per requirement of Bank on need basis. The engineers can be shared resources and should be in payroll of System Integrator. The engineer engaged should not be changed without prior approval of Bank and should be engaged for a minimum period of 1 year.
- Dedicated engineers must be engaged for the minimum numbers of hours specified.
- Application maintenance would include installation, re-installation, troubleshooting, performance tuning, performance monitoring, applications of patches, bug fixing, improvements in presentation and / or functionality and others within a duration mentioned in Service Level Agreement for the extended period.
- All the maintenance and support during this extended support period would be on-site only.
- System Integrator should deploy competent resources for the AMS team to provide necessary maintenance and support as per the requirement of the Bank. Vendor has to deploy adequate resources to ensure that the systems are up and customer service is not impacted.
- To ensure that the timeline defined in SLA are met, the vendor shall deploy additional resources during the migration period without any additional

cost to the Bank. The Bank has a right to interview and reject resources deployed by the System Integrator

- The System Integrator shall consider and envisage all services that will be required in the maintenance of the system.
- All the maintenance and support during this extended support period would be on-site only.
- System Integrator should deploy competent resources for the AMS team to provide necessary maintenance and support as per the requirement of the Bank. Vendor has to deploy adequate resources to ensure that the systems are up and customer service is not impacted.
- To ensure that the timeline defined in SLA are met, the vendor shall deploy additional resources during the migration period without any additional cost to the Bank. The Bank has a right to interview and reject resources deployed by the System Integrator
- The System Integrator shall consider and envisage all services that will be required in the maintenance of the system.
- The issue would be categorized as a bug, enhancement, understanding issue, setup related or data related issues.
- System Integrator's support team and the Bank's team would liaise with the ATS team of OEM Vendor (Infosys) to report product related bugs and obtain fixes(if applicable) for the same.
- If the issue is a bug and would require a fix, restoration would be provided by the support team.
- If the issues are because of the incorrect understanding, the issue would be closed with appropriate explanation.
- If the issues require changes in the product setup or data, the System Integrator's team would suggest the required changes to the parameters / data to be made. The changes will have to be carried out in concurrence with the Bank's team.
- Upon receipt of a patch for a bug, the same would be intimated to the PBGB team & System Integrator would be required to download the patch, deploy and PBGB Bank's UAT team would certify the same before deploying it in the production.
- Once the issue is resolved or a restoration is provided to the issue, the PBGB team would intimate the same to the Bank's end users

6.4 Hardware Management (Servers, Middleware, storage etc.)

- As a part of FM, the System Integrator shall provide services relating to maintenance and support to server hardware and other infrastructure supplied for the entire contract period.
- The System Integrator shall provide for maintenance of Hardware, including preventive Hardware support, as well as repair and / or replacement activity after a problem has occurred, Firmware upgrade, patch update, OS version upgrade, Warranty/AMC service management, including coordination and vendor management.

- The System Integrator shall provide a single-point-of-contact to Bank for the resolution of Hardware related problems or to request an equipment upgrade or consultation.
- If the Hardware supplied by the System Integrator is to be replaced permanently, the System Integrator shall replace the equipment of same Make/ Model/configuration or of higher configuration. However, the Bank may accept different make/model/ configuration at its discretion if the original make/model/ configurations are not available in the market due to obsolescence or technological up gradation, stoppage of the production of the same make/model/ configuration by the MANUFACTURER or cessation / winding up of the Company. The price benefit if any gained in the process by the System Integrator, is agreed by the System Integrator to be passed on to the Bank.
- System Integrator shall provide Hardware maintenance services including preventive maintenance (e.g., running standard diagnostics, machine cleaning, checking cables and ports), corrective maintenance to remedy a problem, and scheduled maintenance required to maintain the Hardware in accordance with manufacturers' specifications and warranties.
- System Integrator shall co-ordinate warranty repair or replacement service for the Hardware and process warranty claims, as applicable.
- The System Integrator agrees that if the faulty equipment are required to be taken outside the Bank premises, the cost of transportation and other related costs will be borne by the System Integrator.
- System Integrator shall maintain accurate documentation on the current location and status of Hardware in the process of being repaired.
- System Integrator shall provide maintenance data, as reasonably requested by the Bank, to support replacement / refresh scheduling.
- System Integrator shall provide monitoring interface to problem management process of the Bank.
- System Integrator shall provide support and assistance, as required, to isolate complex operational and software problems.
- System Integrator shall update and provide the information required for the Bank to update the proposed asset management system.
- System Integrator shall track and report Mean Time between Failures (MTBF) for Hardware.
- System Integrator shall backup, remove, protect, and to restore programs, data and removable storage media in a machine prior to presenting the machine for service.
- The System Integrator shall provide all maintenance services in accordance Service Level agreement mentioned in RFP.
- The Bank will not be liable to pay any additional amounts in respect of any sort of maintenance required during the tenure of the contract.
- Server Planning:
 - Configuration Management

- Performance Management
- Capacity Management

6.5 Hardware Management

- Managing the incident through service restoration
 - Validating severity classification of the problem
 - Determining the scope of the problem
 - Facilitating the Service Recovery Team meeting
 - Escalating the issue as required
 - Conducting Root Cause Analysis
 - Preparing restoration plans
 - Proactive Monitoring of hardware and software during in-scope service hours
 - Administer and/or execute Service Management processes and procedures
 - Perform basic problem determination on systems and components managed by System Integrator which include:
 - Hardware problems
 - System software problems
 - Evaluate planned changes to the server environment and advise requirements to support such changes
 - Provide server configuration reports and configuration details to the Bank as requested
 - Implement configuration management processes and procedures
 - Maintain an audit trail of server configuration changes as resulting from release and change control processes.
 - The required software agents are to be installed, configured and monitored.
 - Provide guidance to the bank and industry best practice for the optimal configuration of the operating system environment
 - Produce and maintain installation and configuration diagrams of all installations
 - Actively manage and report on the availability of all servers.
 - Perform server periodic checks, monitoring and performance tuning.
 - Communicate any service issues or implementation concerns with the bank and appropriate support personnel and/or System Integrators.
 - Monitor hardware and system software status, process status, and take necessary action based on detected problems or issues as provided in this schedule.
 - Provide problem escalation and interact as necessary with third party suppliers.
 - Provide monitoring and troubleshooting for the server environment
 - Provide timely notification and escalation to on site personnel if any hardware and software conditions exist that must be resolved on site to meet the service levels provided in this schedule.
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- System Integrators will ensure appropriate resources are on site to ensure service levels are achieved if recovery or actions are required.
- Propose tools for operations such as monitoring, deployment and configuration etc.
- Ensure server access is secure and authorized.
- Management of logical access to the server environment in accordance with the bank's policy (including administrator \ root access)
- Assist the bank with application support requiring operating system changes or access
- Evaluate the impact of new operating system upgrades or releases on existing applications and performance.
- Install patches as and when these become available, per System Integrator instructions for security exposures and Operating System bug fixes deemed critical by the System Integrator.
- Monitor status of system processes
- Monitor and respond to system alerts and events
- Monitor and respond to hardware alerts and events
- Monitor and maintain system error logs
- Performing required batch setup activities (ad hoc requests)
- Monitoring and responding to application alerts
- Monitoring and responding to application file system space issues
- Manage non-root application file systems
- Modifying file system sizes
- Shifting of servers within the premises and reinstallation and configurations including cabling and asset labelling
- Configure the disk storage arrays
- Execute backup and recovery procedures
- Retrieve archived tapes and restore required files and data sets
- Performing mock system failure and then data restoration drills on periodic basis
- Ensure the configuration of operating systems is in line with standards and policies as defined by the bank
- Document and track all configuration management problems using the site change management process.
- Co-ordinate all changes through the site's change management process.
- Configuration management for operating system release levels, patches and status.
- Perform routine system operation functions and system console operations actions such as power on/off, system reboots, and start/stop/reset.
- Apply preventive and corrective maintenance to all system level software (operating system and other non- application software).
- Install and upgrade all system level software (the operating system and other non-application software).
- Escalate hardware related malfunctions to the hardware supplier for resolution as provided in the System Integrator maintenance contract

- Inventory information about hardware shipping and receiving, raised floor space requirements, equipment placement, cabling, fibre, connectivity details, power and earthing requirements
 - Servers/Storage hardware maintenance and support is based on various maintenance levels.
 - Alert the bank about hardware changes that may impact application execution in support of the bank's application testing.
 - Design back-out processes to return to the former hardware configuration if unforeseen problems occur during installation.
 - Co-ordinate the scheduling and installation of supplier- recommended preventative maintenance and other hardware specific changes.
 - Schedule down time as and when required to perform required hardware preventative maintenance, installation and testing.
 - Design, build, schedule, and implement a hardware refresh template.
 - Configure operating systems at the setup of each server, to establish super user privileges and access rules and establishing other standard guidelines, based on the agreed security policy of the bank
 - Establish the process and procedures for requesting logon IDs and OS system level access
 - Create, modify, and delete system logon IDs using the Change Control Procedure
 - Monitor and maintain accounts and IDs and their designated privileges or access to make certain only active, authorized IDs have access, based on the agreed security policy.
 - Remove inactive or suspended IDs after a specified amount of time, based on consultation with security administration and the bank's using the Change Control Procedure
 - Adjust and maintain operating system and security software parameters for password expiration, available in the specific operating system environment to meet the agreed security policy requirements
 - Provide processes and procedures to maintain operating system data protection options.
 - Perform bi-annual re-verification of data owners, authorized submitters and logon IDs, existing level of privileges, based on input from the bank and system security configuration.
 - Work with the bank's application support personnel as reasonably required for the monthly/Quarterly reviews and maintenance of inactive user id's
 - Compile a list of defined user id's on the Operating System, and provide list to the bank
 - Perform reviews of system, monitoring and database administration user id definitions.
 - System Integrators will apply the necessary changes as per the outcome of the review.
 - Hardening of servers as per standard guidelines.
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- Anti-virus scan and anti-virus update on the servers
- System Integrators will delete the bank's application user id definitions, once such a request has been forwarded by the bank.
- System Integrator to update virus related signature files on servers to manage the removal of malicious code.
- Support and ensure that the timely installation of updated signature files and anti-virus software patches on all servers within the managed environment occurs.
- Obtain and release signature files for testing and application into a client dedicated environment.
- Signature file and patch updates to be made available and installed utilizing the bank's change control process.
- Testing of signature files are to be performed prior to deployment.
- Perform pre-production scans to identify potential security risks on a server prior to entering the production environment.
- Review the results of vulnerability scans and determine corrective actions based on the results of the scans
- Review the results of penetration testing and determine corrective actions based on the results of the scans.
- Review government and supplier bulletins and various other sources to identify emerging threats or vulnerabilities to the bank's hosts.
- Maintain the risk evaluation process of vulnerabilities in which mitigation plans are determined, in accordance with the agreed security policy.
- Maintain a vulnerability correction process to correct vulnerabilities detected through scanning of servers.
- Maintain a vulnerability correction process as new vulnerabilities are identified.
- Correct known vulnerabilities detected within the scope of the System Integrator's responsibility, using the appropriate correction and change management processes
- The agreed security policy is to form the basis of security level.
- Maintain processes to provide consistent configuration of parameters for logging devices and ongoing maintenance of those parameters.
- Make certain of adequate retention of security event logs, based on the agreed security policy.
- Configure the parameters of the administrative tools for all system hosts, in accordance with the agreed security policy.
- Will provide event logging to the extent that tools, resources, and storage are available on client owned environments
- Ensure sufficient storage capacity available to retain logs
- Provide a listing of resource access rules for re-verification purposes
- Perform quarterly review all user ID's and forward list of ID's not used for the last 6 months to the bank for permission to delete these ID's.
- Process security data identifying logged or audited access to a resource.

- Process security data identifying attempted access to a protected resource.
- Process security data identifying password violation attempts.
- Process security data identifying usage of emergency ID's.
- Monitor and maintain ID's and their designated privileges or access to make certain that only active, authorized ID's have access.
- Adjust and maintain operating system and security software parameters, consisting of password expiration, available in the specific operating system.
- Provide performance management functions and establish performance monitoring thresholds for major processes.
- Proactively identify performance problems and improvements
- Provide capacity planning processes, for short term and long term planning, forecasting resource requirements, and analyzing and reporting resource trends.
- Monitor server utilization, CPU usage and I/O activity, produce capacity projection reports and develop plans for improvements.
- Review server capacity and advice where future additional capacity may be required or archiving policies need reviewing or implementing.
- Use standard operating system utilities and/or other third party tools where appropriate, to project the effects of new changes and workload changes or when large configuration changes are performed in the environment on request of the bank.
- Perform operating system software tuning/optimization as required to maintain day-to-day operations
- Provide, install and maintain performance monitoring software.
- Maintain system parameters to manage subsystem performance and workload throughput.
- Implement changes as necessary to optimize the effectiveness and efficiency of the server platform.
- Analyze system resource and storage utilization.
- Perform capacity trend analysis.
- Perform capacity modelling.
- Capture capacity usage for the last 12 months.
- Provide forecasting based on historic trends and planned bank's initiatives.
- Provide assistance with batch scheduling issues and problems using the problem management process.
- Process job dependency information for batch job cycles as defined by the application support staff.
- Maintain specific batch cycles utilizing the standard operating system CRON scheduler throughout the operational support coverage hours as necessary to meet defined service levels.
- Provide appropriate system resources, tools and procedures to support the processing of user-initiated batch jobs.

- Agree with the bank's prioritization for scheduled, ad hoc and system jobs.
- Provide the necessary operational resources to support bank-submitted or bank-scheduled batch processing.
- Maintain tools and facilities for bank to perform batch scheduling and batch monitoring activities.
- Log problem records if scheduled and automated batch jobs fail.
- Consult with the bank should job priorities require a change due to system constraints.
- Perform problem diagnosis and purging of jobs on Operating System as necessary.
- Monitor automation tools and functionality.
- Maintain and execute system start- up/shutdown processes.
- Monitor, identify, and implement automation techniques to remove manual interventions for ongoing monitoring and operation activities.
- Perform maintenance and support for automation tools and products
- Problem determination and isolation for automated operational processes.
- Maintain and update documented hardware, facility, operating system, database and related system software recovery plans as necessary.
- Perform quarterly tests of the recovery plans to verify the effectiveness there-off in supporting the day-to-day banks operations.
- Provide the required personnel resources to perform recovery plan drills or actual recovery plan execution at the time of disaster.
- Provide requisite mirroring and redundancy across the DC & DR facilities to ensure adequate failover for the server environments.
- Cluster configuration including the integration of startup/shutdown scripts
- Configuration of shared storage
- Provision of documentation on implemented high availability solution
- Installation, maintenance and monitoring of clustering
- Conduct Cluster tests as a part of DR drills.

6.6 System Administration

- User account maintenance - Creating users, groups, creating user accounts, deleting user accounts, modifying user accounts etc. on the system.
- File/system/application access management in approval from Bank - Maintaining file and directory permissions on OS and application access management like creating user accounts at application level, assigning application access, setting application passwords, user lockout etc.
- Security monitoring and investigation - Assess risks on a particular system [OS environment and user needs], monitor network security, monitor denial of service attacks, bad bugs programmed threats, track logins, logouts, command runs.

- Performance optimization and reporting - Process and Memory Management, monitoring CPU performance, monitoring Memory performance, monitoring Input / Output performance, monitoring Ethernet traffic etc.
- Error detection, Troubleshooting and correction
- System Integrator need to size the resources to maintain the system as per the SLA and scope of work mentioned in the RFP.

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

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

6.8 Data space management

The System Integrator shall:

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

6.9 Database Administration

The System Integrator agrees that all Finacle databases of the Bank will be administered as per applicable standards and requirements. The service covers all the databases run on Bank servers at DC, DR by the Bank including but not limited to:

6.10_Operating system, Database and system software Installation

- Installation and upgrade including patches of all OS, Databases and system software related to Finacle 10 as per the recommendation of Application vendor during the contract period within quoted cost as per Bank's requirement.
- Defining the physical database design (log files, rollback segments, tablespaces, database descriptors, partitioned objects etc)
- Database Hardening and preparation & submission of hardening document as per the security policy of the Bank.

6.11 Database Performance Management

- Track & co-ordinate database related incidents/ problems till resolution.
- Conduct first level diagnosis for reported incidents & perform resolution.
- Analysis of incident/ problem trends
- Co-ordination & escalation to Database's OEM till resolution
- Maintaining & monitoring the health & performance of databases (Primary and standby)
- Monitor & analyze alerts & logs including trace files, database changes, background job status, operating system logs, space management.
- Monitoring the table space utilization, file system usage and all other events of OS which may deter the performance of the database(primary as well as DR)
- Analyzing/Troubleshooting Database Performance
- Collection of statistics for databases
- Optimizing database performance, Performance tuning
- Monitor physical DBMS for performance & capacity requirements
- Monitoring of databases
- Monitoring of transaction logs
- Provide recommendations on DBMS design
- Monitor the backup & report on backup logs
- DDL, export & import related activities
- Preparing monthly database related reports
- Provide databases for MIS purpose on daily, monthly and on need basis
- Periodic optimization of application databases through compression facilities and database tuning.
- Provide reports on database currency and propose upgrade recommendations
- The System Integrator is required to install & implement database diagnostics & fine-tuning packs based on bank's requirements.

6.12 Database Capacity Management

- Estimate & recommend database requirements based on received data from Database Performance team and Business projections (Half-yearly/ As and when required)
- Perform Database Space analysis

- Alignment to purging policy
- Review archive logs requirements
- Customizations required at DB level

6.13 Database Monitoring and Administration

- Setting data storage parameters for storage associated with the physical elements of the database
- Handling password issues
- Configuration of Databases
- Creating a new database instance
- Testing & implementation of patches
- Testing & implementation of upgrades
- Managing, applying & verifying Database program patches
- Database Scripting
- Review, recommend and test patches.
- Coordinate all changes through the agreed upon change management process
- Start-up and shutdown of databases
- Daily activities such as end of day, end of month, end of year/quarter etc.
- Daily / Weekly / Monthly backup of databases
- Database recovery
- Weekly database recovery checks
- Required logs maintenance as per Standards of the Bank
- Disaster recovery as per Standards of the Bank
- Database problem resolution
- Recreation of Indexes
- Perform pre-batch activities-Scheduling of resources-Scheduling batch services-Define, maintain and document a work schedule for running production system batch jobs, and possible started tasks- Install and document system related batch jobs in the automated job scheduling package-Manage the root cause analysis for scheduling problems-Develop and maintain standards for job acceptance and implementation. The System Integrator can either use scripts or propose a tool for batch automation
- Remove applications from the application portfolio following decommissioning from projects or improvements.
- Perform regular import and loading of data and ad-hoc data extractions.
- Responsible for maintaining DB inventory
- Maintaining and performance tuning of UAT databases
- Migration of Databases (Release Upgrade)
- Execution of all back-end changes across all applications as informed by application owner
- Manage database transaction/ archive logs
- Administration/ management of archival databases (Purge from production and move to archive database)

- Resolving corruption (both Physical & Logical) issues at primary & standby databases
- Execute DBMS changes in support of major application or logical database design changes
- Designing & Implementation of logical & physical backups
- Flash back up on daily basis
- System Integrator coordination with OEMs for upgrades, patches, bug fixes, performance tuning etc.
- Creation of a Standby database & setting up the DR
- Using data guard for Oracle
- Log shipping/Mirroring/Always On for database
- Monitoring, management and implementation of High Availability (HA) viz. clustering/RAC etc.
- Review of all databases and analysis on weekly basis
- Switchover of databases (as and when required and as per the defined time window)
- Refresh of Databases as per defined frequency or on demand
- Day end, month end, quarter end, year-end End of Day & Begin of Day support
- Resolution of audit points and VA/PT reports
- Support for processes run by branch charges for average quarterly balance/ SB interest calculation
- Apply application data fixes.
- Perform application non production environment data refreshes.
- Cloning of application data environments.
- Monitor capacity and performance of databases.
- Control of the database (adapting database profile parameters, expansion of tables and table spaces)
- Technical reorganization of the database (defragmentation) also after archiving
- Analysis of the DB tables & indexes - continual performance enhancement measures
- Create new indexes, performs reorganizations as required per analysis
- Creation, maintenance and execution of database related scripts such as start-up and shutdown processes
- Creating and maintaining formal documentation of the database environment (e.g. scripts, design, configuration, access rights)
- Monitor availability of the databases as a subset of monitoring overall service availability.
- Providing solution services for database design, configuration and maintenance
- Assist with incident and problem management related activities relating to the database environment (e.g. integration, interface, performance, configuration issues as part of the overall support service) including interaction with third party suppliers where necessary.

- Archive of application specific data as requested.
- Implementation and monitoring of database security.
- Loading software components- Kernel patches, Release changes.
- Proactively apply security fixes
- Documentation upkeep and records maintenance

6.14 Database Backup restore

- Manage Database backup/ restore schedule, administration (RMAN Backup)/Scheduled Backups and others
- Data Deletion & Purging/archival activity
- Purging of tables based on availability of space on a regular frequency (Frequency to be decided)
- Consolidating all database backups & Transaction log backups at a single file Server
- Perform database backup, restore and recovery routines.
- Compliance, review and updates to database standards documents.

6.15 Access management

- Implementing & managing security rules & access authority as per security policy of the Bank ; Database Hardening
- Implementation of database security by creating roles, privileges & profiles
- Management of users in database and assigning of roles/privileges
- Monitoring and management of logs for user access management of privileged users

6.16 Database Recovery

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

6.17 Go Live Support

- System Integrator has to provide adequate number of L1 and L2 resources for Hardware, OS, DB & Middleware levels for Finacle 10.x rollout.
- System Integrator has to ensure that these L1 and L2 staff are well versed with the Finacle migration project for the smooth rollout Support.

6.18 System & Security Audit

- Before live implementation / migration of the software solution in production system, the product may be audited by Bank's appointed Software Audit firm / in house team.

- All audit points raised by the auditor should be complied by the System Integrator in consultation with Bank's IT team without any additional cost to the Bank within 60 days of its notification by the Bank.
- During warranty and AMC / ATS period, the System Integrator needs to comply with security and system audit observation without any additional cost to the Bank.

6.19 Solution Design

The Bank requires the solution architecture to have the following minimum capabilities/ features:

End to end IT Architecture

- The Solution should have a compatible end to end IT architecture covering
- End to end solution architecture
- End to end integration architecture
- End to end implementation architecture

6.20 24 X 7 X 365 Availability

24 X 7 X 365 Availability The Critical Business Solutions as defined in SLA and other proposed solutions' design and deployment architecture should be such that the system is available to users 24 X 7 throughout the year without any down-time even during EOD, BOD, OLTP, daily, monthly, quarterly , annual closings, DR-Drill , system maintenance, backups, report generation, MIS generation, and running of batch processes. The Minimum technical requirement in revised Annexure D. For 24 X 7 X 365 availability, to maintained SLA & uptime, if additional hardware/software/solution required System Integrator needs to factor same without any addition cost to Bank.

6.21 System Integrator should supply racks for hosting proposed hardware. System Integrator should design, deploy & install the proposed hardware with optimized utilization of RACK space and power consumption without compromising high availability factor of hardware/application/database. System Integrator should submit deployment designed for proposed hardware along with Rack Space & power requirement with technical bis.

6.22 Go Live Support to the Branches

System Integrator should provide 'Go Live' support to all the Branches for networking, Finacle Application performance, Anti-virus, Active Directory and Biometric application through Bank's Head Office or from offsite for two months from the day of 'Go Live'.

6.23 Performance Requirement :

The new setup should provide following minimum performance during the contract period. System Integrator should propose the hardware, software, VM

configurations based on 5th year business volume given in Table Q- Annexure "D".

SI No	Performance Parameter	
1	Transaction Per Second (TPS)	150
2	Transaction Per day	20 lakhs
3	Server Utilization	<50%

- For Bulk data and transaction processing, the servers or VMs should be re-sized to perform all the transaction within required time. Server should be tuned to handle flash processing of high volume of transactions.
- Report download should not slow down the performance of production server at any movement.
- System Integrators should engineer the sizing of the servers and Virtual Machines to meet the above requirements.

6.24 System Configuration Management –

- The Vendor / System Integrator shall ensure facility exist for the control of documentation and application program versions, executable between environments.
- System Release - All of the deliverables referred to below, shall be delivered to the Bank on commencement of the User Acceptance Testing (UAT) following the correction of any "Non Compliances".
 - Software Executables
 - Customized Software Source Code
 - System Requirements Specifications
 - Logical Data Base Design and Data Dictionary
 - Technical Design Documents

6.25 - Other important points to be noted by the System Integrator :

- The System Integrator shall provide the hardware based on the projections provided by the Bank to ensure high reliability, availability, scalability, redundancy and performance of the solution and to meet the technical and functional requirements as per the terms of the RFP within the timeframe prescribed by the Bank.
- Testing: To assist Bank's team in developing a comprehensive acceptance-testing plan for the different migration phases , including
 - "Functional tests" To demonstrate that the completed system performs the functions as is designed to perform
 - "Load tests" to demonstrate the ability of the system to perform without degradation when under maximum traffic load carrying conditions as defined in the manufacturer's specifications.
- "Performance tests" to demonstrate satisfactory performance during a 30-day period.

- The System Integrator / vendor shall conduct the tests, rectify any problems and provide a fully operational, turnkey system.
- To provide and apply all upgrades and patches free of cost during the warranty / ATS / AMC period. Such upgrades / patches should be applied within 6 months of the release in normal course and ASAP in exceptional cases, depending on the severity and criticality.

6.26 Migration Process :

The migration from Finacle 7.0.18 to Finacle 10.2.25 should be as follows:

1. The database should be migrated from Oracle 11g in Solaris platform in existing PBGB Data centre to Oracle 19c in RHEL platform in proposed UCO bank data Centre.
2. CBS including C24 & CSIS system should be migrated from Finacle 7.0.18 to Finacle 10.2.25 as big bang approach in new RHEL platform in new datacenter.

System Integrator should make ready all the database and application servers, middle-wares, load balancers, etc. before the migration activity started, with all pre-requisites and co-ordinate actively with migration vendor for Database, Finacle application including C24, UNISER & CSIS migration and necessary mock migrations.

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

- The OEM may from time to time release Updates/ Upgrades/New releases/New versions and notify the Bank about the same. The System Integrator agrees that all such Updates/minor Upgrades (dot version)/ new minor releases (dot version)/Minor new versions (dot version), as and when released during the term of warranty, AMC and ATS will be implemented without any additional cost to the bank.
- System Integrator needs to test all these upgrades and releases along with existing customizations in Non-production environment first and once sign off by the bank System Integrator needs to move these upgrades and updates in production through proper change management cycle. In case some changes are required to be made to the existing customizations, the same should be carried out at no additional cost to the Bank. It should be possible to roll back at a short notice and in a short time in case of any problem due to the change.

6.28 Reporting Environment at DR Site

- The System Integrator has to maintain the Reporting & MIS environment at DR site with two additional database instance in DR Finacle Database server. The proposed production App & Web servers at DR site shall be used as App & Web servers of Report & MIS servers for regular days. While,

during DR drill, the APP & Web server at DR site will be used as production App & Web servers.

- All Bank users will access Report for viewing and downloading reports.
- The daily, weekly, Monthly and Quarterly reports as per the format to be shared by Bank, should be available to the Bank branches latest by 7.00 am of the next day. The Half yearly and annual reports should be made available to the bank, the day after the processing.

6.29 UAT Server :

- System Integrator need to ensure that UAT environment need to be in sync with Production environment in terms of master data and sources. All the customization / enhancement / products / parameter change needs to be applied in these environments on periodic basis which should not be greater than 1 month.

6.30 System & Security Audit :

- All audit points raised by the Software auditor should be complied by the vendor without any additional cost to the Bank.
- During AMC / ATS period, the vendor needs to comply with security and system audit observation and rectify the audit observation without any additional cost to the Bank.
- The New solutions should have built in security features and compliant with the requirements of RBI, NABARD, UIDAI and other regulatory agencies.
- SI to ensure compliance of various policies of the Bank, Master Direction & guidelines of regulatory authorities related to IT Infrastructure, IT Security, Cloud Governance, operational guidelines on outsourcing of I.T Services, Digital Data Protection Bill, etc.
- New Solutions should have high level of reliability with particular emphasis on data integrity and security. Authorized users to use the application if available on Internet / Intranet, generate logs and audit trails.
- Before live implementation / migration of the software solution in production system, the product may be audited by Bank's appointed Software Audit firm / in house team.
- All audit points raised by the Software auditor should be complied by the vendor without any additional cost to the Bank.
- During the contract period, the vendor needs to comply with security and system audit observation and remediate the audit observation without any additional cost to the Bank.
- The solution should have built in security features and compliant with the requirements of regulatory agencies.
- It should have high level of reliability with particular emphasis on data integrity and security. Authorized users to use the application if available on Internet / Intranet, generate logs and audit trails.
- Post installation of OS, VA & PT (Vulnerability Assessment & Penetration Testing) is conducted and reported will be provided by Bank to System

Integrator. All findings/issues pointed out in the report to be complied/fixed before installation of the software (Database, application)

7. Network management

7.1 Bank Wide Area Network comprising of branches, Regional Offices, Head Office, DC, DR sites and other network interface with third parties. The System Integrator will supply, install, implement, maintain and manage network & security equipment such as Routers, Switches, Firewall, IPS/IDS, VPN devices, AAA devices, etc. at DC & DR sites. Bank will only select network bandwidth service providers and procure bandwidth. System Integrator has to co-ordinate & liaison with respective network bandwidth service providers for implementation including migration, up-gradation, shifting, maintenance, monitoring and management of network links (primary & secondary) such as MPLS, 4G/5G Mobile based data network, RF link, connecting DC, DR, Branches and other third party sites. System Integrator has to manage entire network including proactive monitoring, performance management, problem management and change management and everything else necessary for effective functioning of the WAN as per the service levels. The System Integrator is expected to liaison with the third party, government authorities etc. as and when required. The System Integrator shall be required to obtain the various permissions from the necessary agencies and liaise with the various Bank's respective telecommunication Service Providers for obtaining the necessary clearances and infrastructure for the WAN.

7.2 Existing Network Links

Bank presently have 235 branches & offices, which are connected with existing DC & DR sites. The branches are connected through Airtel 4G Mobile Based Network as primary link and Hughes VSAT as secondary link. Further, Bank is implementing 2 Mbps MPLS links from BSNL in all branches & offices. On implementation of BSNL MPLS links in branches, VSAT link will be phased out and BSNL MPLS link will be primary link in branches with Airtel 4G mobile link will be act as a secondary link. The backhaul links of BSNL MPLS links, Airtel 4G links, & Hughes VSAT links are terminated in DC & DR sites. Existing DC & DR sites are connected with network link from Sify, having bandwidth of 12 Mbps.

Apart from branches, existing DC & DR sites are connected with UCO Bank DC & DR sites, DC & DR sites of IFTAS & Sify Cloud services, DC & DR sites of Euronet ATM Switch service provider sites.

- Bank have Primary VSAT Link at 234 Branches provided by Hughes and 1 Hughes ON link at 1 Branch including head office and 4 regional offices (Howrah, Suri, Hooghly and Bardhaman). Primary VSAT link has

a pool bandwidth of 4 Mbps which has been divided into (128Kbps and 64 Kbps) among 234 branches.

- Bank have Secondary 4G link at 236 Branches including head office and 4 regional offices (Howrah, Suri, Hooghly and Bardhaman) provided by Airtel. Each link is having 512 Kbps of bandwidth.
- Bangalore DC and Mumbai DR are connected through 12 Mbps MPLS links for data replication provided by Sify.
- For VSAT connectivity Manesar Hughes Noc is HUB and from Manesar HUB it is connected to DC and DR via 8 Mbps MPLS link provided by Sify.
- Bangalore DC having Internet link of 3 Mbps and Mumbai DR having Internet link of 512 Kbps provided by Sify.
- Both DC and DR are having 3 Zones (Inside , DMZ and Outside) through Cisco ASA or Cisco Firepower firewalls configured in High Availability, each for Intranet , Extranet and Internet connectivity.
- Head office and Regional offices have connectivity to DC via Extranet router and Extranet firewall.
- Delivery channel provider (UCO bank DC and DR , Euronet DC and DR and IFTAS) are connected to our DC via Extranet router and Extranet firewall.
- Bank have Mobile ATM van which is having a 4G link of 2 Mbps provided by Airtel.
- All DC and DR network devices are configured under TACACS for authentication, authorization and accounting and being managed by Cisco ISE devices.
- Branch Router is managed by SI and LAN connectivity is managed by Bank.

7.3 Bank seeks the services of the System Integrator for providing Network related Managed services. As per the service the SI has to deploy specialized onsite network team at Bank DC & DR and HO locations to manage the network with EMS tools. The onsite team has to manage network & security devices with comprising of various network links ensuring high uptime as per the SLA's defined in the RFP. All type of links should be managed & monitor by System Integrator.

7.4 Summary of the Requirement

Following are the services required by Bank which will be provided by the System Integrator:

- i) Support the Wide Area Network infrastructure of across the Bank branches.
- ii) Monitoring and management of WAN network using EMS tools.
- iii) Supply, Installation, Configuration, Support services and fault management for the routers, switch, Firewall etc. as required to

establish a secure core network setup for Core Banking & other applications at DC & DR sites.

- iv) Support service including implementation of network links at Branches and DC & DR site, IFTAS, SIFY & Euronet DC & DR sites are to be connected.

7.5 WAN Network Monitoring

All type of data circuit such as MPLS, 4G/ 5G base Mobile data network etc.

- i) Monitoring of Primary BSNL MPLS, secondary service Provider Network.
- ii) Monitoring of Bank WAN, using EMS tool
- iii) Monitoring of all the network devices at all locations using SNMP protocol for accessing device status / data.
- iv) Provide monthly Site up time reports.
- v) Link and device availability reports.
- vi) Provide monitoring services as per the defined service window.

7.6 Network Management service

- i) Incident, Change and Configuration Management
- ii) Restore failed service as soon as possible to minimize impact to the business.
- iii) All changes in the existing/proposed environment are to be accomplished in coordination with the IT department with proper approvals from Bank's competent authority.
- iv) Backup of device configurations on a weekly basis as per policy defined by Bank.
- v) Provide information & recommendations to Bank on the links and devices which are over utilized.
- vi) Periodic updates, audits for network device inventory.
- vii) Keep track of the configuration changes for all the routers and other network equipment.
- viii) Preparing the network diagram and updating it on a continual basis
- ix) Record and implement Service Requests as requested by Bank.

7.7 Core Networking

- i) To manage Core Networking functions of Bank at onsite ensuring high availability of Networking Services to the business.
- ii) Manage & support for Core Network devices (Routers, VPN Devices, switch, Firewall, IPS/IDS etc.)
- iii) Ensure 24*7 network service availability
- iv) Integration of network consisting of MPLS, 4G/5G Mobile network, RF Link and other Technologies like VPN over Internet.
- v) IP Schematic Management (IP Inventory, IP assignment & IP records)

- vi) WAN device at Core, Branch & other location Management and Reporting Monthly inventory of WAN equipment.
- vii) Performance monitoring, tuning & reporting
- viii) Monitoring WAN traffic, bandwidth utilization of all WAN links and generating reports.
- ix) Evaluate system performance under normal and degraded condition.
- x) Periodic fine tuning to ensure that network availability is at peak.
- xi) Regular reporting on health of Network and Assets deployed.
- xii) Logs and Backup management.
- xiii) Co-ordination on / liaisoning with all vendors/OEM/ISP for support of network devices.
- xiv) Maintain updated diagrams and document related to network.
- xv) Network software management
- xvi) Maintaining all asset details pertaining to network and reporting Quarterly basis.
- xvii) Implementation & commissioning of new links including router configuration and policy implementation.
- xviii) Management configuration , integration , troubleshooting of other SPs network at core level.
- xix) Migration of IPv6 network at internet, if required.
- xx) Network recovery should be automatically from primary to secondary and vice-versa.

7.8 Supply, installation, configuration and maintenance of Equipment

- i) SI as a part of Core Banking Application migration, has to implement new setup at proposed data centre & DR sites. In both the sites Network connectivity in between servers and that of from branches with dual connectivity (BSNL & secondary service provider) should be implemented.
- ii) The core network setup should be comprises of Core network switches, Core Routers, core firewalls, perimeter firewall, Internet Firewall, Extranet Firewall, Authentication servers, Domain servers, etc.
- iii) All the network devices at DC & DR sites should have active standby system for redundancy.
- iv) The core switches should have network port compatible with proposed core banking & other applications servers. It is the responsibility of SI to establish Core Network at DC in DR sites with the proposed servers and other hardware, network & security devices. To establish the core network, all required active & passive component should be provided by System Integrator.
- v) SI should establish LAN at DC & DR sites connecting servers, storage, SAN Directory, NAS, Routers, Firewalls and all other hardware, network & security devices.

- vi) There will be three types of access to core servers to maintain e.g. Branch/ office users through Intranet, for interfacing with various third party network through Extranet, and to access Internet based applications through Internet.
- vii) There should be dual layers of firewalls of different makes, those should be crossed by every network traffic before reaching to Core Banking & other Application & database servers.
- viii) SI shall implement Branch network with secondary Network link preferably MPLS link to be provided by Bank from different (other than BSNL) Network bandwidth service provider. Si shall supply & install Network Router & Managed Network switches at 230 branches. The BSNL 2 Mbps network link will be continued as primary network link in branches.
- ix) Vendor shall ensure that under AD based domain environment, with anti virus installed desktops the branch network should be secured from all types of threats & vulnerabilities.
- x) All the firewalls should be integrated with IPS system. IPS should operate in on-line /off line mode.
- xi) Supply as per technical requirement & quality mentioned in Annexure-D , installation of networking equipment like router, switch, modem at various locations identified by the Bank. The equipment supplied must be seamlessly integrated with the existing equipment deployed in the bank.
- xii) Generate & provide suitable IP address to new branches as per Bank's existing IP addressing scheme
- xiii) Detailed configuration of equipment to be deployed in the network.
- xiv) Configure necessary security feature.
- xv) Energisation of the MPLS link with backup link.
- xvi) On restoration of primary link, traffic should be dropped from secondary link automatically.
- xvii) System Integrator should conduct acceptance tests to ascertain the quality and completeness of the installation.
- xviii) The System Integrator should study & estimate the equipment capacity of the existing network equipment at the branches, , DC , DR & other offices.
- xix) The System Integrator shall suggest for necessary upgradation of equipment for better performance with proper justification of change. Final decision to be taken by bank.
- xx) To implement IPsec encryption on new routers. The implementation includes, installation of the hardware, configuration of the router, creation of IP tunneling with VPN routers at DC & DR, testing, monitoring etc.

- xxi) The Bank reserves the right to shift the equipment from one location to another location depending upon its need. The vendor will arrange to shift, install and commission the equipment.
- xxii) System Integrator will be required to stock adequate stand by equipment and spares in order to meet uptime commitment of this bid.
- xxiii) In case there is a cost incurred to the bank due the wrong configuration of network equipment at any location, the same will be borne by the System Integrator.

7.9 Managing & Supporting Network at Help Desk level

- i) The System Integrator should provide technical expertise at Helpdesk to manage the network and to support field engineers to resolve the problem and for day to day smooth operation.
- ii) The support at help desk level should be available during business hours (8.00AM to 8.00PM).
- iii) The support at DC & DR help desk should be available for **on 24X7 basis.**
- iv) The help desks should be manned by dedicated manpower as per the details given as below.
- v) The System Integrator is responsible to resolve the problem within the stipulated time schedule referred by any of the following:
 - a. The network trouble tickets generated in the EMS tool
 - b. Telephonic information
 - c. E-mail information etc.
- vi) Monitor all Network Link and raise call to respective Bandwidth Service provider for any outage / issue/problem in network link and co-ordinate with Bandwidth Service provider for resolving the issue.
- vii) Monitor all Network equipment and initiate troubleshooting for any issue in network equipment. Arrange for on-site engineer, in case remote troubleshooting is not possible. Lodge a complain to OEM of the equipment in case resolving of problem is not possible by System Integrator team. Co-ordinate with OEM's representative or onsite engineers till resolving of the problem. Keep track of the status of problem till completion.
- viii) Suggest / recommend changes in the network and/or device configurations for securing the same against any probable attacks, increasing data transfer security, up-gradation of network etc.
- ix) Compliance of audit queries as per recommendations.
- x) Infrastructure design of any kind, Network Audits, base lining and consulting services of any kind
- xi) Assist the bank to carry out any maintenance activities on the network devices and also during DR drills.
- xii) Assist the bank to carry out any maintenance activities also during DR drills.

- xiii) Any other task relevant to, but not mentioned above.
- xiv) Onsite engineers should attend call from branches for network related support.

7.10 Uptime maintenance

- i) The overall uptime should be 99.9% Core network (DC, DR, IFATS, SIFY Cloud and ATM Switch network)
- ii) No down time (site) shall be permitted in case of DC. DR Site will act as DC at the time of DC disaster as per DRP (Disaster Recovery Plan).
- iii) No down time (site) shall be permitted in case of DR site.

7.11 Integration of new application/network on existing Network

- i) Based on the requirement System Integrator has to integrate any new network to the Bank's existing network smoothly, which may be obtained from existing bandwidth provider or any new bandwidth provider as per the decision of the bank. System Integrators may advise bank in selection of media/type of link.
- ii) Bank may implement new applications over the network. The System Integrator shall implement such application/network for which it has to prepare plan, bandwidth sizing & identify network equipment specification for the integration.
- iii) System Integrator shall install & configure network equipment for integration of new application, additional network etc., shall support for smooth operation of the entire network, conduct user training at the location specified by the bank. and provide consultation, management and monitoring for other network related problems of any applications.

7.12 Access list Management

- i) Manage the access lists on all the network equipments.
- ii) Maintain a record of branches with deviation in standard access list along with the reasons.
- iii) Any change/removal in the access lists to be done only with approval from the network department
- iv) Report on a monthly basis the changes done in ACLs branch-wise
- v) Port management for managed switches.

7.13 Configuration Management

- i) All network devices configuration is done by System Integrator including a hardening of device as per Bank requirement. If ISDN get fired because of wrong or unwanted configuration, the bill generated out of wrong configuration shall be borne by System Integrator.

- ii) During any major incident or Critical activity or redesign level resource should be available at site. Bank will not pay any extra charges for the same.

7.14 Inventory Management

- i) Periodic updates, monthly audits for network device inventory.
- ii) Inventory database must be maintained by NOC operations unit for all network devices.
- iii) Quarterly submission of all network devices inventory (Branches and hub locations) report, on site visit and signed by the branch location head.
- iv) Upgrade the IOS ,if needed, on the routers for effective functioning
- v) Making the network diagram and updating it on a continual basis
- vi) Maintain IP wise user detail list for all branches / centre and monitor

7.15 Vendor Management

- i) Coordinating with ISP for quick breakfix resolution of WAN issues.
- ii) Coordination with the vendors/OEM who have supplied network products and devices.
- iii) Managing the vendor's SLA and reporting the same on a monthly basis.

7.16 System Integrator Deliverables and Liability

- i) The deputed personnel should be prepared to work for extended working.
- ii) Required manpower should be deputed at Bank DC & DR site within 1 week from the date of Purchase Order.
- iii) Details like Name, Address contact should be provided. Bank may take an interview of onsite engineers before deployment.
- iv) The onsite team shall maintain attendance register and the same should be sent monthly to Bank for SLA calculations, failing which appropriate penalty condition as defined below shall be invoked.
- v) The onsite team shall not be changed without adequate notice (minimum 15 days) to Bank. Any resigned resource of onsite team should not be relieved before giving suitable replacement. Any breach of this clause will attract penalty
- vi) The vendor will also provide suitable onsite technical staff to supplement the efforts of the onsite support resources during emergencies / contingencies which might impact the systems, solutions and services covered under this scope.
- vii) The Vendor must ensure one month's notice with proper handover for any change of manpower pertaining to project manager profile.

7.17 Covenant of the System Integrator

- i) In the implementation of the contract, the System Integrator and its employees shall at all the times comply with & abide by the security policy of the bank in so far as the same may be applicable to or in respect of the works and the provisions of the contract.
- ii) Confidentiality of the network setup, configurations and all related details including the addressing scheme etc shall not be disclosed by the System Integrator to any third parties or persons (except to System Integrator's own employees and that too only to those employees or representatives who need to know the same).
- iii) System Integrator will follow and comply with the procedures and policies, applicable to the scope of work mentioned above lay down by the Bank vide IS Security Policy from time to time and also extend full cooperation to the auditors designated by Bank.
- iv) Depending on the sensitivity and criticality of the services or data provided, Bank will consider commissioning or requesting a review of System Integrator's internal control structure for ensuring that any confidential/restricted/internal information of the Bank is maintained securely. System Integrator will assist and cooperate with the Bank auditors in a way as they are expected to assist and cooperate with their audit.

7.18 Documentation & Reports

- i) The System Integrator shall provide documentation related to every activity (as per the scope of work) like network design/expansion, equipment configuration, layout plan and any changes made to, or deviations from design, configuration, base line configuration etc.
- ii) The System Integrator shall provide following reports from time to time (as per the timeline and format decided by the bank)
 - a. Response time reports
 - b. Down time reports on daily basis.
 - c. Manpower deployment report
 - d. Call Escalation Matrix
 - e. Bandwidth utilization report on link basis.
 - f. Any other reports, if required
- iii) Overall project documentation.
- iv) Take regular backup of configuration after a specific time interval of all the bank's branch network
- v) Prepare white paper on new technology / product relevant to the network.
- vi) Every quarterly basis System Integrator should provide all network devices configuration details in CDs/DVDs.

7.19 Network Management

- i) On disaster at DC, all branches should be atomically connected to DR.
- ii) On restoration of DC, branch/ office network traffic should be automatically
- iii) On restoration of primary link, traffic should be dropped from secondary link automatically.
- iv) The main media availability should be MPLS. Only in case of major problem in main link, secondary MPLS / 4G /5G based Mobile network from alternate service provider as backup should be used.
- v) System Integrator has to co-ordinate with respective bandwidth service provider for speedy recovery of MPLS and bring back the availability of network on main media.
- vi) Apart from above, System Integrator team should be proactive in terms of early diagnosis of problems, detection of any abnormalities in the network and take corrective/preventive measure promptly.
- vii) Whenever there is installation / configuration of the link is being carried out, the System Integrator has to configure all the network equipments including Backup links.
- viii) Coordinate with the telecom service provider and assist Bank to procure, commission, upgrade / shift / decommission all types of data circuit lines so that they can build network in a timely manner.
- ix) Liaison with the respective service providers for resolution of link failures.
- x) Coordinate with the respective equipment vendor / service provider for restoration of the failed device / service.
- xi) Maintain updated diagrams and documents related to network and also maintain all relevant information of the links like data circuit numbers, commercial reference numbers and other technical details.
- xii) Maintain comprehensive branch wise information relevant to the network equipments i.e. routers, modems, NT1, etc. with details like whether owned by Bank, the AMC/warranty vendor, DOC, EOL,EOS etc.
- xiii) Maintain monthly report on the total links of Bank with details like bandwidth, branch id , equipment, IP details etc.
- xiv) New link Commissioning and new link delivery period should be 4 weeks from the date intimation/mail communication.
- xv) Up-gradation of the existing links will be commissioned at earliest as per requirement.
- xvi) In case of link surrender/terminations the surrender/termination request to respective vendor, surrender/termination order and refund if any should be completed within 15 days.
- xvii) Monitor WAN traffic, bandwidth utilization and generate reports.
- xviii) Performance monitoring, tuning and reporting.

- xix) Evaluate system performance under normal and degraded condition.
- xx) Maintain all asset details pertaining to network and report on quarterly basis.
- xxi) Address issues of latency and other connectivity issues of branches.
- xxii) Manage – passive network components in the datacentre like modems, FCD converters, and other networking devices in the core network including configuration.
- xxiii) IP scheme management including IPv6.
- xxiv) WAN device management and reporting the monthly inventory of WAN equipment
- xxv) Periodic fine-tuning to ensure optimal network availability.
- xxvi) Regular checking for proper functioning of network and assets deployed.
- xxvii) Incident, Change and Configuration Management ,IOS Upgradation, change request management, configuration change management network restructuring is part of managed services.
- xxviii) Maintain and manage configuration of all routers.
- xxix) Management of network equipment on site and providing L1/L2/L3 support for fault diagnostic for both software and hardware.
- xxx) Troubleshoot, debug and restore failed services as soon as possible to minimize impact to the business.
- xxxi) Maintain logs and record of the major incidents, changes in configurations of the routers and equipment with reasons.
- xxxii) The System Integrator has to ensure that any equipment to be supplied as part of this RFP should not have either reached end of sales for at least 3 years post-date of acceptance of such equipment by the Bank. Further any equipment supplied by the System Integrator, should not have reached end of support/life for at least 2 years from the date of contract expiry. In the event if any equipment supplied by the System Integrator, reaches either end of sales / life support as stipulated in this clause, within the period of contract, the System Integrator has to immediately replace the equipment at no additional cost to the Bank.
- xxxiii) The System Integrator is required to replace the end of life and end of support components six months before the end of life date. The System Integrator needs to supply, install and commission and maintain network equipment for the period of contract. The specifications of the network equipment are given in “Annexure-D”.
- xxxiv) Security being prime concern, Solution should not breach the security of any other installations of Bank in any way.
- xxxv) System Integrator shall provide backup resource in case any of the project member avails leave, however System Integrator service delivery team will be entirely responsible for team deployment, SLA monitoring, task delegation, workload distribution and team size.

- xxxvi) Absence of any resources must be accompanied with equal skill resources.
- xxxvii) Every month review meeting with project manager and ISP team.

8. Implementation of Active Directory, Anti-irus, Biometric and EMS Solution

8.1 Active Directory

- i) System Integrator has to establish an Active Directory setup for all the desktops available at branches & offices.
- ii) All the desktops should be part of domain system. The domain should be separate from Core banking and other application servers domain.
- iii) Basic restriction and hardening of domain e.g. restriction of usage of mass storage devices in USB ports, secured login, etc. should be implemented in day first.
- iv) Later, based on best practices and recommendation of regulatory authorities, sponsored Bank, etc. restriction in access will be implemented.
- v) SI is required to supply, design, implement and maintain software and hardware required for the Active Directory Domain Services.
- vi) The SI is required to maintain the AD setup for the period of contract.
- vii) The Active Directory solution should be implemented at DC and DR site, HO, RO & branches.
- viii) AD data should be replicated to Dr Site. In case of the disaster at DC, all the branches seamlessly connect/authenticate with AD at DR Site.
- ix) The SI should develop a project plan for implementation of AD services indicating milestones and deliverables to the Bank.
- x) The SI is expected to size the bandwidth requirement for DC and DR Site replication of AD data to be in sync with each other.
- xi) The SI is expected to liaison with the branches and other vendors of the Bank to implement AD Services at Branches and offices.
- xii) The SI is expected to provide details regarding Active Directory network, Hardware design so as to give the Bank sufficient insight on working of the software.
- xiii) The SI is expected to provide adequate training and operational guidelines to designated Bank personnel.
- xiv) The Active Directory logical structure should be in line with the organizational structure of Bank.
- xv) The SI is expected to configure active directory for group policies and security policies in concurrence with the Bank.
- xvi) The entire active directory operation will be centralized.
- xvii) All users PCs at all locations across the bank will be joined to - Active directory domain-.
- xviii) It is the SI's responsibility to ensure that all PCs are loaded with the relevant within the implementation timeline at no additional cost.

- xix) For the current sizing purpose, the numbers of users to be considered is 1000, and should be scalable to support 1200 users.
- xx) Bank's Desktops has valid Windows License. Any other Licenses if required to implement AD, it should be supplied by SI in the name of Bank
- xxi) The domain joining of all relevant devices, at branches/offices will be done by the SI.
- xxii) The SI is also expected to synchronise any existing active directory in the bank with this implementation.

8.2 Anti-Virus System

- i) Centrally managed Anti-virus system should be deployed.
- ii) It should take care all types of RHEL based servers and windows based desktops. Regular updation of AV signatures should be automated from central server.
- iii) System Integrator will be responsible for deployment of Antivirus Solution at all Computers, Servers Branches & Offices.
- iv) System Integrator needs to make sure that all the end points are fully complied with the latest updates / patches and all the system antivirus is properly working.
- v) Antivirus solution should provide following minimum features but not limited to
 - Host Intrusion Prevention
 - Host Firewall
 - Host Vulnerability Scanning
 - Application Control
 - Anti-malware
 - Server-client model, where server is responsible to collect the updates from internet and update the clients in LAN /WAN (without internet) automatically along with centralize management of clients.
- vi) SI has to establish Centralised Antivirus system for desktops at branches & Offices and servers at DC & DR Site.
- vii) Supply, implementation, maintenance and integration to make application software operational for Centralized Antivirus Solution as per Bank's requirement and support for a period of Five years.
- viii) SI shall configure desktops to get automatic updates from the Antivirus Server / Central console with proper scheduling so as to avoid traffic congestion. The update mechanism should be configured in efficient manner by fixing micro sizing and update frequency in such a way that it does not cause bandwidth issues, on the other hand latest updates should be installed in the desktops.
- ix) SI shall provide Antivirus Enterprise Edition Security Suite covering Anti Virus, Desktop Firewall and Intrusion Prevention System.

- x) Licenses required to implement Anti Virus should be supplied by SI in the name of Bank
- xi) The updates of definitions and version updates at branches to be done over the Bank's network.
- xii) The System Integrator shall inspect & provide an active response to all virus related incidents that happen within the Bank
- xiii) The solution would be managed centrally and having facility of system monitoring, software updates, client configuration, and event reporting.
- xiv) The central site administrator should have the ability to manage the software at all levels of the network and have the ability to remotely deploy product updates and modifications to all users.
- xv) The solution should be capable of remote deployment to client workstations, as well as, removal of any existing Antivirus software.
- xvi) The central site management system must be capable of providing a daily report of found viruses, including locations and a report of incomplete or failed nodes updates for each location.
- xvii) The solution should provide enforce update facility from central server to any node, including agent of the branch, as and when required.
- xviii) Central Server should have facility to resend updates for the incomplete or failed updates of any node.
- xix) The solution should provide real-time detection and elimination or isolation of viruses.
- xx) The solution should provide to configure response levels to viruses including isolating the infected file and automatic deletion of infected files by administrator.
- xxi) Further, some desktops are directly connected to the internet, where the anti-virus solution should be implemented in such a way that the PCs should get update automatically from internet on regular basis.
- xxii) The solution should provide for automatic virus pattern file updates in the central server from the OSD of software on 24x7 basis.
- xxiii) The solution must be designed for real-time detection and removal of viruses and other malicious codes from desktops as well as damage repair of the computer.
- xxiv) The solution should provide quarantine management in order to prevent spreading.
- xxv) The solution must provide anti-virus, anti-spyware and firewall on nodes on a single client software.
- xxvi) The solution should provide Spyware/Grayware Detection Reports, Virus Detection Reports, Antivirus Client Information Reports, Antivirus Server Deployment Reports, Virus Damage Cleanup Services Reports, Policy Violation report, Virus Infection Report, Infected Files Report, Security Violation Report.

- xxvii) The solution must provide real-time spyware/grayware scanning for file system to prevent or stop spyware execution.
- xxviii) Security being prime concern, Solution should not breach the security of any other installations of Bank in any way.
- xxix) For the current sizing purpose, the numbers of desktops & servers to be considered is 1500, and should be scalable to support 2000 users.

8.3 Biometric Authentication system

- i) System Integrator has to implement Biometric based dual authentication system for login in Finacle 10.X application.
- ii) The Biometric solution should be seamlessly integrate with Finacle.
- iii) Bank is having Morpho MSO 1300 biometric finger print scanner device for Finacle users in branches.
- iv) The Biometric solution should use the existing finger print scanner devices for finger print scan.
- v) Bank is having at present 1000 nos. of Finacle users. SI should implement Hardware, System software, Database & Application at DC & DR sites for Biometric solution for 1200 users.
- vi) SI should implement biometric client applications in all branch PCs (estimated 1000 in nos.).
- vii) The System Integrator should supply, install, commission and operationalise Finger print based Biometric Authorization solution to all branches and offices of the Bank.
- viii) The solution should include Application Software and necessary hardware with system software
- ix) The System Integrator should provide an Enterprise License for the Biometric Application user license. There should not be any other license like Client Access License to run the application.
- x) The Client machines will be accessing the application through a web browser Internet Explorer, Microsoft Edge, Google Chrome etc) where the finger print devices are connected. The backend application will fetch the LIVE finger print information from the Client machines. The LIVE finger print information received will be compared with the respective finger print template stored in the database. Application should also be compatible with necessary Application Program Interface (API) to integrate Biometric solution with Finacle 10.x application.
- xi) The finger print image should be stored in central server.
- xii) Customisation of the application software, if required has to be done by the SI at no additional cost to the Banks.
- xiii) The Servers at Central site will be in Active – Passive cluster at DC and also at DR Site.
- xiv) Necessary cluster licenses required should be included in the quote along with hardware.

- xv) Bank will provide required space and power to host the servers.
- xvi) Application Server loaded with the Biometric application software should be enabled with biometric Development utility to enable the enrolment and verification functionality.
- xvii) Hardware should be sized suitably to ensure biometric authentication for concurrent users as mentioned
- xviii) Peak time for finger print verification will be from 10.00 am to 11.00 am.
- xix) In case, the Hardware/Software installed is found to be insufficient, the System Integrator has to upgrade the same at NO EXTRA COST TO THE BANK.
- xx) The client machine will be interface for both enrollment and verification functions of the Biometric Solution. Customisation required if any, should be done by the System Integrator at no extra cost to the Bank.
- xxi) Upon implementation of the Biometric login solution also, the employee should be able to login through any System (PC) or any branch.
- xxii) There should be a provision to register the finger prints of SIX fingers and stored in the central server under the Employee-id and that he/she must be able to login with any of the finger print of his/her choice which should be validated and authenticated. At the time of registering, system should be able to check for de duplication of the finger prints.
- xxiii) The solution should provide Maker Checker facility at the time of enrollment process.
- xxiv) The solution should provide a secure end-to-end encrypted channel for all data communication between client and server.
- xxv) After implementation of the Biometric solution, a facility should be available to by-pass biometric login, and to allow direct login to CBS application under due authentication method.
- xxvi) The approach to the solution should be such that before any user can enter the CBS system, they have to get their Finger Print authenticated through the Finger Print authentication system

8.4 Enterprise Management Solutions

System Integrator should implement Enterprise management Solution having following features:

- Helpdesk management,
- change management,
- patch management (for servers),
- Server, database monitoring
- network monitoring

- overall reporting
System Integrator should supply, install and maintain EMS tool related hardware & software at DC and DR both locations. Entire EMS tool solution should be able to run from DR also during DR-Dill or in case of any exigency.

Licenses requirement:

- Helpdesk with Change management feature – 10 nos. of users.
- DC, DR infrastructure monitoring and Patch management for all physical & virtual devices to be delivered by system integrator in the project. Approx. 50 devices.
- Middleware monitoring (JOBSS): 20 (DC & DR).
- Network monitoring and configuration automation for 600 devices.
- Database monitoring 10 nos. of various application DB instances.
- Branch login should be unlimited.

Additionally, System Integrator should implement call/helpdesk management solution such as way that branch/corporate office users should be able to access helpdesk portal/URL for call ticketing/call lodge at any point of time and that should be attended by L1 & L2 support team for resolution accordingly.

9. Manpower requirement for FM Services

9.1 Minimum Resource Deployment during contract period

Resource	Location of the resource	Minimum no. of Resources Per Shift	Service Window
Program Manager (Infrastructure & Applications Management)	DC	1	General Shift
L1- Hardware , OS and backup & restoration Management & Load Balancer	DR	1	24x7x365
L1-Hardware, OS and backup & restoration Management & Load Balancer	DC	2	1 for 24x7x365 1 - 8 a.m. to 8 p.m.
L2-Hardware, OS and backup	DC	1	8 a.m. to 8 p.m.

& restoration Management, Load Balancer and Middleware			
L1 – Database Management	DC	1	24x7x365
L2 - Database Management	DC	1	8 a.m. to 8 p.m.
AD, CAV, Biometric & EMS tool management	DC	2	8 a.m. to 8 p.m.
L1 for Core Network & Security Equipment monitoring & management and Branch & Core Link monitoring, co-ordination with respective service provider	DC	1	24x7x365
L1 for Core Network & Security Equipment monitoring & management and Branch & Core Link monitoring, co-ordination with respective service provider	DR	1	24x7x365
L2 for Core Network & Security Equipment monitoring & management	DC	1	8 a.m. to 8 p.m.

However, if needed, System Integrator can engage more resources to meet SLA, uptime and scope of work defined in this RFP during contract period.

9.2 Resource Qualification & Experience

Role / Description	Experience	Educational Qualifications/ Certifications/Skills
Program Manager for Infrastructure and Application	>10 years	1) MBA/Engineering/MCA 2) Should have experience as Program Manager of managing IT Infrastructure managed services (servers, storage, database, networks, backup & restore, application) Implementation and operations engagements in at least one Scheduled Commercial Banks in India having more than 1000 branches in India in last 3 years

L1-Hardware, OS and backup & restoration Management & Load Balancer	>2 years	<ul style="list-style-type: none"> ▪ Diploma/ Graduate/MCA/BCA. ▪ Good Communication (written/Oral) ▪ Knowledge/expertise on Infrastructure Management – Windows/ Linux administration ▪ Technical certifications like MCP/SA/ RHCE etc. ▪ Specific experience with Storage (e.g. SAN, NAS) and Backup (e.g. Network, Tape libraries) technologies ▪ Have experience on File base cluster system, Middleware like JBOOS, Redhat , Have Experience on Managing Database RAC Architecture ▪ Willing to work in 24X7 environment Should have worked in 1 similar project as L1
L1- Data Base Management (CBS & Internet Banking)	>2 years	<ul style="list-style-type: none"> ▪ Diploma/Engineering Graduate/Science Graduate/MCA/BCA. ▪ Good Communication (written/Oral) ▪ Working Knowledge Oracle database, SQL Database in core banking environment. ▪ Knowledge on Managing Database RAC Architecture
L2- Data Base Management (CBS & Internet Banking)	>5 years	<ul style="list-style-type: none"> ▪ Diploma/Engineering Graduate/Science Graduate/MCA/BCA. ▪ Good Communication (written/Oral) ▪ Knowledge on Managing Database RAC Architecture ▪ Working Knowledge Oracle database, SQL Database in core banking environment.

L1- Management & Link monitoring	Network & Link	>2 years	<ul style="list-style-type: none"> ▪ Any Graduate / Diploma holder ▪ Good Communication (written/Oral) ▪ Knowledge of MPLS, 4G/5G, RF Network link, Router, Switch, Firewall, AAA authentication System, etc. ▪ Willing to work in 24X7 environment. Should have worked in 1 Similar Projects as Network L1.
L2- Management	Network	>5 years	<ul style="list-style-type: none"> ▪ Any Graduate ▪ CCNA certification ▪ Good Communication (written/Oral) ▪ Knowledge of MPLS, 4G/5G, RF Network link, Router, Switch, Firewall, AAA authentication System, etc. ▪ knowledge on Router, Switch, Firewall configuration, network routing, VLAN, Firewall policy, rule setting, AAA authentication process, etc. ▪ Willing to work in 24X7 environment. Should have worked in 1 Similar Projects as Network L2.

10. Project Management Services :

10.1 Project Planning, Monitoring and Control:-

- The Vendor /System Integrator shall develop a Project Management Plan. The plan shall also detail all milestones and indicate the list of activities and when the activity will be commenced and when it will get completed etc.
- The Vendor /System Integrator shall develop a Quality Assurance Plan for the execution of this Service(s). The Quality Assurance Plan shall address at a minimum, the following Service(s) processes:
 - Document Control
 - Change Management
 - Product Review and Approval
 - Control of third party products
 - Inspection and Testing
 - Control of Quality Records

- The progress of the Service(s) shall be monitored on regular basis and the deviations, exceptions shall be analyzed and corrective actions to be recommended / suggested.
- The Deliverables shall be :
 - Project Management Plan
 - Quality Assurance Plan
 - Progress Reports
- On receipt of each deliverable, the Bank will review each deliverable within agreed time frame.

10.2 Project Reporting:-

- A weekly progress report shall be submitted. Also the Vendor/Bidder shall report on items by exception or that require urgent action.
- The project progress status is to be reported and submitted at the end of 2nd and 4th week every month
- Monthly Project Execution Committee meetings will be held at the Bank's premises. The vendor /System Integrator is required to provide a report on the following:
 - Progress against the Project Management Plan
 - Status of all open issues
 - Ad-hoc requests for information will be assessed promptly by the Vendor/Bidder and a delivery date will be given. The Vendor/Bidder shall deliver the required information within the agreed time frame.

10.3 – Project Time Line :

The Vendor /System Integrator shall complete the project as per the agreed project plan. A tentative plan is given below but the vendor should prepare their own project plan and get Bank's sign off prior to commencement of the project.

S No.	Activity	Start Month	End Month
1	Project Initiation, Detailed Project Plan Submission and sign off SLA, Business Process Documentation, SOW sign off	M0	
2	Hardware, Software delivery and installation	M0	M2
3	System Set-up (Test, All server setup and Finacle version 10.2.25 installation)	M3	M4
4	DR server setup and enablement	M3	M4
5	DR server setup and enablement	M4	M5

6	Migration Stage 1	M4	M5
7	Migration Stage 2	M5	M6
8	Test Migration on the test server, minimum of 3(three) iterations will be conducted	M6	M7
9	Migration Stage 3	M6	M7
10	Go Live Readiness and Go-Live	M8	M8
11	Post Migration support – Closure of Issues found in migration Audit and Closure signoff by Bank.	M9	M11
12	Facility Management Services	M8	M67

10.4 **Project Go-Live: This project will be said to Go-Live when:**

- The “Core Migration Committee” of Bank examines and finds that all technical and Functional requirements of the project have been implemented.
- All modules and customization in Bank's Finacle 7.x platform has been migrated with successful testing of the same in new production environment of Finacle 10.2.25.
- All security measure has been implemented as per globally accepted standard.
- Compliance to Migration Audit report has been done.
- All policies required by Bank have been implemented.
- To comply with all policies of the Bank pertinent to the project under implementation
- Bank has shared a Project Go-Live certificate to the System Integrator.

It is System Integrator's responsibility to complete the migration process in time. The Go Live of the project must be completed on or before **31st March 2024** To expedite the process, System Integrator should engage adequate engineers to complete the migration process before scheduled time well in advance.

10.5 – **Knowledge Transfer and Documentation :**

Complete hands-on Knowledge Transfer for all relevant Bank's applications along with necessary documentation, including but not limited to the following:

- Application & Integration Architecture
- Application set-up, installation, upgrades
- Environment details, including Prod and Non-Prod
- Configurations

- Customizations (completed, in-progress, planned) with source codes for the existing customizations.
- Change Requests (completed, in-progress, planned)
- Debugging and fixing approach
- Batch processing programs, configurations and environment details
- Interfaces (internal systems, external systems)
- Reports (batch, on-demand)
- Application management scripts (start / stop / status / monitor)
- Master / Configuration data used by respective application
- Take-over and validation of all source code required to maintain and support the applications (covering product customizations, interfaces, reports, etc.)
- All support activities including application details required to deliver the services
- Configuration Management with latest source code, sanity tested and synchronized in Development / Test environment
- Existing gaps / issues and proposed resolution / improvements and any other relevant aspect of each application

Complete Documentation and hands-on Knowledge Transfer for all relevant Bank's Infrastructure, including peripherals, but not limited to the following:

- Infrastructure Architecture, including Server, Storage, Network and Security Architecture
- Environment details
- Hardware components (Servers, Storage, Networks, Peripherals)
- Software Licenses and CD/ DVDs
- Patches and Upgrades required
- Track End of Support for all relevant Hardware and Software components and notify Bank in case of any renewals, AMC/ATS/ New procurement/ replacement required
- Service Delivery processes and SLAs with complete documentation (Incident Management, Availability Management, Capacity Planning, IT Security Management, Backup and Recovery, Database Management, Storage Management, E-mail and Collaboration Services, File and Directory Services, Tape Operations)
- IT Security policies and procedures
- Change Requests (completed, in-progress, planned)
- Existing gaps / issues and proposed resolution / improvements.
- Incident Management and Problem Management

Complete hands-on Knowledge Transfer for all required Processes, Policies and Procedures at the Bank, including but not limited to the following:

- Status reporting, Communication and Escalation process
- Service request procedures for Infrastructure requirements
- Regulatory aspects that impact IT operations

Part-V

1. Consortium

The System Integrator may have a tie-up with any solution provider for providing the mentioned services. However, the System Integrator should have a relationship with the solution provider as an authorized reseller, distributor, and should have a back-to-back agreement to ensure that the total solution proposed is as a turnkey solution.

The System Integrator may form a consortium and bid for the RFP document, as it is the Banks' expectation to implement and maintain the most appropriate solution and maintain policies and procedures to serve the Bank. However, in this case the Bank will deal with only the System Integrator as a single point of contact who shall have the sole responsibility for the entire assignment irrespective of the fact that it is only the part of the consortium. Each consortium shall name the System Integrator who shall have the single point responsibility for the consortium in their bid responses. The System Integrator shall have the single-point responsibility of the bid will be deemed to be the system integrator and will be deemed to play the lead role in the bid and shall have single point responsibility of the bid.

The System Integrator shall mention in technical bid the details of contractor or sub-contractor in connection with the services required to be provided by the System Integrator. Under all circumstances, the System Integrator shall be responsible for misconduct / deficiencies in services rendered to Bank through the System Integrator selected or its sub-contractors. Bank reserves the right to reject work, which is not in conformity with its standards

2. Order details

The purchase order will be placed by Bank Head Office, DIT in the name of System Integrator as per requirement mentioned below table, the sequence of placing the purchase order will be at bank's discretion. The payment will be made by Head Office, DIT and the Performance Bank Guarantee for order will be required to be submitted in the same office.

Sl. no.	Purchase order	Items Covered	Reference Commercial BOM (Annexure E)
1	1 st Purchase order / Master Purchase order	Hardware, Network items, software, AMC & ATS charges and One Time Implementation cost. Related Core banking solution.	Table A and Finacle related part in Table B, Table C, Table D, Table E, and Table F
2	2 nd Purchase order	Implementation of other Solutions including Hardware, Software, AMC & ATS, and Implementation cost for AD, CAV, EMS & Biometric Solution	Other Solutions related part in Table B, Table C, Table D, Table E, and Table G
3	3 rd Purchase order	Branch Network Equipment	Branch Network part in Table B, Table D and Table E
4	4 th Purchase order	Facility management services for the period of five years.	Table H

Bank reserves the right to conduct the pre-shipment inspection or onsite inspection of the system before final acceptance by Bank. In case of pre-shipment inspection, additional one week will be given to System Integrator for delivery.

3. Delivery, Installation Schedule

The System Integrator must undertake to delivery, installation, configuration, for Hardware and including EMS solution hardware as per SOW in the RFP as mentioned below:

S No.	Activity	Start Month (M)	End Month (M)
1	Project Initiation, Detailed Project Plan Submission and sign off SLA, Business Process Documentation, SOW sign off	M0	
2	Hardware, Software, Network equipment delivery	M0	M2
3	Installation of Core Network at DR including all security Items	M2	M3
4	Installation of UAT, training, Migration, setup at DR site including Finacle 10.2..25 application	M3	M4

	installation		
5	Installation of Core Network at DC including all security Items	M2	M4
6	Installation of Production setup at DC	M3	M4
7	Installation of Production setup at DR	M4	M5
8	Implementation of Secondary Link in branches including Branch Router & Switch	M2	M4
9	Implementation of AD, Antivirus, EMS, Biometric Setup at DC & DR site	M3	M5
10	Implementation of AD, Antivirus, EMS, Biometric Setup at Branches	M5	M8
12	Facility Management Services	M8	M67

However, any delay due to site not readiness in the Bank will not attributable to the System Integrator for LD purpose.

4. Warranty for Hardware, Network & Software items

- 4.1 The System Integrator must provide 3 (Three) year on-site comprehensive warranty for all hardware and peripheral items to be supplied under this RFP covering all parts and Label from the date of acceptance of the systems by Bank at the respective locations i.e. on-site comprehensive warranty and two year AMC (4th Year AMC & 5th Year AMC).
- 4.2 The System Integrator must provide 1 (One) year on-site warranty for all software items to be supplied under this RFP from the date of acceptance of the systems by Bank at the respective locations i.e. on-site comprehensive warranty and four year ATS (2nd Year, 3rd Year, 4th Year AMC & 5th Year AMC).
- 4.3 During the warranty/ATS/AMC period, the System Integrator will have to undertake comprehensive maintenance of the entire hardware, hardware components, system software and accessories supplied by the System Integrator. OS patch application as required by bank from time to time will be the responsibility of the System Integrator during the warranty and AMC period
- 4.4 The System Integrator shall be fully responsible for the manufacturer's warranty for all equipment, accessories, spare parts etc. against any defect arising from design, material, manufacturing workmanship, or any act or omission of the manufacturer /System Integrator or any defect that may develop under normal use of supplied equipment during the warranty period.
- 4.5 Warranty shall not become void even if Bank buys any other supplemental hardware from a third party installs it with these machines. However, the warranty will not be applied to such hardware installed.

Besides the above, the System Integrator will have to enter into Service Level Agreement (SLA) with the Bank.

5. Contract Period

The System Integrator needs to execute a Service Level Agreement (SLA) with Paschim Banga Gramin Bank covering all terms and conditions of this RFP. SLA will cover performance and availability of the solution deployed. The contract period will be for a period of five years from the date of Go-Live of the Project. Contract period may be extended further for maximum 2 years on mutually agreed terms and condition at that point of time. The performance of the System Integrator shall be reviewed every quarter. Any offer falling short of the contract validity period is liable for rejection.

6. Payment Terms:

Hardware Software Cost

Payment related to Table A & B

- a. 50% cost of Finacle related Hardware, Network equipment and Software cost (table A & table B) will be payable after successful installation with all the functionalities of the said software, including implementation of all hardware (Finacle & Biometric), software (related to Finacle & Biometric), network equipment at DC & DR sites and acceptance sign-off from the Bank realizing penalty charges, if any.
- b. 50% cost of other solution related Hardware and Software cost (table A & table B) will be payable after successful installation of respective application with all the functionalities of the said software, including implementation of all hardware, software at DC, DR sites & branches and acceptance sign-off from the Bank realizing penalty charges, if any.
- c. Remaining 50%, cost of Finacle related Hardware, Network equipment and Software cost (table A & table B) will be payable after successful migration (Go-Live) of Finacle 7.0.18 version to 10.2.25 with all the functionalities of the said software, including implementation of all hardware (Finacle & Biometric), software (related to Finacle & Biometric), network equipment at DC & DR sites and acceptance sign-off from the Bank realizing penalty charges, if any.
- d. Remaining 50%, cost of other solution related Hardware and Software cost (table B & table C) will be payable after successful implementation of respective application with all the functionalities of the said software, including implementation of all hardware, software at DC, DR sites & branches and acceptance sign-off from the Bank realizing penalty charges, if any.

AMC & ATS Cost and Facility Management Services

Payment related to Table C, D & G

- a. After expiry of warranty period, AMC for Hardware & Network Equipment shall be paid in quarterly arrear basis, after realizing penalty charges, if any.
- b. After expiry of Initial One year period, ATS for Software shall be paid yearly in advance, after realizing penalty charges, if any.
- c. The charges for Facility Management Resources would be payable quarterly in arrears, at the end of the month, on actuals, as per the bill submitted by the System Integrator and on verification of the Bank after realizing penalty charges, if any.

One Time Implementation cost

Payment related to Table E & F

- a. 90% of Implementation cost (Table E) will be payable after successful migration (Go-Live) of Finacle 7.0.18 version to 10.2.25 with all the functionalities of the said software, including implementation of all hardware (Finacle & Biometric), software (related to Finacle & Biometric), network equipment at DC & DR sites and acceptance sign-off from the Bank realizing penalty charges, if any.
- b. Remaining 10%, Implementation cost (Table E) will be payable after three months of successful migration of Finacle 7.0.18 version to 10.2.25 with all the functionalities of the said software, including implementation of all hardware (Finacle & Biometric), software (related to Finacle & Biometric), network equipment at DC & DR sites and acceptance sign-off from the Bank realizing penalty charges, if any.
- c. 50% cost of other solution implementation (table F) will be payable after successful implementation of respective application in 50% branches and DC & DR sites with all the functionalities of the said software, including implementation of all hardware, software at DC, DR sites & branches and acceptance sign-off from the Bank realizing penalty charges, if any.
- d. Remaining 50%, cost of other solution implementation (table F) will be payable after completion of successful implementation of respective application with all the functionalities of the said software, including implementation of all hardware, software at DC, DR sites & branches and acceptance sign-off from the Bank realizing penalty charges, if any.

7. Paying Authority

The payments as per the Payment Schedule covered hereinabove shall be paid by DIT, Head Office. However, Payment of the Bills would be released, on receipt of advice / confirmation for satisfactory delivery and commissioning, live

running and service report etc. Also the System Integrator has to submit the certificate of insurance covering all the risks during transit, storage, installation, commissioning, testing and handling including third party liabilities
Following Documents are to be submitted for Payment:

- Invoice in Triplicate
- Duly receipted Delivery Challans
- Original Octroi Receipts, if any
- Installation Report, counter signed by an authorized official from the delivery site.

8. Performance Bank Guarantee

The System Integrator, within 15 days from the date of letter of intent (LOI) will have to furnish a Performance Bank Guarantee, format as per Annexure – G, issued by any scheduled commercial bank (other than Bank) equivalent to 10% of the total project cost valid for 63 months (60 months + a claim period of 3 months) from the date of Letter Of Intent (LOI). Upon furnishing the Performance Bank Guarantee, the EMD of the System Integrator shall be returned.

The Performance Bank Guarantee shall act as a security deposit and either in case the System Integrator is unable to start the project within the stipulated time or start of the project is delayed inordinately beyond the acceptable levels, the Bank reserves the right to forfeit the same.

Further, the Bank reserves the right to invoke the Performance Bank Guarantee in case the System Integrator is not able to fulfill any and all conditions specified in the document or is unable to complete the project within the stipulated time and such breach remains uncured within such period as mentioned in the termination clauses. This is independent of the LD (Liquidity Damage) on Delivery and installation.

In case the contract is getting extended, the System Integrator shall submit the Bank Guarantee of 10% of the project cost of that period of time with a validity of the extension period with 3 months claim period.

The System Integrator shall be responsible for extending the validity date and claim period of Performance Bank Guarantee as and when it is due on the account of non-completion of the project and warranty period.

9. Uptime & Penalty

The Finacle CBS system has to be up for at least 99.90%. The Finacle CBS is deemed to be up if the users are able to log into the system, do regular operations and transactions are posted from all types of alternate delivery channels. The uptime of Critical and Key infrastructure of Data Centre and

Disaster Recovery Centre will be supported on 24x7 basis. The business hours are 24X7 on all calendar days. The uptime will be calculated on monthly basis as specified below and penalty will be charged accordingly.

Uptime (Monthly)

Sl. No.	Category	Required uptime
1.	Production Hardware - Server, Storage (DC, DR) and NAS (DC & DR), Load Balancer, SAN director/switch, Backup solution for Finacle.	99.90%
2.	Finacle Database & Delivery Channels	99.90%
3.	Biometric Application services	99.90%
4.	Core Network	99.90%
5.	Active Directory, Antivirus & EMS Tools	99.50%
6.	Branch Network equipment	99.00%
7.	Finacle UAT/Migration/Development environment	99.00%

Note:

- Response time for replacement/ rectification for all production related hardware & Core Network item is 8 hours in all days.
- Response time for replacement/ rectification for UAT related hardware and Branch Network item is 24 hours

If the System Integrator fails to rectify/replace faulty hardware within stipulated time mentioned above, then System Integrator will be penalized by 0.5%/per hours or part thereof of monthly facility management cost and same will be deducted from monthly FM changes. This penalty will be independent of other penalties

Penalty amount

SLA Parameters	Penalty
For critical Solution- Production Hardware - Server, Storage (DC, DR) and NAS (DC & DR), Load Balancer, SAN director/switch, Backup solution for Finacle, Finacle Applications, Database & Delivery Channels, Biometric Application services & Core Network Schedule uptime – 99.90%	For each 0.1% drop in availability, penalty 1% of monthly FM cost
For non-critical solution - Active Directory, Antivirus & EMS Tools	For each 0.1% drop in availability, penalty 0.5% of

Schedule uptime – 99.50%	monthly FM cost
Non-functioning of Network, AD, Antivirus at branch level	For each 0.1% drop in availability, penalty 1% of per branch monthly FM cost (Monthly FM charges / 230)
Schedule uptime – 99%	

Total penalty imposed by the Bank under this contract shall not exceed 10% of the order value (TCO).

10. Liquidated Damage

Notwithstanding Bank's right to cancel the order, liquidated damages at 1% (one percent) of the TCO will be charged of the price of undelivered portion/ not installed services for every week's delay subject to a maximum of 10% of the total cost of ownership. Bank will have right to recover these amounts by any mode such as adjusting from any payments to be made to the System Integrator or from the performance Bank Guarantee. Liquidated damages will be calculated per week basis. Dispatch details shall be shared by the System Integrator regularly after handing over the consignment to the concerned Courier Agency/Indian Postal services.

The Bank reserves its right to recover these amounts by any mode including adjusting from any payments to be made by the Bank to the System Integrator. Bank may invoke the Bank Guarantee for further delay in in delivery & migration.

11. Price Validity

The System Integrator will be required to keep the price valid for a period of 01 year (12 months) from the date of submission of commercial bid. There shall be no increase in price for any reason whatsoever during the period of 12 months and Bank may place the additional Purchase Orders to the System Integrator for any or all of the services at the agreed unit rate for line items as mentioned in the commercial format i.e. Annexure – E during the price validity period of 12 months.

12. Single Point of Contact

The System Integrator shall appoint a single point of contact, with whom Bank will deal, for any activity pertaining to the requirements of this RFP.

13. Taxes

- a. Bidder shall be solely liable for the payment of all taxes, duties, fines, penalties, etc., by whatever name called as may become due and

payable under the local, state and/or central laws, rules and/or regulations as may be prevalent and as amended from time to time in relation to the services rendered pursuant to this agreement. The Bank may in its discretion, but without being bound to do so, make payment of Taxes, duties as aforesaid and in the event of such payment, Bank shall be entitled to deduct the payment so made from the payment due to System Integrator in respect of Bills.

- b. The Bank shall not be liable nor responsible for collection and / or payment of any such taxes, duties, fines, penalties etc., by whatever name called, that are due and payable by System Integrator, under the local, state and/ or central laws, rules and /or regulations as may be prevalent and as amended from time to time.
- c. Nothing contained herein shall prevent the Bank from deducting taxes deductible at source as required by any law/s or regulation/s. System Integrator shall be responsible to report any non-receipt of certificate of taxes deducted at source within ninety (90) days of deduction of such taxes at source by the Bank to System Integrator. The Bank will not issue any duplicate certificate for deduction of taxes at source unless such request is made within ninety (90) days of the closure of the financial year.
- d. Bidder shall co-operate fully in the defence of any claim/s by any local, state or union authorities against The Bank with respect to any taxes and/or duties due and payable by System Integrator and /or individuals assigned by System Integrator under this agreement. Without limiting the generality of the foregoing System Integrator shall upon request by The Bank, give to The Bank all documents, evidences in a form satisfactory to The Bank to defend such claim/s. Any claims filed against The Bank, the cost to be borne by the System Integrator.
- e. The payments which is/are inclusive of GST and other taxes, fees etc. as per the Payment Schedule covered herein above shall be paid by Department of Information Technology, Bank, Head Office – Howrah. However, Payment of the Bills would be released, on receipt of advice / confirmation for satisfactory delivery and commissioning, live running and service report etc. after deducting all penalties.

14. Confidentiality and Secrecy

The RFP document is confidential and is not to be reproduced, transmitted, or made available by the Recipient to any other party. The RFP document is provided to the Recipient on the basis of the undertaking of confidentiality given by the Recipient to Bank. Bank may update or revise the RFP document or any part of it. The Recipient acknowledges that any such revised or amended document is received subject to the same terms and conditions as this original and subject to the same confidentiality undertaking.

The Recipient will not disclose or discuss the contents of the RFP document with any officer, employee, consultant, director, agent, or other person associated or affiliated in any way with Bank or any of its customers, suppliers, or agents without the prior written consent of Bank.

The System Integrator must undertake that they shall hold in trust any Information received by them under the Contract/Service Level Agreement, and the strictest of confidence shall be maintained in respect of such Information. The System Integrator has also to agree:

- To maintain and use the Information only for the purposes of the Contract/Agreement and only as permitted by BANK;
- To only make copies as specifically authorized by the prior written consent of Bank and with the same confidential or proprietary notices as may be printed or displayed on the original;
- To restrict access and disclosure of Information to such of their employees, agents, strictly on a “need to know” basis, to maintain confidentiality of the Information disclosed to them in accordance with this Clause, and
- To treat all Information as Confidential Information.
- The System Integrator acknowledges and agrees that all tangible and intangible information obtained, developed or disclosed including all documents, data, papers, statements, any business/customer information, trade secrets and process of the Bank relating to its business practices in connection with the performance of services under this Agreement or otherwise, is deemed by the Bank and shall be considered to be confidential and proprietary information (“Confidential Information”), solely of the Bank and shall not be used/disclosed to anybody in any manner except with the written consent of The Bank.
- The selected service provider shall ensure that the same is not used or permitted to be used in any manner incompatible or inconsistent with that authorized by the Bank. The Confidential Information will be safeguarded and the selected service provider will take all necessary action to protect it against misuse, loss, destruction, alterations or deletions thereof.
- Conflict of interest: The Vendor shall disclose to BANK in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for the Vendor or the System Integrator's team) in the course of performing the Service(s) as soon as practical after it becomes aware of that conflict.
- The System Integrator is required to execute a Non-Disclosure Agreement to the bank as per bank's format before or at the time of execution of the Service Level Agreement.

15. Right to Alter Quantities

The Bank reserves the right to alter the number of hardware hardware/software/licenses specified in the tender in the event of changes in

plans of the Bank. Any decision of Bank in this regard shall be final, conclusive and binding on the System Integrator. The bank reserves the right to place order for additional hardware/software/licenses at the agreed price during the contract period with the same terms and conditions. Banks is not obligate to purchase all the quantity of the hardware/software/licenses as mentioned above. Bank reserves the right to alter the quantities at any time **not exceeding 25% of the total contract value** without prior notice to the System Integrator(s).

16. Compliance With Laws

- a. The selected service provider hereto agrees that it shall comply with Labour Laws and all applicable union, state and local laws, ordinances, regulations, CVC / RBI guidelines / statutory requirements and codes in performing its obligations hereunder, including the procurement of licenses, permits and certificates and payment of taxes where required at no additional cost to the Bank.
 - b. The selected service provider has represented that their company holds all valid, licenses/registrations as may be required under the laws prevalent from time to time, in particular but not limited to, The Contract Labor (Abolition and Regulation Act) and other labor laws. The service provider shall ensure that all such registrations/licenses where required, are kept valid and subsisting throughout the term of this agreement.
 - c. If at any time during the term of this Agreement, if Bank is informed or information comes to its attention that the selected service provider is or may be in violation of any terms and conditions mutually agreed between the Bank and the service provider, which proves to be unsatisfactory to the Bank, then the Bank shall be entitled to terminate this
 - d. Agreement by giving not less than one month notice in writing.
 - e. The System Integrator shall undertake to observe, adhere to, abide by, comply with and notify the Bank about all laws in force or as are or as made applicable in future, pertaining to or applicable to them, their business, their employees or their obligations towards them and all purposes of this tender and shall indemnify, keep indemnified, hold harmless, defend and protect the Bank and its employees / officers / staff / personnel / representatives / agents from any failure or omission on its part to do so and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to conform or comply with the above and all other statutory obligations arising there from.
 - f. All the employees/operator deployed by the vendor for the digitization activity must comply with government's rules and regulations like minimum wages act, Provident fund and ESIC facility standard. (Proof of compliance and labour license needs to be submitted along with the quotation).
 - g. This indemnification is only a remedy for the Bank. The vendor is not absolved from its responsibility of complying with the statutory obligations as specified above. Indemnity would be limited to court awarded damages and shall
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exclude indirect, consequential and incidental damages. However indemnity would cover damages, loss or liabilities suffered by the bank arising out of claims made by its customers and/or regulatory authorities.

- h. The System Integrator confirms to Bank that it complies with all Central, State, Municipal laws and local laws and rules and regulations and shall undertake to observe, adhere to, abide by, comply with and notify Bank about compliance with all laws in force including Information Technology Act 2000, or as are or as made applicable in future, pertaining to or applicable to them, their business, their employees or their obligations towards them and for all purposes of this Contract, and shall indemnify, keep indemnified, hold harmless, defend and protect Bank and its officers/staff/personnel/representatives/agents from any failure or omission on its part to do so and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to conform or comply with the above and all other statutory obligations arising there from. The System Integrator shall promptly and timely obtain all such consents, permissions, approvals, licenses, etc., as may be necessary or required for any of the purposes of this project or for the conduct of their own business under any applicable Law, Government Regulation / Guidelines and shall keep the same valid and in force during the term of the project, and in the event of any failure or omission to do so, shall indemnify, keep indemnified, hold harmless, defend, protect and fully compensate Bank and its employees/officers/staff/personnel/
- i. representatives/agents from and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to conform or comply with the above and all other statutory obligations arising there from and Bank will give notice of any such claim or demand of liability within reasonable time to the System Integrator.

17. Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the System Integrator or the Bank as the case maybe which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance, such as:

- Natural phenomenon, including but not limited to floods, droughts, earthquakes, epidemics, pandemics
- Situations, including but not limited to war, declared or undeclared, priorities, quarantines, embargoes.
- Terrorist attacks, public unrest in work area.

Provided either party shall within ten (10) days from the occurrence of such a cause notify the other in writing of such causes. The System Integrator or the Bank shall not be liable for delay in performing his / her obligations resulting from any Force Majeure cause as referred to and / or defined above.

18. Completeness of the Project

The project will be deemed as incomplete if the desired objectives of the project as mentioned in Section "Scope of Work" of this document are not achieved.

19. Acceptance Testing

The Bank will carry out the acceptance tests as per Scope of work Part – IV supplied & implemented by the System Integrator as a part of the Project. The Vendor shall assist the Bank in all acceptance tests to be carried out by the Bank. The provisioned items will be deemed accepted only on successful acceptance of those products and the vendor would need to provision insurance of those items till successful acceptance. The Bank at its discretion may modify, add or amend the acceptance tests which then will have to be included by the vendor. The Vendor shall arrange for the tests at the relevant sites in the presence of the officials of the Bank. The Vendor should ensure that the tests will involve trouble-free operation of the complete system apart from physical verification and testing and that there shall not be any additional charges payable by the Bank for carrying out this acceptance test.

20. Order Cancellation

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

- i. The System Integrator commits a breach of any of the terms and conditions of the offer or any of the terms and conditions of the Purchase Order / SLA.
- ii. Serious discrepancy in the quality of service expected during the implementation, rollout and subsequent maintenance process.
- iii. The System Integrator/Vendor violates the Laws, Rules, Regulations, Bye-Laws, Guidelines, and Notifications etc.,;
- iv. The System Integrator goes into liquidation voluntarily or otherwise.
- v. An attachment is levied or continues to be levied for a period of 7 days upon the effects of the order.
- vi. The progress regarding execution of the order accepted made by the vendor is found to be unsatisfactory.
- vii. Non-compliance of the scope of the job.
- viii. Repetitive failure of the deployed personnel to perform the job to the satisfaction of the bank.
- ix. The System Integrator/Vendor fails to complete the assignment as per the timelines prescribed in the Work Order/ said Agreement/Contract and the extension, if any allowed.
- x. On the events of data piracy / privacy / system failures / security failures.

- xi. If deductions on account of liquidated damages exceed more than 10% of the total order price.

In case of cancellation of order

- i. In case the System Integrator fails to deliver the ordered hardware, software, services and FM resources as stipulated in the delivery schedule, BANK reserves the right to procure these deliverable from alternate sources at the risk, cost and responsibility of the System Integrator with the capping of 125% of the original quoted cost for such deliverable as per commercial bid.
- ii. If the System Integrator does not perform satisfactorily or delays execution of order, Bank reserves the right to get the balance order executed by another party of its choice by giving 30 days' notice for the same. In this event the System Integrator is bound to make good with the capping of 125% of the original quoted cost for such deliverable as per commercial bid, which Bank may have to incur in executing the balance order. This clause is applicable, if for any reason, the order is cancelled.
- iii. Bank reserves the right to recover any dues payable by the System Integrator under the contract from any amount outstanding to the credit of the System Integrator, including the bills and /or invoking the Bank Guarantee under this purchase order.
- iv. In case of cancellation of order, any advance payments (except payment against ATS) made by the Bank to the Vendor for implementation of project, would necessarily have to be returned to the Bank, if System Integrator fail to return such payment within 30 days, then vendor have to be returned amount to the Bank with interest @ 15% per annum , further the Vendor would also be required to compensate the Bank for any direct loss suffered by the Bank due to the cancellation of the contract/purchase order and any additional expenditure to be incurred by the Bank to appoint any other Vendor. This is after repaying the original amount paid.
- v. Vendor should be liable under this section if the contract/ purchase order has been cancelled in case sum total of penalties and deliveries exceeds 10% of the TCO.

In case of order cancellation Bank will notify System Integrator with 90 days' notice period inclusive of 30 days cure period before cancellation of the Order. However, it is clarified that the notice should specifically contain that the 90 days period for cancellation is inclusive of cure period of 30 days, if the Vendor fails to cure within 30 days time the notice for cancellation will become absolute.

21. Indemnity

Vendor shall indemnify, protect and save the Bank and hold the Bank harmless from and against all claims, losses, costs, damages, expenses, action suits and other proceedings, (including reasonable attorney fees), relating to or resulting directly or indirectly from

- I. an act or omission of the Vendor and /or its employees, agents, subcontractors in performance of the obligations under this Contract; and/or
- II. material breach of any of the terms of this Contract or breach of any representation or false representation or inaccurate statement or assurance or covenant or warranty of the Vendor under this Contract; and/or,
- III. Bank's authorized/ bona-fide use of the deliverables and/or the services provided by the Vendor under this Contract; and/or
- IV. Infringement of any patent, trademarks, copyrights etc. or such other statutory infringements in respect of all components provided to fulfil the scope of this project applicable to Vendor's scope. Vendor shall further indemnify the Bank against any loss or damage to the Bank premises or property, loss of life, solely attributable, to the acts of the Vendor's employees or representatives.

The Vendor shall further indemnify the Bank against any loss or damage arising out of claims of infringement of third-party copyright, patents, or other intellectual property, and third-party claims on the Bank for malfunctioning of the equipment or software or deliverables at all points of time, provided however,

- I. The Bank notify the Vendor in writing immediately on becoming aware of such claim,
- II. The Vendor has sole control of defense and all related settlement negotiations,
- III. The Bank provides the Vendor with the assistance, information and authority reasonably necessary to perform the above, and
- IV. The Bank does not make any statement or comments or representations about the claim without prior written consent of the Vendor, except under due process of law or order of the court.

It is clarified that the Vendor shall in no event enter into a settlement, compromise or make any statement (including failure to take appropriate steps) that may be detrimental to the Bank (and/or its customers, users and service providers) rights, interest and reputation. Vendor shall be responsible for any loss of life, etc, due to acts of Vendor's representatives, and not just arising out of gross negligence or misconduct, etc, as such liabilities pose significant risk.

Vendor should take full responsibility for its and its employee's actions. The Vendor should indemnify the Bank (including its employees, directors or representatives) from and against claims, losses, and liabilities arising from:

- Non-compliance of the Vendor with applicable Laws / Governmental Requirements to its scope under this Contract, IP infringement;
- Gross Negligence or willful misconduct attributable to the Vendor, its employees, and agents
- Material breach of any terms of this Contract, Representation or Warranty
- Act or omission in performance of service.

Further,

- I. Vendor's aggregate liability in connection with obligations undertaken as a part under this Contract regardless of the form or nature of the action giving rise to such liability (whether in contract, tort or otherwise), shall be at actual and limited to the Total Contract Value.
- II. Vendor's liability in case of claims against the Bank resulting from Willful Misconduct or Gross Negligence of Vendor, its employees and Subcontractors or from infringement of patents, trademarks, copyrights or such other Intellectual Property Rights or breach of confidentiality obligations shall be unlimited.
- III. Bank shall not be held liable for any responsibility or claim / litigation arising out of the use of any third-party software or modules supplied by Vendor as part of procurement under this Contract.
- IV. Under no circumstances bank shall be liable to the Vendor for direct, indirect, incidental, consequential, special or exemplary damages arising from termination of this Contract, even if Bank has been advised of the possibility of such damages, such as, but not limited to, loss of revenue or anticipated profits or loss of business.
- V. Subject to any law to the contrary, and to the maximum extent permitted by law Bank shall not be liable to Vendor for any consequential/ incidental, or indirect damages arising out of this Contract.

Indemnity would be limited to court; tribunal or arbitrator awarded damages and shall exclude indirect, consequential and incidental damages. However indemnity would cover damages, loss or liabilities suffered by the Bank arising out of claims made by its customers and/or regulatory authorities. The Vendor shall not indemnify the Bank for

- I. Any loss of profits, revenue, contracts, or anticipated savings or
- II. Any consequential or indirect loss or damage however caused, provided that indemnity would cover damages, loss or liabilities suffered by the Bank arising out of Claim made by Regulatory Authorities for reasons attributable to breach of services provided/ obligation under this Contract and by the Vendor. Vendor shall be responsible for any loss of life or bodily

injury, due to acts of Vendor's representatives, and not just arising out of gross negligence or misconduct, etc., as such liabilities pose significant risk. Vendor should take full responsibility for its and its employee's actions.

“Gross Negligence” means an indifference to, and a blatant violation of a legal duty with respect to the rights of others, being a conscious and voluntary disregard of the need to use reasonable care, which is likely to cause foreseeable grave injury or harm to persons, property, or both. Gross negligence involves conduct that is extreme, when compared with ordinary negligence. A mere failure to exercise reasonable care shall not be a Gross negligence.

“Wilful Misconduct” means any act or failure to act with an intentional disregard of any provision of this RFP/Contract, which a party knew or should have known if it was acting as a reasonable person, which would result in injury, damage to life, personal safety, real property, harmful consequences to the other party, but shall not include any error of judgment or mistake made in good faith.

The Vendor should indemnify the Bank (including its employees, directors representatives) from and against third party claims of losses, and liabilities arising from non-compliance of the Vendor with Laws / Governmental Requirements applicable to its scope of work

22. Publicity

Any publicity by the System Integrator in which the name of the Bank is to be used should be done only with the explicit written permission of the Bank. The System Integrator shall not make or allow making a public announcement or media release about any aspect of the Contract unless The Bank first gives the System Integrator its prior written consent.

23. Privacy and Security Safeguards

The System Integrator shall not publish or disclose in any manner, without the Bank's prior written consent, the details of any security safeguards designed, developed, or implemented by the System Integrator under this contract or existing at any Bank location. The System Integrator shall develop procedures and implementation plans to ensure that IT resources leaving the control of the assigned user (such as being reassigned, removed for repair, replaced, or upgraded) are cleared of all Bank Data and sensitive application software. The System Integrator shall also ensure that all subcontractors who are involved in providing such security safeguards or part of it shall not publish or disclose in any manner, without the Bank's prior written consent, the details of any security safeguards designed, developed, or implemented by the System Integrator under this contract or existing at any Bank location.

24. Technological Advancements

The System Integrator shall take reasonable and suitable action, taking into account economic circumstances, at mutually agreed increase / decrease in charges, and the Service Levels, to provide the Services to the Bank at a technological level that will enable the Bank to take advantage of technological advancement in the industry from time to time.

25. Guarantees

System Integrator should guarantee that all the material as deemed suitable for the delivery and management for this RFP. All hardware and software must be supplied with their original and complete printed documentation.

26. Exit option and Contract Re-Negotiation

The Bank reserves the right to cancel the contract in the event of happening one or more of the following Conditions:

- i. Failure of the System Integrator to accept the contract / purchase order and furnish the Performance Guarantee within 30 days of receipt of purchase contract;
- ii. Delay in offering;
- iii. Delay in commissioning project beyond the specified period;
- iv. Delay in completing commissioning / implementation and acceptance tests / checks beyond the specified periods;
- v. Serious discrepancy in project noticed during the testing;
- vi. Serious discrepancy in functionality to be provided or the performance levels agreed upon, which have an impact on the functioning of the Bank.
- vii. Serious discrepancy in completion of project.
- viii. Serious discrepancy in maintenance of project.

Bank shall notify System Integrator with 90 days' notice period inclusive of 30 days cure period before cancellation of the Order. However, it is clarified that the notice should specifically contain that the 90 days period for cancellation is inclusive of cure period of 30 days, if the Vendor fails to cure within 30 days time the notice for cancellation will become absolute.

In addition to the cancellation of purchase contract, Bank reserves the right to appropriate the damages through encashment of Bid Security / Performance Guarantee given by the System Integrator.

The Bank will reserve a right to re-negotiate the price and terms of the entire contract with the System Integrator at more favourable terms in case such terms

are offered in the industry at that time for projects of similar and comparable size, scope and quality.

The Bank shall have the option of purchasing the equipment from third-party suppliers, in case such equipment is available at a lower price and the System Integrator's offer does not match such lower price. Notwithstanding the foregoing, the System Integrator shall continue to have the same obligations as contained in this scope document in relation to such equipment procured from third-party suppliers.

As aforesaid the Bank would procure the equipment from the third party only in the event that the equipment was available at more favourable terms in the industry, and secondly, The Equipment procured here from third parties is functionally similar, so that the System Integrator can maintain such equipment. The modalities under this right to re-negotiate /re-procure shall be finalized at the time of contract finalization.

Notwithstanding the existence of a dispute, and/or the commencement of arbitration proceedings, the System Integrator will be expected to continue the services. The Bank shall have the sole and absolute discretion to decide whether proper reverse transition mechanism over a period of 6 to 12 months, has been complied with. In the event of the conflict not being resolved, the conflict will be resolved through Arbitration.

The Bank and the System Integrator shall together prepare the Reverse Transition Plan. However, the Bank shall have the sole decision to ascertain whether such Plan has been complied with.

Reverse Transition mechanism would typically include service and tasks that are required to be performed / rendered by the System Integrator to the Bank or its designee to ensure smooth handover and transitioning of Bank's deliverables, maintenance and facility management. However during transitioning period payment will be made to vendor as per payment terms.

27. Signing of Contract

The System Integrator(s) shall be required to enter into a service level agreement (SLA) with Bank, within 15 days of the award of the Bid through a Letter of Intent or within such extended period as may be specified.

The SLA shall be based on the requirements of this RFP, the terms and conditions of purchase order, the letter of acceptance and such other terms and conditions as may be determined by the Bank to be necessary for the proper performance of the work in accordance with the Bid and the acceptance thereof, with terms and conditions contained in a Memorandum of Understanding to be signed at the time of execution of the Form of Contract.

The System Integrator will also sign a Non-Disclosure Agreement and Deed of Indemnity with the Bank on a format prescribed by the Bank.

28. Technical Inspection and Performance Evaluation

Bank reserves its right to carry out a technical inspection and performance evaluation (bench-marking) of the offered item(s). Bank may instruct eligible System Integrators to make technical presentation at Bank's Head Office, Kolkata for the proposed solution / service. System Integrators will have to make such presentation at their own cost.

29. Verification

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

30. Termination

BANK reserves the right to cancel the work/purchase order or terminate the SLA by giving 90 (ninety) days' prior notice in writing inclusive of 30 days cure period and recover damages, costs and expenses etc., incurred by Bank under the following circumstances:

- i. The System Integrator commits a breach of any of the terms and conditions of this RFP or the SLA to be executed between the Bank and the System Integrator.
 - ii. The System Integrator goes into liquidation, voluntarily or otherwise.
 - iii. The System Integrator violates the Laws, Rules, Regulations, Bye-Laws, Guidelines, and Notifications etc., applicable to the System Integrator under performance of the RFP.
 - iv. An attachment is levied or continues to be levied for a period of seven days upon effects of the bid.
 - v. The System Integrator fails to complete the assignment as per the timelines prescribed in the Work Order/SLA and the extension, if any allowed.
 - vi. Deductions on account of liquidated damages exceed more than 10% of the total work order.
 - vii. In case the System Integrator fails to deliver the resources as stipulated in the delivery schedule, BANK reserves the right to procure the same or similar resources from alternate sources at the risk, cost and responsibility of the System Integrator.
 - viii. After award of the contract, if the System Integrator does not perform satisfactorily or delays execution of the contract, BANK reserves the right to get the balance contract executed by another party of its choice by giving
-

one month's notice for the same. In this event, the System Integrator is bound to make good the additional expenditure, which BANK may have to incur in executing the balance contract. This clause is applicable, if the contract is cancelled for any reason, whatsoever.

- ix. BANK reserves the right to recover any dues payable by the System Integrator from any amount outstanding to the credit of the System Integrator, including the adjustment of pending bills and/or invoking the Performance Bank Guarantee under this contract. The rights of the Bank enumerated above are in addition to the rights/remedies available to the Bank under the Law(s) for the time being in force.

31. Termination for Convenience

The Bank, by written notice sent to the vendor, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Bank's convenience, the extent to which performance of work under the Contract is terminated and the date upon which such termination becomes effective.

In case of Termination of Convenience Bank will provide notice period of 90 days inclusion cure period of 30 days. However, it is clarified that the notice should specifically contain that the 90 days period for cancellation is inclusive of cure period of 30 days, if the Vendor fails to cure within 30 days time the notice for cancellation will become absolute. Bank will pay the bidder till termination date for satisfactory services after deduction of penalty & LD amount, if applicable as per terms & conditions of the RFP.

32. Termination for Insolvency

The Bank may at any time terminate the Contract by giving written notice (90 days' notice period) to the System Integrator, if the System Integrator becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the System Integrator, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Bank.

33. Termination for Default

The Bank, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the System Integrator, may terminate this Contract in whole or in part, if the System Integrator fails to perform any obligation(s) under the Contract.

In case of Termination for Default Bank will provide notice period of 90 days inclusion cure period of 30 days. However, it is clarified that the notice should specifically contain that the 90 days period for cancellation is inclusive of cure

period of 30 days, if the Vendor fails to cure within 30 days' time the notice for cancellation will become absolute. Bank will pay the bidder till termination date for satisfactory services after deduction of penalty & LD amount, if applicable as per terms & conditions of the RFP

34. Consequences of Termination

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

In the event that the termination of the Contract is due to the expiry of the term of the Contract, a decision not to grant any (further) extension by Bank, the System Integrator herein shall be obliged to provide all such assistance to the next successor System Integrator or any other person as may be required and as Bank may specify including training, where the successor(s) is a representative/personnel of Bank to enable the successor to adequately provide the Service(s) hereunder, even where such assistance is required to be rendered for a reasonable period that may extend beyond the term/earlier termination hereof.

Nothing herein shall restrict the right of Bank to invoke the Performance Bank Guarantee and other guarantees, securities furnished, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available to Bank under law or otherwise.

The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by implication intended to come into or continue in force on or after such termination.

35. Dispute Resolution Mechanism

- i. The System Integrator and The Bank shall endeavour their best to amicably settle all disputes arising out of or in connection with the Contract in the following manner:
- ii. The Party raising a dispute shall address to the other Party a notice requesting an amicable settlement of the dispute within seven (7) days of receipt of the notice.

- iii. The matter will be referred for negotiation between Deputy General Manager of The Bank / Purchaser and the Authorised Official of the System Integrator. The matter shall then be resolved between them and the agreed course of action documented within a further period of 15 days.
- iv. In case any dispute between the Parties, does not settle by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration and such dispute may be submitted by either party for arbitration within 20 days of the failure of negotiations. Arbitration shall be held in Kolkata and conducted in accordance with the provisions of Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Each Party to the dispute shall appoint one arbitrator each and the two arbitrators shall jointly appoint the third or the presiding arbitrator.
- v. The "Arbitration Notice" should accurately set out the disputes between the parties, the intention of the aggrieved party to refer such disputes to arbitration as provided herein, the name of the person it seeks to appoint as an arbitrator with a request to the other party to appoint its arbitrator within 45 days from receipt of the notice. All notices by one party to the other in connection with the arbitration shall be in writing and be made as provided in this tender document.
- vi. The arbitrators shall hold their sittings at Kolkata. The arbitration proceedings shall be conducted in English language. Subject to the above, the courts of law at Kolkata alone shall have the jurisdiction in respect of all matters connected with the Contract/Agreement even though other Courts in India may also have similar jurisdictions. The arbitration award shall be final, conclusive and binding upon the Parties and judgment may be entered thereon, upon the application of either party to a court of competent jurisdiction. Each Party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the Parties unless the award otherwise provides.
- vii. The System Integrator shall not be entitled to suspend the Service/s or the completion of the job, pending resolution of any dispute between the Parties and shall continue to render the Service/s in accordance with the provisions of the Contract/Agreement notwithstanding the existence of any dispute between the Parties or the subsistence of any arbitration or other proceedings.

36. Arbitration

All dispute or differences whatsoever arising between the System Integrator and the Bank out of or in relation to the construction, meaning and operation, with the System Integrator, or breach thereof shall be settled amicably. If, however, the parties are not able to resolve any dispute or difference aforementioned amicably, the same shall be settled by arbitration in accordance with the Rules of Arbitration of the Indian Council of Arbitration and the award made in

pursuance thereof shall be binding on the parties. The Arbitrator / Arbitrators shall give a reasoned award.

Work under the Contract shall be continued by the System Integrator during the arbitration proceedings unless otherwise directed in writing by the Bank unless the matter is such that the work cannot possibly be continued until the decision of the arbitrator or of the umpire, as the case may be, is obtained and save as those which are otherwise explicitly provided in the Contract, no payment due to payable by the Bank, to the System Integrator shall be withheld on account of the on-going arbitration proceedings, if any unless it is the subject matter or one of the subject matters thereof. The venue of the arbitration shall be at KOLKATA, INDIA.

37. Applicable Law and Jurisdiction of Court

The Contract with the System Integrator shall be governed in accordance with the Laws of India for the time being enforced and will be subject to the exclusive jurisdiction of Courts at Kolkata (with the exclusion of all other Courts).

38. Limitation of Liability

- i. For breach of any obligation mentioned in this document, subject to point no. iii, in no event System Integrator shall be liable for damages to the Bank arising under or in connection with this agreement for an amount exceeding the total project cost/contract value.
- ii. Service Provider will ensure Bank's data confidentiality and shall be responsible for liability arising in case of breach of any kind of security and/or leakage of confidential customer/Bank's related information to the extent of loss cause.
- iii. The limitations set forth in point no. i shall not apply with respect to:
 - a. Claims that are the subject of indemnification pursuant to Intellectual Property Rights and Ownership.
 - b. Damages occasioned by the **Gross Negligence** or **Willful Misconduct** of Service Provider.
 - c. Damages occasioned by Service Provider for breach of confidentiality obligations.
 - d. Regulatory or statutory fines imposed by the Government or Regulatory agency or non-compliance of statutory or regulatory guidelines applicable to the project.

The System Integrator/Vendor will not be liable for any loss of profits, revenue, contracts or anticipated savings or any consequential or indirect loss or damages however caused, provided that indemnity would cover damages, loss

or liabilities suffered by the Bank arising out of claim made by Regulatory authorities for reasons attributable to breach of services provided / obligation under this contract and by the System Integrator.

“Gross Negligence” means an indifference to, and/or a blatant violation of a legal duty with respect of the rights of others, being a conscious and voluntary disregard of the need to use reasonable care, which is likely to cause foreseeable grave injury or harm to persons, property, or both. Gross negligence involves conduct that is extreme, when compared with ordinary negligence. A mere failure to exercise reasonable care shall not be a gross negligence.

“Willful Misconduct” means any act or failure to act with an intentional disregard of any provision of this RFP/Contract, which a party knew or should have known if it was acting as a reasonable person, which would result in injury, damage to life, personal safety, real property, harmful consequences to the other party, but shall not include any error of judgment or mistake made in good faith.

39. Privacy & Security Safeguards

The System Integrator shall not publish or disclose in any manner, without the Bank's prior written consent, the details of any security safeguards designed, developed, or implemented by the System Integrator under this contract or existing at any Bank location. The System Integrator shall develop procedures and implementation plans to ensure that IT resources leaving the control of the assigned user (such as being reassigned, removed for repair, replaced, or upgraded) are cleared of all Bank data and sensitive application software. The System Integrator shall also ensure that all subcontractors who are involved in providing such security safeguards or part of it shall not publish or disclose in any manner, without the Bank's prior written consent, the details of any security safeguards designed, developed, or implemented by the System Integrator under this contract or existing at any Bank location.

40. Non-Disclosure Agreement

By virtue of Contract, as and when it is entered into between the Bank and the System Integrator, and its implementation thereof, the System Integrator may have access to the confidential information and data of the Bank and its customers. The System Integrator will enter into a Non-Disclosure Agreement to maintain the secrecy of Bank's data as per following:-

- a. That the System Integrator will treat the confidential information as confidential and shall not disclose to any third party. The System Integrator will also agree that its employees, agents, sub-contractors shall maintain confidentiality of the confidential information.

- b. That the System Integrator will agree that it shall neither use, nor reproduce for use in any way, any confidential information of the Bank without consent of the Bank. That the System Integrator will also agree to protect the confidential information of the Bank with at least the same standard of care and procedures used by them to protect its own confidential Information of similar importance. Without limitation of the foregoing, the System Integrator shall use reasonable efforts to advise the Bank immediately in the event that the System Integrator learns or has reason to believe that any person who has had access to confidential information has violated or intends to violate the terms of the Contract to be entered into between the Bank and the System Integrator, and will reasonably cooperate in seeking injunctive relieve against any such person.
- c. That if the System Integrator hires another person to assist it in the performance of its obligations under the Contract, or assigns any portion of its rights or delegates any portion of its responsibilities or obligations under the Contract to another person, it shall cause its assignee or delegate to be bound to retain the confidentiality of the confidential information in the same manner as the System Integrator is bound to maintain the confidentiality. This clause will remain valid even after the termination or expiry of this agreement.

41. Amendment(s) In the Contract / Service Level Agreement

There shall be no variation(s) in or modification(s) in the terms of the Contract/ Service Level Agreement save and except by a written mutual consent signed by both the Parties i.e. the Bank and Vendor. Bank shall have the discretion/liberty to give effect to any amendment, modification etc. in the Contract/Service Level Agreement, if so required by Bank, sequel to any amendment(s)/ modification(s) etc. in the applicable Laws/Statutes including but not limited to amendment(s)/ modification(s) etc. in the existing Guidelines/ Instructions issued/to be issued by any Regulatory Authority.

42. Severability

If any provision of this Agreement is held to be illegal, invalid, or unenforceable under any Applicable Law, and if the rights or obligations of the Parties under this Contract/ Service Level Agreement will not be materially and adversely affected thereby (a) such provision will be fully severable; (b) this Contract/Service Level Agreement will be construed and enforced as if such illegal, invalid, or unenforceable provision had never been comprised a part hereof; and (c) the remaining provisions of this Contract/ Service Level Agreement will remain in full force and effect and will not be affected by the illegal, invalid, or unenforceable provision or by its severance here from.

43. Blacklisting

Grounds for Disqualification & Blacklisting

(A) Notwithstanding anything contained in this document, any System Integrator/selected Vendor shall be disqualified when –

- a) Any System Integrator who have been black-listed or otherwise debarred by any Bank/Financial Institution/Central Government/State Government/any Central or State Undertaking or Corporation/Reserve Bank of India or any other Regulatory/Statutory Authority as on date of the publication of this Tender/Procurement;
- b) Any System Integrator whose Contract/Agreement with any Bank/Financial Institution/Central Government/State Government/any Central or State Undertaking or Corporation/Reserve Bank of India or any other Regulatory/Statutory Authority has been terminated before the expiry of the Contract/Agreement for breach of any terms and conditions at any point of time during the last five years;
- c) Any System Integrator whose Earnest Money Deposit and/or Security Deposit have been forfeited by any Bank / Financial Institution/Central Government/ State Government/any Central or State Undertaking or Corporation/ Reserve Bank of India or any other Regulatory/Statutory Authority, during the last five years, for breach of any terms and conditions.

(B) Further disqualification can be imposed by the Bank in accordance with the procedures established, which may include but not limited to the following grounds, either at the stage of Competitive Bidding or at the stage of implementation of the Contract:

Commission of any act of:

- i) submission of a bid, proposal or any other document that is known or should be known by the System Integrator to be false, misleading or non- meritorious or to contain false information or concealment of information which will influence the outcome of the eligibility screening/selection process;
- ii) any documented unsolicited attempt by the System Integrator to unduly influence the decision making process of the Bank while determining the eligibility screening/selection process in favour of the System Integrator;
- iii) unauthorized use of one's name or using the name of another for purpose of bidding;
- iv) breach of the terms of a public contract by a wilful or material failure to perform in accordance with the terms thereof;

- v) withdrawal of a bid, or refusal to accept an award, or enter into contract with any Bank/Financial Institution/Central Government/State Government/ any Central or State Undertaking or Corporation/Reserve Bank of India or any other Regulatory Authority without any justifiable cause, after the System Integrator had been adjudged as having submitted the lowest calculated Responsive Bid or highest rated Responsive Bid;
- vi) refusal or failure to furnish the required performance security within the prescribed time frame;
- vii) refusal to clarify or validate the Bid submitted, in writing, within a period of seven (7) calendar days from receipt of the request for clarification if sought by the Bank;
- viii) that may tend to defeat the purpose of the competitive bidding, such as but not limited to; an eligible System Integrator not purchasing the bid documents or not complying with the requirements during the evaluation of bid or habitually withdrawing from bidding or submitting letter of non-participation for at least three (3) times within a year, except for valid reasons;
- ix) lack of integrity or honesty or fraud, bribery, collusion or conspiracy;
- x) failure by the System Integrator/Vendor, due to solely his fault or negligence, to mobilize and commence the work or perform within the specified time period, as specified in the Tender Document, including but not limited to the Request for Proposal/ Request for Quotation/ Agreement/Letter of Intention/Purchase Order etc.,;
- xi) failure by the System Integrator/Vendor to fully and faithfully comply with its contractual obligations without valid cause, or failure to comply with any written lawful instruction of the Bank or its representative(s) pursuant to the implementation of the Contract, which may include but not limited to the following:
 - a. Employment of competent technical personal, competent engineers and/or work supervisors;
 - b. Provision of warning signs and barricades in accordance with approved plans and specifications and contract provisions;
 - c. Stockpiling in proper places of all materials and removal from the project site of waste and excess materials, including broken pavement and excavated debris in accordance with approved plans and specifications and contract provisions;
 - d. Deployment of committed equipment, facilities, support staff and manpower; and
 - e. Renewal of effectively date of the performance security after its expiry during the tenure of the Contract.

- xii) assignment and subcontracting the Contract or any part thereof or substitution of key personnel named in the proposal without prior written approval by the Bank;
- xiii) for the procurement of goods, unsatisfactory progress in the delivery of the goods by the manufacturer, supplier or distributor arising from his fault or negligence and/or unsatisfactory or inferior quality of goods, as may be provided in the contract;
- xiv) for the procurement of consulting services, poor performance by the consultant of his services arising from his fault or negligence. The poor performance of the Consultant can include and may not be limited to defective design resulting in substantial corrective works in design and/or construction, failure to deliver critical outputs due to consultant's fault or negligence, specifying materials which are inappropriate, substandard, or way above acceptable standards, allowing defective workmanship or works by the contractor being supervised by the consultant etc.,
- xv) for the procurement of infrastructure projects, poor performance by the contractor or unsatisfactory quality and/or progress of work arising from his fault or negligence as per the existing performance monitoring system of the Bank shall be applied, quality of materials and workmanship not complying with the approved specifications arising from the contractor's fault or negligence, willful or deliberate abandonment or non-performance of the project or contract by the contractor resulting to substantial breach thereof without lawful and/or just cause.

(C) Any parameters described, supra, attributable to any Partner/Director shall be construed as disqualification for the Firm/Company, as the case may be.

(D) The Bank will have the discretion to disqualify the System Integrator/Vendor and/or initiate the process for blacklisting the System Integrator/Vendor and may also entail forfeiture of performance security furnished by the System Integrator/Vendor. “

44. Notices

Notice or other communications given or required to be given under the contract shall be in writing and shall be faxed/e-mailed followed by hand-delivery with acknowledgement thereof, or transmitted by pre-paid registered post or courier. Any notice or other communication shall be deemed to have been validly given on date of delivery if hand delivered & if sent by registered post than on expiry of seven days from the date of posting.

45. Adherence to Data Security

Bidders should ensure Data Security and protection of facilities/application managed by them. The deputed persons should aware about Bank's security policy and have to maintain the utmost secrecy & confidentiality of the bank's data including process performed at/outside the Bank premises. At any time, if it comes to the notice of the bank that data has been compromised / disclosed/ misused/misappropriated then bank would take suitable action as deemed fit and System Integrator would be required to compensate the bank to the fullest extent of loss incurred by the bank. System Integrator has to agree and provide undertaking not to disclose any Bank information and will maintain confidentiality of Bank information as per policy of the Bank and will sign "Non-Disclosure Agreement" (document provided by Bank). The legal and regulatory requirements, including data protection, intellectual property rights, copy right, all the relevant regulations for sub-contracting; including the controls that need to be implemented shall be included in the supplier agreement. All information resources (online/in-person) of the vendors and its partners shall be made accessible to reserve Bank of India as and when sought. Credentials of vendor/third party personnel accessing and managing the bank's critical assets shall be maintained and shall be accordance with Bank's policy. The Bank shall evaluate, assess, approve, review, control and monitor the risks and materiality of vendor/outsourcing activities and System Integrator shall ensure to support baseline system security configuration standards. The Bank shall also conduct effective due diligence, oversight and management of third-party vendors/service providers & partners. Vendor criticality assessment shall be conducted for all partners & vendors. Appropriate management and assurance on security risks in outsources and partner arrangements shall be ensured. System Integrator has to abide by the data security guideline by consulting executives as defined by the bank from time to time.

That the System Integrator will strictly maintain the secrecy of Bank's data.

46. Reverse Transitioning

The Bank and the System Integrator shall together prepare the Reverse Transition Plan. However, the Bank shall have the sole decision to ascertain whether such Plan has been complied with.

Reverse Transition mechanism would typically include service and tasks that are required to be performed / rendered by the Vendor to the Bank or its designee to ensure smooth handover and transitioning of Bank's deliverables, maintenance and facility management.

If the reverse transition is required during the contract period, then it would be maximum period of 3 months and only FM cost as per existing payment terms

will be paid and no additional payment to be made in the name of transitioning. However, due to some reasons if reverse transitioning is required beyond contract period then it will for a maximum period of 3 months and payment to the Vendor will be made as per last quarter payment of FM cost for the actual reverse transition period.

(Tender offer forwarding letter)

Tender Ref. No.: PBGB/HO/DIT/ /2023-24

Date:

**To
The General Manager- DIT
Paschim Banga Gramin Bank,
Head Office, Howrah**

With reference to the above RFP, having examined and understood the instructions including all annexure, terms and conditions forming part of the Bid, we, the undersigned, hereby enclose our offer for “Selection of System Integrator (SI) for Supply, Installation, Integration, Implementation and Maintenance of Hardware, Software, Facility Management Services for Finacle Core Banking (Version 10.x) at DC, DR and Near DR Site” mentioned in the RFP document forming Eligibility, Technical and Commercial Bids being parts of the above referred Bid.

In the event of acceptance of our Eligibility, Technical and Commercial Bids by The Bank we undertake to Supply, Installation, Integration, Implementation and Maintenance of Hardware, Software, Facility Management Services for Finacle Core Banking (Version 10.x) at DC, DR and Near DR Site as per your purchase orders.

In the event of our selection by the Bank for Supply, Installation, Integration, Implementation and Maintenance of Hardware, Software, Facility Management Services for Finacle Core Banking (Version 10.x) at DC, DR and Near DR Site, we will submit a Performance Guarantee for a sum equivalent to 10% of the Project Cost to be valid for a period of Five years (plus 3 month of claim period) in favour of **PASCHIM BANGA GRAMIN BANK** effective from the month of execution of Service Level Agreement.

We agree to abide by the terms and conditions of this tender and our offer shall remain valid for one year from the date of commercial bid opening and it remain binding upon us which may be accepted by The Bank any time before expiry of one year.

Until a formal contract is executed, this tender offer, together with the Bank's written acceptance thereof and Bank's notification of award, shall constitute a binding contract between us.

We understand that The Bank is not bound to accept the lowest or any offer the Bank may receive.

We enclose the following:

1. Tender Fee of Rs. _____ (Rupees _____ Only) dated _____. Vide UTR No/Txn Id _____.
2. BG No _____ for Rs. _____ (Rupees _____ Only) dated _____ as EMD.

Dated this __ day of ____ 2020

Signature: _____

(In the Capacity of) _____

Duly authorized to sign the tender offer for and on behalf of

General Details of the Bidder**A. Profile of Bidder**

1. Name of bidder:
2. Location
Regd. Office:
Controlling Office:
3. Constitution
4. Date of incorporation & Date of Commencement of business:
5. Major change in Management in last three years:
6. Names of Banker /s:
7. Name and details (designation and Phone no.) of Authorized Signatory:

B. Financial Position of Bidder for the last three financial years

	2019-20	2020-21	2021-22
Operating Profit			
Net Worth			
Turnover			

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

C. Proposed Service details in brief

- Description of service :
- Details of similar service provided to PSU organization/BFSI in India specifying the number of Banks and branches

Details of Experience in the field of (for Supply, Installation, Integration, Implementation and Maintenance of Hardware, Software, Facility Management Services for Finacle Core Banking (Version 10.x) at DC, DR and Near DR Site)

PSU Organization/BFSI		
Name of Organization	Period	
	From	To

N.B. Enclose copies of Purchase Orders and references.

Date: _____

Place: _____

Business Address: _____

Signature of Bidder: _____

Manufacturer's Authorization Form (MAF)

Date:

**To
The General Manager- DIT
Paschim Banga Gramin Bank, Head Office**

Dear Sir,

We (Name of the Manufacturer) who are established and reputable manufacturers of having factories at,, and do hereby authorize M/s (Name and address of Bidder) who is the bidder submitting its bid pursuant to the Request for Proposal issued by Bank on behalf, to submit a Bid and negotiate and conclude a contract with you for supply of equipment manufactured by us against the Request for Proposal received from your bank by the Bidder and we have duly authorized the Bidder for this purpose.

We hereby extend our guarantee/ warranty and AMC as per terms and conditions of the RFP Noand the contract for the equipment and services offered for supply against this RFP No..... By the above-mentioned Bidder, and hereby undertake to perform the obligations as set out in the RFP No.....In respect of such equipment and services. We undertake to provide back-to-back support for spares and skill to the bidder for subsequent transmission of the same to the Bank. We also undertake to provide support services during warranty as well as AMC/ATS period if the above bidder authorized by us fails to perform in terms of the RFP. We shall continue and ensure support services to Bank either directly or Bank appointed third party vendor, regarding this decision of bank will be final and binding upon us.

We also undertake to supply and upgrade of proposed hardware/ software over a period of five (5) years and support for period of minimum seven (7) years.

Yours Faithfully

Authorized Signatory

(Name:

Phone No.:

Fax:

E-mail :)

(This letter should be on the letterhead of the Manufacturer duly signed by an authorized signatory)

Technical Requirements**Table A : Minimum Technical Requirement of Production DB, CSIS DB, APPS (J2EE+C/C++) ,C24, Uniser, Web & CSIS APP (Production) on x86 (Linux RHEL) platform****DC site:**

- a. 2 nos. production DB (Type A) separate physical server in Active-Passive cluster mode
- b. 2 nos. CSIS DB (Type B) separate physical server in Active-Passive cluster mode
- c. 3 Nos. Physical servers shall contain (Type C)
 - i. 3 (C/C++) virtual node
 - ii. 3(J2EE) virtual node
 - iii. 3(HTTP) virtual nodeEach physical server should host 1 no. C/C++, 1 no. J2EE and 1 no. HTTP virtual node
- d. 2 Nos. Physical server shall contains (Type C)
 - i. 2 (Uniser) virtual Node
 - ii. 2(C24) virtual Node
 - iii. 2(CSIS APP) virtual NodeEach physical server should host 1 no. C24, 1 no. CSIS APP and 1 no. Uniser APP virtual node

DR site:

- a. 2 nos. production DB (Type A) separate physical server in Active-Passive cluster mode
- b. 2 nos. CSIS DB (Type B) separate physical server in Active-Passive cluster mode
- c. 3 Nos. Physical servers shall contain (Type C)
 - i. 3 (C/C++) virtual node
 - ii. 3(J2EE) virtual node
 - iii. 3(HTTP) virtual nodeEach physical server should host 1 no. C/C++, 1 no. J2EE and 1 no. HTTP virtual node
- d. 2 Nos. Physical server shall contains (Type D)
 - i. 2 (Uniser) virtual Node
 - ii. 2(C24) virtual Node
 - iii. 2(CSIS APP) virtual NodeEach physical server should host 1 no. C24, 1 no. CSIS APP and 1 no. Uniser APP virtual node

All servers should be supplied with standard server Rack along with required redundant PDUs. The servers at Application & DB level should be installed in different racks, to have a rack level redundancy.

SI	Description	Production DB (Type A)	CSIS DB (Type B)	C/C++, J2EE App & Web Server (Type - C)	CSIS App, C24 & UNISER (Type - D)	Compliance (Yes /No)
1	Make & Model	To be Specified by Bidder				
2	Processor/Server Type & clock speed	Intel Xeon Gold 63xx CPU x86-64 bit @ 2.8 GHz or higher with HT, Turbo Boosting	Intel Xeon Gold 63xx CPU x86-64 bit @ 2.8 GHz or higher with HT, Turbo Boosting	Intel Xeon Gold 63xx CPU x86-64 bit @ 2.8 GHz or higher with HT, Turbo Boosting	Intel Xeon Gold 63xx CPU x86-64 bit @ 2.8 GHz or higher with HT, Turbo Boosting	
3	Minimum total no. of cores per Physical Server from day 1/ minimum cores upgrade capability per physical server	24 cores, upgradable to 48 cores	8 cores, upgradable to 16 cores	48 cores, upgradable to 64 cores	24 cores, upgradable to 48 cores	
4	Minimum number of Physical servers from day-1	2 at DC 2 at DR	2 at DC 2 at DR	3 nos. at DC 3 nos. at DR	2 at DC 2 at DR	
5	Minimum total no. of cores per Virtual Server / minimum cores upgrade capability per virtual server	NA	NA	24 Cores for C++ 12 Core for JEE 8 Core for web	8 cores for CSIS App 4 Cores for C24 8 Cores for UNISER	
6	Minimum number of Virtual servers from day-1	NA	NA	9 nos. at DC 9 nos. at DR 3 Virtual server per Physical server	6 nos. at DC 6 nos. at DR 3 Virtual server per Physical server	
7	Minimum total	256 GB /512	128 GB /256	512 GB/ 768	256 GB /512	

	RAM per Physical server from day 1 / minimum RAM upgrade capability per Physical server	GB	GB	GB	GB	
8	Minimum total RAM per Virtual server from day 1 / minimum RAM upgrade capability per Virtual server	NA	NA	256 GB for C++ 128 GB for JEE 32 GB for web	96 GB for CSIS App 32 GB for C24 96 GB for UNISER	
9	Minimum Hard Disk Drives per server from day-1	2x2.4 TB or 4X1.2 TB 10K/15K RPM SAS configured on RAID 1+0 or SAN Boot	2x2.4 TB or 4X1.2 TB 10K/15K RPM SAS configured on RAID 1+0 or SAN Boot	2x2.4 TB or 4X1.2 TB 10K/15K RPM SAS configured on RAID 1+0 or SAN Boot	2x2.4 TB or 4X1.2 TB 10K/15K RPM SAS configured on RAID 1+0 or SAN Boot	
10	Operating System from day-1	Red Hat Enterprise Linux (RHEL) Server 8.6 (64 bits on intel)	Red Hat Enterprise Linux (RHEL) Server 8.6 (64 bits on intel)	Red Hat Enterprise Linux (RHEL) Server 8.6 (64 bits on intel)	Red Hat Enterprise Linux (RHEL) Server 8.6 (64 bits on intel)	
11	OS Virtualisation software	NA	NA	Required	Required	
12	Minimum Redundant Network ports per server (Fiber ports- SR SFP+ with LC-LC cables) per server from day-1	2 no. of 10G Fiber port (1 +1) Minimum 2 no. of 1 Gbps (1+1) Copper Ethernet Port RJ45	2 no. of 10G Fiber port (1 +1) Minimum 2 no. of 1 Gbps (1+1) Copper Ethernet Port RJ45	4 nos. of 10G Fiber port (1 +1) Minimum 4 no. of 1 Gbps (1+1) Copper Ethernet Port RJ45	4 nos. of 10G Fiber port (1 +1) Minimum 4 no. of 1 Gbps (1+1) Copper Ethernet Port RJ45	
13	Minimum Redundant Host Bus Adapter (HBA) per server from day-1 for	2 no. of port 32 Gbps HBA (1 no. 32 Gbps+1 no. 32	2 no. of port 32 Gbps HBA (1 no. 32 Gbps+1 no.	2 no. of port 32 Gbps HBA (1 no. 32 Gbps+1 no. 32	2 no. of port 32 Gbps HBA (1 no. 32 Gbps+1 no.	

storage space for application/DB installation	Gbps)	32 Gbps)	Gbps)	32 Gbps)	
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Table B : Minimum Technical Requirement of Non-Production UAT DB, Apps & Web, UAT CSIS DB & App, UAT C24 & Uniser, UAT UNISER, Migration DB & App and training DB & App & Web on x86 (Linux RHEL) platform

DC site:

- i. 1 no. UAT DB (Type E) separate physical server
- ii. 1 no. CSIS DB (Type F) separate physical server
- iii. 5 Nos. Physical server shall contain (Type G)
 - a. 2 DB server in virtual node
 - b. 3(C/C++) virtual node
 - c. 3(J2EE) virtual node
 - d. 2(HTTP) virtual node
 - e. 1 (Uniser) virtual Node
 - f. 1 (C24) virtual Node
 - g. 1(CSIS APP) virtual Node

One Physical Server shall host 1 Migration DB & Migration App (C++ & J2EE)
 Two Physical Server shall host 2 UAT (C++) App, 2 UAT (J2EE) App, 2 UAT Web
 One Physical Server shall host 1 Training DB, 1 Training (C++) App, 1 Training (J2EE) App, 1 Training Web
 One physical server should host 1 no. UAT C24, 1 no. UAT CSIS APP and 1 no. UAT Uniser APP virtual node

All servers should be supplied with standard server Rack along with required redundant PDUs

SI	Description	UAT DB (Type E)	UAT CSIS DB (Type F)	UAT C/C++, J2EE App, CSIS App, C24 & UNISER Server (Type G)	Compliance (Yes/No)
1	Make & Model	To be Specified by Bidder			
2	Processor/Server Type & clock speed	Intel Xeon Gold 63xx CPU x86-64 bit @ 2.8 GHz or higher with HT, Turbo Boosting	Intel Xeon Gold 63xx CPU x86-64 bit @ 2.8 GHz or higher with HT,	Intel Xeon Gold 63xx CPU x86-64 bit @ 2.8 GHz or higher with HT, Turbo Boosting	

			Turbo Boosting		
3	Minimum total no. of cores per Physical Server from day 1/ minimum cores upgrade capability per physical server	8 cores, upgradable to 16 cores	8 cores, upgradable to 16 cores	16 cores, upgradable to 32 cores Each virtual node should contain minimum 4 nos. Cores	
4	Minimum number of Physical servers from day-1	1 at DC	1 at DC	4 nos. at DC	
5	Minimum total no. of cores per Virtual Server / minimum cores upgrade capability per virtual server	NA	NA	4 cores, upgradable to 8 cores	
6	Minimum number of Virtual servers from day-1	NA	NA	13 nos. at DR 3 / 4 Virtual server per Physical server as mentioned above	
7	Minimum total RAM per Physical server from day 1 / minimum RAM upgrade capability per Physical server	64 GB/ 128 GB	32 GB/ 64 GB	128 GB/ 256 GB	
8	Minimum total RAM per Virtual server from day 1 / minimum RAM upgrade capability per Virtual server	NA	NA	Minimum 24GB upgradable to 48 GB per virtual server	
9	Minimum Hard Disk Drives per server from day-1	1x2.4 TB or 2X1.2 TB 10K/15K RPM SAS configured on RAID 1+0 or	1x2.4 TB or 2X1.2 TB 10K/15K RPM SAS configured	1x2.4 TB or 2X1.2 TB 10K/15K RPM SAS configured on RAID 1+0 or SAN Boot	

		SAN Boot	on RAID 1+0 or SAN Boot		
10	Operating System from day-1	Red Hat Enterprise Linux (RHEL) Server 8.6 (64 bits on intel)	Red Hat Enterprise Linux (RHEL) Server 8.6 (64 bits on intel)	Red Hat Enterprise Linux (RHEL) Server 8.6 (64 bits on intel)	
11	OS Virtualisation software	NA	NA	Required	
12	Minimum Redundant Network ports per server (Fiber ports-SR SFP+ with LC-LC cables) per server from day-1	2 no. of 10G Fiber port (1 +1) Minimum 2 no. of 1 Gbps (1+1) Copper Ethernet Port RJ45	2 no. of 10G Fiber port (1 +1) Minimum 2 no. of 1 Gbps (1+1) Copper Ethernet Port RJ45	4 nos. of 10G Fiber port (1 +1) Minimum 4 no. of 1 Gbps (1+1) Copper Ethernet Port RJ45	
13	Minimum Redundant Host Bus Adapter (HBA) per server from day-1 for storage space for application/DB installation	2 no. of port 32 Gbps HBA (1 no. 32 Gbps+1 no. 32 Gbps)	2 no. of port 32 Gbps HBA (1 no. 32 Gbps+1 no. 32 Gbps)	2 no. of port 32 Gbps HBA (1 no. 32 Gbps+1 no. 32 Gbps)	

SL. No	Table C: Required Minimum Basic Technical Requirement – All Types of servers	Compliance Yes/No	Remarks
	Make:		
	Model :.....		
1	Intel Xeon Gold 63xx CPU x86-64 bit @ 2.8 GHz or higher with HT, Turbo Boosting., 4 Memory channel, Virtualization support		
2	Latest Intel Chipset supporting above Processor		
3	DDR4 Memory module, should be scalable as specified above memory per server with minimum 2400 MT/s Memory modules		
4	Should have minimum 3 PCI-e (Express) slots in which minimum 2 x PCI-e 16X		
5	Graphics should be Integrated with chipset		
6	Minimum 2 x 2.4 or 4X1.2 SFF 15K RPM SAS HDD / SSD Hot		

	Pluggable Drive. The server should support SAS, SATA and SSD hard disk drives and must have an internal slot for SD Card/Micro SD Card/ USB Flash Drive which supports booting hypervisors. The Server should have support for Boot from LAN.		
7	Should Support Microsoft Windows Server, Redhat Enterprise Linux, SuSE Linux Enterprise Server, Market leading Bare metal Virtualization Hypervisor.		
8	HDD controller SAS/SATA/SSD Raid controller capable of providing RAID 0, 1, 5, 10 configurations.		
9	Should have minimum 4 x 10GbE Fibre ports with module		
10	Should have min 2 x USB 2.0, 1 x Management port		
11	Should have Dual, Hot-plug, Redundant Power Supply		
12	Should have Redundant Hot Pluggable cooling Fans.		
13	should provide notification of critical component failure alerts like CPU, Memory, HDD, Raid controller etc. Should support Remote management features, Should be able to perform comprehensive system data collection and enable users to quickly produce detailed inventory reports for managed devices		
14	should have embedded Update Provisioning Essential tools, drivers, agents to setup, deploy and maintain the server. There should be a built -in Update manager that can update firmware of system by connecting online.		
15	Should have minimum 2 * 32Gbps dual port PCI-E FC HBA		
16	Shall support latest versions of Microsoft Windows Server Linux (Redhat / Suse / Etc)		
17	The bidder has to give certificate of assurance for supply and upgraded of proposed server over a period of five (5) year and support for period of seven (7) year shall be submitted on OEM letter head duly signed by authorized signatory		
18	Bidder should mention maximum rated power (watts) and cooling (BTU/hr) and rack space requirement for the server.		
19	The system should be quoted with 5years with 24 x 7 and 6 HR CTR Support by the OEM during the contract period. The operating system, any system software's, management tools and security tools should also be quoted with 5years 24X7 support services basis. All the hardware should be quoted with 99.90% SLA uptime (calculated monthly) with 4 hours response time. Proactive services like Patches & fixes for the OS shall be provided free of cost during contract period for all the systems quoted.		

<p>The servers will be commissioned by the OEM certified engineers only.</p> <p>The supplied hardware should be covered under Data Center mission critical or equivalent support.</p> <p>The on-site support will be by the OEM certified engineers only.</p>		
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Table D: Minimum technical requirement for Enterprise class Storage at DC and DR

Sl. No	Technical Requirement	Compliance Yes/No	Remarks
1	Make : Model :.....		
2	The Storage System must be an enterprise class Storage System and shall support no single point of failure features, such as Non- disruptive component replacement and non-disruptive replacement of Interfaces, Disk controllers, Disk drives, Cache memory cards, Micro-code upgrade, Power supplies, Battery systems, Fan subsystems, FC controller and ports, etc.		
3	Storage should be proposed with at-least dual redundant, hot swappable controllers for high-availability, load balancing and redundant modes of operation.		
4	Storage system shall be configured with adequate number of Backend FC/SAS Disk ports (towards disks) so as to meet the required performance specifications.		
5	Minimum 256 GB DRAM to accommodate cache pages and Data in cache should be protected against unexpected power failures for minimum 72 hours of time.		
6	The Storage System should have minimum of 512 GB of Cache and should be scalable to 1 TB Cache for data and control operation. The write cache must be mirrored / protected to avoid any data loss in case of a failure		
	<p>DC Site: 30 TB All Flash usable capacity in RAID 6 upgradable to 100 TB usable space.</p> <p>DR Site: 50 TB All Flash usable capacity in RAID 6 upgradable to 200 TB usable space.</p> <p>In all sites mentioned above, effective usable capacity should <u>NOT</u> include effect of compression, de-duplication or thin provisioning for storage capacity and its scalability. The usable capacity should be clearly available.</p>		

8	Minimum 100,000 IOPS upgradable to 2,00,000 IOPS at Block size - 8 KB and 70:30 Read Write for Storage DC & DR		
9	Storage should have features like Snapshot, Clone, Temper proof/read only copy, and multisite replication etc. Storage providing enterprise class data availability		
10	GUI based management software for configuration, historical performance monitoring and storage replication, data at rest encryption		
11	Minimum 8 X 32 Gbps FC Ports (4+4) . If required bidder needs provision extra port to future provisioning during contract period.		
12	Industry Standard RAID array supporting minimum 6 levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / SSD Disk Pools.		
13	The design shall provide automatic rerouting of I/O traffic from the host in case of primary path failure. The I/O paths from the servers and servers shall be load balanced. The Storage array based host resident HBA load balancing software should be provided for every SAN attached server.		
14	Offered storage array shall support quality of service for critical applications to define IOPS, bandwidth & response time in both milliseconds as well as Submilliseconds for different application logical units at real time. A single console shall be used for the entire storage system. The storage array must provide performance monitoring, reporting and tuning (QoS). The performance monitoring should be real-time and historical providing IOPS, Response Time and utilization of individual components within the storage. If licensed separately, the vendor needs to provide the necessary licenses for full capacity. The storage management software must provide multiple levels of access control including role-based security, provision to send alerts via email.		
15	The storage system shall support the latest OS releases of the following mentioned servers / OS :- Servers running Windows, Linux, HPUX, AIX, Solaris etc. It should also support popular virtualization platforms like VMware.		
16	The storage system shall support and provision for connectivity (either directly or through switches) to industry standard interfaces such as Fibre Channel		
17	The storage system shall support connectivity to multiple host platforms simultaneously		
18	The storage system shall support connectivity to multiple host		

	platforms simultaneously		
19	The storage system shall support data replication from One storage system to another storage system without any server intervention.		
20	The storage system should support oracle data guard replication between DC and DR sites.		
21	The storage system shall support hardware based data replication to a remote site		
22	Licenses for point in time copies, full volume copies should be provided for the complete proposed capacity that is being supplied and configured in DC and DR Storage.		
23	Should be firmware upgradable for functionality improvements and enhancements. Must support non-disruptive upgrade of core software, BIOS, snapshot, clone remote mirroring and management software without shutting down the storage system. All host attached servers must be fully operational during system level or maintenance upgrade procedures.		
24	The Storage System should have automatic failover architecture with redundant, hot-swappable components, such as disks, interfaces, disk controllers, power supply, Cooling fan sub system, and other major components		
25	The storage configuration should be such that it provides 99.9 data availability guarantee and meets the Zero data loss in the solution design		
26	The Storage System should be configured with sufficient number of spares disks to provide dynamic reallocation to spare disk automatically, in case of hard disk failure.		
27	The Storage management software should provide real time monitoring, and historical analysis of storage performance and capacity such as total no. of IOPS, read/write %, cache hit %, throughput etc for analyzing the performance of the system. The Storage System should have tamper proof audit log for recording all service/maintenance and host log actions on the storage.		
28	The Storage System must support thin provisioning or virtual provisioning.		
29	The Storage System should be able to create volumes that stripe across multiple RAID groups for better load distribution and prevention of hot spots. Any license if required must be enabled for the proposed formatted capacity		
30	The Storage System should have Pro-active maintenance – self monitoring, self-diagnosing, and error correction mechanisms.		

31	The Storage System design should provide automatic rerouting of I/O traffic from the host in case of primary path failure. The I/O paths from the servers should be load balanced.		
32	The Storage must be provided with Advanced multi-path software from the storage vendor for the no. of hosts and OS connected to storage as per the solution or bidder can quote for native multipathing if supported by native OS feature		
33	The proposed storage to provide data encryption at rest at controller level or using self-encrypting drives without impacting storage performance. The features should be provided for all proposed disk type.		
35	The design shall also provide provision for following: Allocating and revoking disk space Creating RAID groups and logical units Dynamic Volume Expansion The storage system shall support Oracle ASM for RAC.		
36	The storage system must support IPv4 & IPv6.		
37	Bidder to factor the required Encryption licenses at storage level, the Bank may intends to have storage level encryption for the data in all the sites.		
38	All passive cablings between server-to-server, server-to-tape, storage-to-tape, server -to -SAN, Storage-to SAN (including and all other combinations connected) (for connecting between new-to-new or new-to-existing setup) will be provided and installed/ configured by the bidder. The management of these cabling (including replacement whenever required) to be provided by the bidder during the tenure of the contract without any additional cost to the Bank.		
39	The bidder has to give certificate of assurance for supply of proposed storage solution over a period of five (5) year and support for period of seven (7) year shall be submitted on OEM letter head duly signed by authorized signatory.		
40	Bidder should mention maximum rated power (watts) and cooling (BTU/hr) and rack space requirement for the server.		
41	The system should be quoted with 5years with 24 x 7 and 6 HR CTR Support by the OEM. (3 years Upfront warranty and AMC for year 4th and Year 5 th) The operating system, any system software's, management tools and security tools should also be quoted with 3 years and ATS for year 4 and Year 5 support 24x7 support. All the hardware should be quoted with 99.9% SLA uptime		

	<p>(calculated monthly) with 4 hours response time.</p> <p>Proactive services like Patches & fixes for the OS shall be provided free of cost during contract period for all the systems quoted.</p> <p>The servers will be commissioned by the OEM certified engineers only.</p> <p>The supplied hardware should be covered under Data Center mission critical or equivalent support.</p> <p>The on-site support will be by the OEM certified engineers only.</p>		
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Table E Minimum Technical Requirement for Network Attached Storage at DC, DR

Sl. No.	Required Minimum Specifications	Compliance (Yes/No)	Remarks
1	Make: Model:.....		
2	Propose Network Attached Storage System (NAS) with no single point of failure architecture. NAS solution should have file access with host connectivity for CIFS and NFS.		
3	Proposed storage must have minimum two numbers of active-active SAN storage controllers for better performance and redundancy		
4	The Storage should be supplied with 2 TB usable with all flash drives to support 50000 NFS IOPS/concurrent connection or above over 10Gbps Ethernet with response time of less than 2 milliseconds excluding all overhead configuration like RAID (RAID 6) configuration formatting and hot spare disk.		
5	Storage should be configured minimum 4*16 Gbps FC port and minimum of 4 *10 G base SR ports from day -1		
6	The proposed storage array must support all Industry Standard RAID levels including 0, 1, 10, 5 and 6. The storage array should allow online expansion of existing RAID/Disk group.		
7	The storage array should support Global Hot Spare (HS) Disks. A minimum of one global hot spare per 30 disks should be supplied and configured. These should be of the same type as used for all the type of disks used in this solution.		
8	The storage array must have complete cache protection mechanism either by de-staging data or providing complete cache data protection with battery backup for up to 72 hours or more.		
9	The storage array must have Space-efficient copy-on-write snapshots; supports NDMP-based backup		

10	The Storage should support the following Network Protocols : NFS v3 & v4 (TCP/IP; UDP/IP); CIFS, NDMP v3, iSCSI (multi-target & multi-LUN), SNMP MIB II, HTTPS .		
11	The storage array should support industry-leading Operating System platforms & clustering including: Windows, VMWare, Linux, Sun Solaris, HP-UX, IBM-AIX, OS, etc.		
12	The proposed storage should perform write cache mirroring for data availability. The cache mirroring should happen over dedicated paths/bus between the controllers without using the external host and/or disk ports.		
13	The proposed storage array must have minimum 128 GB memory across the two SAN controllers and scalable to 256 GB		
14	The cache management should be adaptive as per the I/O workload. The storage should dynamically allocate cache to accommodate the changing I/O workload and not restrict the write cache to value less than 20% of total cache available.		
15	The proposed storage array systems must natively support automated Sub-LUN tiering of data within the Storage to achieve improved performance and lower Total cost of Ownership.		
16	The storage array should have No Single Point of Failures (NSPoF) providing high availability at component and functional level.		
17	The storage array should allow firmware up-gradation for functionality improvement and enhancements. Must support non-disruptive upgrade of core software.		
18	Array should be provide wish all software like clone, snap shot, replication, performance management & QOS		
19	The storage array should support pointer based, space efficient Snapshots. The full copy Clones with update incremental data synchronization. The snapshot copies to be independent of each other, restoring a snapshot of production LUN should not invalidate the rest of the snaps for the same production LUN. If licensed separately, necessary licenses for entire capacity to be included.		
20	The storage array must provide virtual/thin provisioning. If licensed separately, necessary licenses for entire capacity to be included.		
21	The storage array should support policy-based compression and/or deduplication providing space efficiency.		

22	The proposed storage array must support data at rest encryption offering industry standard certification/compliance. The storage array may implement data at rest encryption using self-encrypting drives or controller based functionality there by not impacting performance.		
23	Synchronous and asynchronous replication with 2/3-way topology should be supported. If licensed separately, necessary licenses for asynchronous replication for entire capacity with above features to be included.		
24	The storage array must support latest versions of leading operating systems like Solaris (Solaris 10 and onwards) Linux (RHEL and SUSE), Windows 2012/2008, UNIX (AIX / HPUX /Solaris), etc. The array system shall support virtualized environment for VMware, Citrix Xen Server and Microsoft Hyper-V.		
25	Offered Storage Shall support all above OS-level Clustering from leading OEM's.		
26	Appropriate RAID level to be used for meeting the SLAs. Appropriate disk to be provided for creating clone copies of data within the storage.		
27	Should support minimum of 65534 subdirectories for a given directory or share as a part of the proposed NAS		
28	The bidder has to give certificate of assurance for supply of proposed NAS over a period of five (5) year and support for period of seven (7) year shall be submitted on OEM letter head duly signed by authorized signatory.		
29	Bidder should mention maximum rated power (watts) and cooling (BTU/hr) and rack space requirement for the server.		
30	<p>The system should be quoted with 5years with 24 x 7 and 4 HR CTR Support by the OEM. (3 years Upfront warranty and AMC for year 4 and Year 5)</p> <p>The operating system, any system software's, management tools and security tools should also be quoted with 3 years and ATS for year 4 and Year 5 support 24x7 support.</p> <p>All the hardware should be quoted with 99.99% SLA uptime (calculated monthly) with 4 hours response time.</p> <p>Proactive services like Patches & fixes for the OS shall be provided free of cost during contract period for all the systems quoted.</p> <p>The servers will be commissioned by the OEM certified engineers only.</p> <p>The supplied hardware should be covered under Data Center mission critical or equivalent support.</p>		

	The on-site support will be by the OEM certified engineers only.		
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Table F: Minimum Technical requirement for Backup Software

Sl. No	Technical Requirement	Compliance Yes/No	Remarks
1	Make: Software Version:.....		
2	Enterprise backup software that supports online backup of databases namely Oracle, DB2, SQL OS namely Windows, Linux and VMs backup.		
3	Should be available on various OS platforms which are supported by OEMs such as different variant of Windows and Linux platforms and be capable of supporting backup / restores from various platforms including Windows, Unix and Linux. Both Server and Client software should be capable of running on all these platforms.		
4	The licensing for the Backup software must be in Usable Capacity in such a way that the migration of operating systems and/or databases/mail servers of servers/clients must not warrant a change in license. The licensing must be independent of the server processor, whether it is RISC based or SISC based processors or x86. Also, same license can be used to initiate backup in DC , DR and NDR		
5	Backup Software Solution for web servers, application servers, database servers for Core Banking system and other applications as proposed. Backup of database servers should be taken on daily basis while Web, application and other servers weekly basis. Further milestone backup on monthly, quarterly, half-yearly and yearly should be taken. Full and Incremental, online & offline backup having capability of taking backups on LTO 9 Tape Drives at DC & DR location.		
6	Bidder to provide compute resources for running the backup software either as virtual VM in proposed compute farm or a physical server. It should support clustered configurations of the backup application in a cluster. I.e. backup application should failover as a highly available resource in a cluster.		
7	SAN based LANFREE Backup to tape drives, built-in alerting mechanism, built-in centralized, policy driven management feature, encryption support. Should have built-in centralized, policy driven management feature by which all Backup servers can be managed from central location.		

8	Any Server and OS required for the Backup need to be quoted separately		
9	Backup Software Solution should support Full/Incremental backup having capability of taking backups on LTO Tape Drives. Backup Software solution should also support Industry standards encryption (128/256 bit). Bidder has to install Backup software solution and make the necessary configuration with proposed tape library.		
10	Ability to backup data from one platform and restore it from another (limited to genera of operating systems (Unix to Unix, Windows to Windows) to eliminate dependence on a particular OS machine and for disaster recovery purposes.		
11	Software should have full command line or GUI based support on above mention OS's.		
12	The backup software must have the capability to migrate files from one media to another without changing the time stamp of the data that is backed up.		
13	The Backup software must not have any restrictions on the number of drives that can be attached in the tape library. There should be no additional licensing if the number of tape drives is increased in the tape library.		
14	Should support clustered configurations of the backup application in a cluster. i.e. backup application should failover as a highly available resource in a cluster.		
15	Software should have an inbuilt feature for Tape to tape copy feature (cloning, within the tape library) to make multiple copies of the tapes without affecting the clients for sending tapes offsite as part of disaster recovery strategy.		
16	Should support different levels of User access, Administrator, User, Operator, so that only the authorized personnel can make changes or view the status based on the rights they have.		
17	The software should have the capability to replicate the backed-up data to the DR site for the selected systems only and should leverage de-duplication capability while replicating to DR site.		
18	The Software should have capability to define retention policy to the data & not to a Media.		
19	Backup Software should also have a Capacity based licensing 20 TB from day 1 and have upgradation capability to minimum 100 TB		
20	The backup software should be able to leverage the backup data of the Virtual environment for other purpose like Test/Dev, DevOps, Analytics.		

21	The proposed backup solution should support tape mirroring of the same job running concurrently with primary backup.		
22	The proposed backup solution shall be able to copy data across firewall.		
23	The proposed backup solution shall support synthetic full backup / Virtual full backups.		
24	The proposed backup software should support both on-premise and secure hosted backup solution		
25	The proposed backup software should give the option to allow de duplication to be done either on the Application Server or on the Backup Server or at the Target Device.		
26	The backup software should support backup to disk /VTL / Deduplication Device via Fiber channel		
27	The backup software/solution should support 256-bit encryption		
28	The proposed backup software should use the same API for software and hardware deduplication		
29	The proposed backup solution have hot-online backup solution for different type of Enterprise databases and applications		
30	The proposed backup solution has in-built frequency and calendar based scheduling system.		
31	The proposed backup solution has in-built media management and supports cross platform device and media sharing in SAN environment. It provides a centralized scratched pool thus ensuring backups never fail for media		
32	The proposed backup solution support de-multiplexing of data cartridge to another set of cartridge for selective set of data for faster restores operation to client/servers.		
33	The proposed backup solution shall be configured with unlimited client and media licenses for both SAN based backup and LAN based backup.		
34	The proposed backup solution shall be configured in such a fashion that no extra license for client and media servers is required while moving from LAN to SAN based backup.		
33	The proposed backup solution should allow creating tape clone facility after the backup process.		
34	The proposed backup solution should support tape mirroring of the same job running concurrently with primary backup.		
35	The proposed backup solution shall have same GUI across heterogeneous platform to ensure easy administration.		
36	The bidder has to give certificate of assurance for supply of proposed solution over a period of five (5) year and support for period of seven (7) year shall be submitted on OEM letter		

head duly signed by authorized signatory.		
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Table G: Minimum Technical requirement for Tape Backup Library			
Sl No	Technical Requirement	Compliance Yes/No	Remarks
1	Make:		
2	Enterprise tape library built with rack hosting accessor, tape drives and cartridge slots.		
3	Minimum No. of tape drives DC and DR Site: 2 X LTO 9 FC drives		
4	Tape Library shall be offered with minimum of 20 cartridge slots and barcode reader. Bidder should provide all the drives in all the slots configured. Bidder should provide all the drives in all the slots configured		
5	Proposed tape library should have features Dynamic storage management, enabling users to dynamically create and change logical libraries and configure any drive into any logical library. Analytic software that provides system configuration operations, reporting, automated scheduling for scanning tapes, cartridge movement for maintenance and management purposes, Barcode reader, Encryption support.		
7	Tape Library shall provide web based remote monitoring capability.		
8	Tape Library shall provide native Fiber connectivity to SAN Environment.		
9	Tape Library shall provide native minimum 8 Gbps FC interface connectivity to SAN switches with redundancy.		
10	Tape library shall support removable magazine and mail slot.		
11	Tape Library shall have redundant power supply.		
12	Tape Library shall be supplied with software which can predict and prevent failures through early warning and shall also suggest the required service action.		
13	Offered Software shall also have the capability to determine when to retire the tape cartridges and what compression ratio is being achieved.		
14	Offered tape Library shall have partitioning support and shall support at-least two number of partition so that configured drives can have owned partition and slots		
15	Offered LTO-9 and LTO-8 drive in the Library shall conform to the Data rate matching technique for higher reliability		
16	The bidder has to give certificate of assurance for supply of proposed tape libeary over a period of five (5) year and		

	support for period of seven (7) year shall be submitted on OEM letter head duly signed by authorized signatory.		
17	Bidder should mention maximum rated power (watts) and cooling (BTU/hr) and rack space requirement for the server.		
18	<p>The system should be quoted with 5years with 24 x 7 and 6 HR CTR Support by the OEM. (3 years Upfront warranty and AMC for year 4 and Year 5)</p> <p>The operating system, any system software's, management tools and security tools should also be quoted with 3 years 24x7 support and ATS for 4th & 5th Year with 24x7 support</p> <p>All the hardware should be quoted with 99.99% SLA uptime (calculated monthly) with 4 hours response time.</p> <p>Proactive services like Patches & fixes for the OS shall be provided free of cost during contract period for all the systems quoted.</p> <p>The servers will be commissioned by the OEM certified engineers only.</p> <p>The supplied hardware should be covered under Data Center mission critical or equivalent support.</p> <p>The on-site support will be by the OEM certified engineers only.</p>		

Table H: Minimum Technical requirement for SAN Director/switch

Sl No	Technical Requirement	Compliance Yes/No	Remarks
1	Model:		
2	Redundant 2 no. of SAN Switch with latest generation 32/16 Gbps FC Switches with enterprise-class availability features such as redundant power supply module, power and cooling subsystems at DC & DR		
3	Minimum 24X 32 Gbps/16 Gbps FC ports per Switch		
4	Enterprise bundle, SAN management portal. Any Server required to install this feature bidder has to quote the same with SAN Switch.		
5	Minimum 5 meters FC cables for equivalent no. of ports proposed. Bidder need to provide longer FC cable >5 meters if required		
6	The bidder has to give certificate of assurance for supply of proposed SAN switch over a period of five (5) year and support for period of seven (7) year shall be submitted on OEM letter head duly signed by authorized signatory.		
7	Bidder should mention maximum rated power (watts) and cooling (BTU/hr) and rack space requirement for the server.		

8	<p>The system should be quoted with 5years with 24 x 7 and 6 HR CTR Support by the OEM. (3 years Upfront warranty and AMC for year 4 and Year 5)</p> <p>The operating system, any system software's, management tools and security tools should also be quoted with 3 years 24x7 support and ATS for 4th & 5th Year with 24x7 support</p> <p>All the hardware should be quoted with 99.99% SLA uptime (calculated monthly) with 4 hours response time.</p> <p>Proactive services like Patches & fixes for the OS shall be provided free of cost during contract period for all the systems quoted.</p> <p>The supplied hardware should be covered under Data Center mission critical or equivalent support.</p> <p>The on-site support will be by the OEM certified engineers only.</p>		
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Table I Minimum Technical requirement for EMS Tool

SI No	Technical Requirement	Compliance (Yes/No)	Remark
1	The proposed EMS solution should be an integrated, modular and scalable solution to provide comprehensive fault management, performance management, traffic analysis and business service management, IT service desk\ help desk\trouble ticketing system & SLA monitoring functionality.		
2	It should have a secured single sign-on and unified console for all functions of components offered for seamless cross-functional navigation & launch for single pane of glass visibility across multiple areas of monitoring & management.		
2	The system should be accessible via a Web based GUI console/portal from intranet as well as from internet.		
6	The solution should have self-monitoring ability to track status of its critical components & parameters such as Up/Down status of its services, applications & servers, CPU utilization, Memory capacity, File system space, Database Status, synchronization status between primary and secondary system and event processing etc. It should provide this information in real-time through graphical dashboards, events/alerts as well as in the form of historical reports.		
7	The proposed solution should be IPv6 ready including hardware & software.		
8	Solution should ensure compatibility of existing Infrastructure with the procured infrastructure and it must fill the end functionality of the project. Offered solution should have		

	single console for network and closely integration with network devices for log / event sharing in between the devices and EMS tool.		
9	The proposed Enterprise Management tools must be able to monitor end to end performance of Server Operating Systems & Databases and Should be able to manage distributed, heterogeneous systems – Windows & LINUX from a single management station.		
10	There should be agent less and agent base method on the managed node that provides the system performance data, and for event management it should be able to prioritize events, do correlation & duplicate suppression ability to buffer alarms and provide automatic actions with capability to add necessary annotations		
11	The system must support multiple built in discovery mechanisms for e.g. Active Directory, Windows Browser, DNS with capability to discover and services discovery		
12	Each operator should be provided with user roles that should include operational service views enabling operators to quickly determine impact and root cause associated with events.		
13	The system should integrate with Helpdesk / Service desk tool for automated incident logging and also notify alerts or events via e-mail or SMS.		
14	The proposed Alarm Correlation and Root Cause Analysis system shall integrate network, server and database performance information and alarms in a single console and provide a unified reporting interface for network components. The current performance state of the entire network & system infrastructure shall be visible in an integrated console.		
15	It should have capability to perform cross domain correlation with alarm correlation from Network Monitoring tool, Systems monitoring tool and other domain monitoring tools.		
16	The proposed solution should provide out of the box root cause analysis with multiple root cause algorithms inbuilt for root cause analysis.		
17	Should trigger automated actions based on incoming events / traps. These actions can be automated scripts/batch files.		
18	Should be able to send e-mail or Mobile –SMS to pre-defined users for pre-defined faults.		
19	Should Detect, collect and maintain information about Managed Servers, including packaged, unpackaged software, runtime state, host/guest relationships and more.		

20	Should have capability to auto install agent onto target server		
21	Identifies server vulnerabilities quickly and easily and reduces the time needed to patch multiple servers. Enables patch policy creation and flexible patch deployments. Supports native patch formats for all major operating systems. Provides out-of-the-box integration with Microsoft Patch Network and Red Hat Enterprise Linux		
22	Will support audit and remediation against industry best practice content such as PCI or CIS or MSFT.		
23	Open a remote terminal or get complete server history directly in the application visualization interface		
24	System should provide a shell interface to let users operate through a command line across multiple servers simultaneously.		
25	The Network Management function must monitor performance across heterogeneous networks from one end of the enterprise to the other.		
26	The solution should allow for discovery to be run on a continuous basis which tracks dynamic changes near real-time; in order to keep the topology always up to date. This discovery should run at a low overhead, incrementally discovering devices and interfaces.		
27	The proposed Network Fault Management console must also provide network asset inventory reports		
28	The tool should automatically discover different type of heterogeneous devices (all SNMP supported devices i.e. Router, Switches, LAN Extender, Servers, Terminal Servers, Thin-Customer and UPS etc.) and map the connectivity between them with granular visibility up to individual ports level. The tool shall be able to assign different icons/ symbols to different type of discovered elements. It should show live interface connections between discovered network devices		
29	It should support various discovery protocols to perform automatic discovery of all L2, L3 Network devices across SWAN and any further Network connectivity's planned in future.		
30	The tool shall be able to discover IPv4 only, IPv6 only as well as devices in dual-stack. In case of dual stack devices, the system shall be able to discover and show both IPv4 and IPv6 IP addresses.		
31	The tool shall be able to work on SNMP V-1, V-2c & V-3 based on the SNMP version supported by the device. It shall provide an option to discover and manage the devices/elements		

	based on SNMP as well as ICMP.		
32	The proposed Network Fault Management solution must support extensive discovery mechanisms and must easily discover new devices using mechanisms such as SNMP Trap based discovery. It must also allow for inclusion and exclusion list of IP address or devices from such discovery mechanisms		
33	The proposed solution must provide a detailed asset report, organized by vendor name, device type, listing all ports for all devices in DC & DR sites. The Solution must provide reports to identify unused/dormant Network ports in order to facilitate capacity planning		
34	The system should be able to clearly identify configuration changes / policy violations / inventory changes across multi-vendor network tool.		
35	The system should support secure device configuration capture and upload and thereby detect inconsistent "running" and "start-up" configurations and alert the administrators.		
36	The proposed system should be able to administer configuration changes to network elements: a) Capture running configuration b) Capture start-up configuration c) Upload configuration d) Write start-up configuration e) Upload firmware		
37	The proposed configuration management solution must able to perform "load & merge" configuration changes to multiple network devices		
38	The proposed configuration management solution must able to perform real-time or scheduled capture of device configurations		
39	Reporting solution should be able to report on Service Level status of configured business service.		
40	The solution should be user configurable for building additional reports.		
41	Should able to support and handle large volume of incident, service requests, changes management etc.		
42	The solution should have a Single Architecture and leverage a single application instance across ITIL processes, including unique data and workflows segregated by business unit, cost Center, and user role for Incident, Problem, Change, Knowledge Management, Asset Management and CMDB.		
43	The solution should provide to browse through CMDB which should offer powerful search capabilities for configuration		

	items and services, enabling to quickly find Cis as well as their relationships to other Cis.		
44	Tool Analytics should be completely configurable in terms of source data and results, enabling Process Managers and other IT Users to proactively identify trends that can be used to drive action. Multiple instances shall be allowed to be configured in different ways in different modules for different outcomes – for example one should be able to identify trends in one set of data and subsequently develop linkages with other data, or Analytics can run on top of reporting results to provide further insights from unstructured data.		
45	The tool should allow the user to take a screenshot of the error message and sends it to the service desk. The user can type in a couple of text lines to describe the error in simple language. The service desk agent then can pick up the ticket with the information already filled in (category, impact, and assignment).		
46	The tool should allow the creation of different access levels (i.e. Read only, write, create, delete) to knowledge management system		
47	Must allow creating and applying various operational level parameters to Incidents, Requests, Changes, and Release management modules.		
48	The application should have a predefined/customizable field to indicate & track the progress/status of the lifecycle of ticket(s).		
49	The tool should provide an audit trail, tracking & monitoring for record information and updates from opening through fulfilment to closure For example: IDs of individuals or groups opening, updating & closing records; dates / times of status & activities updates, etc.		
50	The solution must provide a flexible framework for collecting and managing service level templates including Service Definition, Service Level Metrics, Penalties and other performance indicators measured across infrastructure and vendors		
51	Discovery should work without requiring agent installation (that is, agent-less discovery) while discovery Layers 2 through Layers 7 of OSI model		
52	Discovery system should have ability to modify out-of-box discovery scripts, create customized discovery scripts		
53	The bidder has to give certificate of assurance for supply of proposed solution (Hardware and software) over a period of five		

	(5) year and support for period of seven (7) year shall be submitted on OEM letter head duly signed by authorized signatory. All the hardware should be quoted with 99.50% SLA uptime (calculated monthly) with 8 hours response time		
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Sl No	Table J Minimum Technical requirement for Load Balancer with Application Delivery controller (ADC)	Compliance (Yes/No)	Remark
1	Make: RADWARE/ Citrix /F5		
2	<p>Solution shall be dedicated, purpose built, & Appliance based solution.</p> <p>DC:</p> <ul style="list-style-type: none"> ➤ 1 Pair of ADC & load balancer used for load balancing 3 no. of C/C++ Finacle Application and 3 nos. of Web (Http) servers. ➤ 1 no. ADC & load balancer used for load balancing 3 no. of UAT C/C++ Finacle Application and 3 nos. of Web (Http) servers. <p>DR:</p> <ul style="list-style-type: none"> ➤ 1 Pair of ADC & load balancer used for load balancing 3 no. of C/C++ Finacle Application and 3 nos. of Web (Http) servers. 		
3	The Solution should support minimum 5 Gbps L7 throughput. Solution should support minimum SSL throughput of 2 Gbps. Each device should have minimum 32 GB RAM		
4	TYPE 2: Each Device should have minimum 4 no of 10 G Fiber port with SR module to cover multiple segment load balancing		
5	Dual Power is a started for Banking datacenter to have dual power backup for same appliance. Memory should be good enough to ensure high performance and compatible for all OEMs.		
7	Appliance should support a LCD panel/LED to display alerts and fault information for an administrator to monitor the system		
8	The solution should support performing load balancing for Layers 4 through 7 of the Open Systems Interface (OSI) reference model with support to the IP, TCP and UDP protocols.		
9	The solution should support load balancing based on ROUNDROBIN - Distribute requests in rotation, regardless of the load. LEASTCONNECTION - The service with the fewest connections. LEASTRESPONSETIME - The service with the		

	lowest average response time. LEASTBANDWIDTH - The service currently handling the least traffic. LEASTPACKETS - The service currently serving the lowest number of packets per second, Hashing (URL, Domain, Source IP, Destination IP, and CustomID), SNMPprovided metric, Server Application State Protocol (SASP)		
10	The solution should support virtual servers that can listen on UDP and TCP ports and has the ability to enable and disable individual servers behind a virtual address.		
11	The proposed solution should Support minimum 2 Million L4 concurrent connections and minimum 200k L4 connections per second		
12	The offered solution should provide the configuration wizards for LB etc.		
13	Protocols supported: TCP, UDP, FTP, HTTP, HTTPS, DNS (TCP and UDP), SIP (over UDP), RTSP, RADIUS, DIAMETER, SQL, RDP, IS-IS, SMPP		
14	The Proposed solution must support Database Load Balancing at Database layer.		
15	The solution should support SSL offload - the ability to manage client side SSL traffic by terminating incoming SSL connections and sending the request to the server in clear text.		
16	The solution should support end to end SSL if required		
18	The proposed solution Should support at least 25000 of concurrent SSL users connected at 2048 key size		
19	The solution should support hardware or software based SSL acceleration.		
20	The Proposed Solution should support 1024, 2048 and 4096 bit key for SSL offloading		
21	Load Balancer should supports session affinity (sticky sessions) to be deployed with any application e.g Finacle 10.x Application and Web		
22	The Proposed Solution Should support HTTP caching and compression to minimize the network bandwidth utilization and to optimize the application performance.		
23	The Proposed Solution Should support minimum 4 Gbps of compression.		
24	The solution should support HTTP hardware or software compression		
25	The Solution should support selective compression to avoid known compression problems in commonly used browsers		
26	The solution should support one-arm , two-arm mode		

	deployment		
27	The solution should have capability to Perform load balancing in Transparent mode (client transparency mode)		
28	The Solution Should support IPv4 and IPv6 addressing along with NAT64 and NAT46.		
29	The Proposed Solution must support failover capability between data centers in active-active or active-backup modes. The Proposed Solution must have performing load balancing across multiple geographical sites for transparent failover, complete disaster recovery among sites and optimal service delivery , Single application failure etc		
30	The Solution Should support seamless failover between units in a pair i.e. it should support transparent failover between 2 devices, the failover should be transparent to other networking devices		
31	The solution should support Web Based Management for full device configuration (GUI)		
32	The solution should support modifying configuration via modular CLI / SSH		
33	The solution should support diagnostics which are readily available and easy to send to support (capture core dumps, configurations, logs, and so on).		
34	The solution should Support integration with RSA-SA SIEM Tool for broader visibility and web traffic analysis.		
35	The solution should Support integration with Health monitoring Tool based on SNMP v2 and above.		
36	The proposed solution should support real Time Reporting and Monitoring for Load-Balancer.		
37	The Proposed Solution must have Unified (Centralized) Consolidated Management for Configuration Management, SSL Certificate Management, Configuration Auditing , Reporting etc.		
38	The solution should support TCP Multiplexing and HTTP connection pooling as well as support customized multiplexing setting per virtual IP address.		
39	The Solution should support Inbuilt Packet logging and capture on demand.		
40	The solution should support minimum ip based persistency, session based cookie persistency and headers inspection, url redirection, hash ip, round robin, shortest repose time and least connections, and these are various algorithm support for maximum options and help granular control per service and applications.		

41	The proposed solution should have the capability of Rate shaping, QOS Support, Rate Limiting and TCP Surge Protection.		
42	The Proposed Solution must have global redirection based on DNS		
43	The Proposed Solution Should be able to monitor TCP, HTTP Based applications.		
44	The Proposed Solution Should be Identifying the root cause of slow performance issues		
45	For Internet segment all the features mentioned are must and all the modules should be from same OEM however for Intranet segment GSLB can be excluded		
46	Bidder should quote same OEM solution for Internet and Intranet segment		
47	The appliance should have option to enable forwarder option per service to log actual client IP in webserver log		
48	The proposed solution should have capability to handle and Configure multiple load balancing (Layer 7) protocols on same appliance		
49	The proposed solution should have capability of Rate Limiting and TCP Surge Protection		
50	The proposed solution should have the capability to configure multiple services on same Virtual IP with different ports and services options.		
51	The proposed solution should support atleast 5 number of virtual ADC or context or partition or segmentation or VLAN without any additional license		
52	The proposed solution Should have Application Visibility. Appliance should support customized reports example, Location of the user, IP Address, Hostname, Resolve Server IP Address etc., Number of Clients rejected etc.		
53	The appliance should have feature of Cluster failover over industries standard is preferred with within 3 second failover		
54	The solution should have various options to control and redirect user request to ensure proper load distribution and ensure incoming traffic is properly load balanced and distributed for best performance		
55	The appliance should have feature of GSLB with Per host name TTL value control GSLB (Global Server Load Balancer) for Application Failover across Datacenter. GSLB should be capable of monitoring health of application		

	across data center example Primary site and DR site. Support DNS Rate Limiting and DNS DNS report per host name		
56	The proposed solution should provide DNS reporting per user request with statistics last second, minute, hour usage and peak usage per application host name		
57	ADC and Load balancer should support multiple segmentation for different VLAN for load balancing different application.		
58	Physical resources like memory, CPU must not be shared between virtual load balancer instance, resulting in predictable performance of each virtual load balancer instance		
59	The bidder has to give certificate of assurance for supply of proposed solution over a period of five (5) year and support for period of seven (7) year shall be submitted on OEM letter head duly signed by authorized signatory. All the hardware should be quoted with 99.99% SLA uptime (calculated monthly) with 4 hours response time		
60	Bidder should mention maximum rated power (watts) and cooling (BTU/hr) and rack space requirement for the server.		

Sl. No	Table K: Minimum Technical requirement for Core Router	Compliance (Yes/No)	Remark
1	Modular architecture or a single box configuration for ease of management. SDWAN feature is optional which may be inbuilt solution or may be integrated externally or internally.		
2	Should have a dedicated console port and USB port for storage of configuration/image.		
3	Should have at least 4 nos. 1000 Mbps Ethernet (copper) LAN/WAN, 4 no. of OFC WAN port with SR module and should have at least 2 No. of 10 Gigabit Ethernet (Fibre) with SR module from day one.		
4	Routers should have at least 1 open slot for modular LAN and WAN connectivity options including Gigabit Ethernet and Fast Ethernet, interface modules.		
5	Should support debugging capabilities to assist in problem Resolution		
6	Should support hardware assisted VPN acceleration.		
7	Router should support minimum 5Gbps throughput enabling all features.		
8	Should support other IP Services like GRE tunneling, ACLs,		

	IPSEC VPNs, NAT services, Router should support HSRP or VRRP for Redundancy		
9	Routers should have Class-based queuing		
10	Routers should have marking, policing and shaping.		
11	Routers should have IPV6 compliance from day one		
12	Routers should IPv6 transport packets between IPv6-only and IPv4-only endpoints, ICMPv6, IPv6 DHCP.		
13	Support for the following IP v6 features : RIP NG , OSPF v3 , BGP Support for V6, IP V6 Dual Stack, NAT 64/Suitable Network address translation/tunneling for IPv6, IP v6 Policy based Routing, and IP v6 QoS, SNMP V3 over IPv6		
14	Router should support protocols like IPv4, IPv6, VRRP, Static Routes, RIPv1, RIPv2, OSPF, IS-IS, BGP, MBGP, BFD, Policy based routing, IPv4 and IPv6 tunneling from day 1		
15	The router should be capable of WAN protocols like PPP, Multilink PPP, etc.		
16	Dynamic Host Control Protocol (DHCP) server/relay/client		
17	Dynamic DNS Support		
18	Support for 802.1q VLANs		
19	Should have IGMP v1/v2/v3, PIM-DM/PIMSM, Source Specific Multicast (SSM)		
20	Routers should have Configuration rollback		
21	Should support network traffic monitoring, Security, Denial of Service (DoS) capabilities and network monitoring		
22	Routers should support Software upgrades as and when Necessary		
23	Routers should have SNMPv2 and SNMPv3		
24	Routers should have AAA authentication using RADIUS and TACACS		
25	Routers should have Packet Filters like: Standard ACL, Extended ACL, Time range ACL"s etc.		
26	Router should support advanced application inspection and Control		
27	Routers should support Tunnels (GRE, IPsec)		
28	The router should support IPsec Framework for Secured Data transfer Key Exchange : Internet Key Exchange (IKE), IKEv2, Pre-Shared Keys (PSK), Public Key Infrastructure PKI (X.509), RSA encrypted nonces/ RSA Signatures etc, IPsec Data Encapsulation AH and ESP.		
29	IPsec 3DES termination/initiation, IPsec passthrough		
30	Routers should have DES, 3DES, AES (256 bit) encryption, Authentication Algorithm: SHA1 and SHA2, Group: Diffie-Hellman(DH) Group 1, 2, 5		
31	Routers should have generation of SNMP traps and syslog		

32	Routers should have Network address translation (NAT) and PAT		
33	Extensive debugs on all protocols		
34	Shall have Secure Shell for secure connectivity		
35	Management should support : Telnet, Simple Network Management Protocol (SNMP), CLI/Web based HTTP management, RADIUS		
36	Attach solution document containing detailed bill of material (make, model, OS details: version, date of release, date of release of next version, end of sale & support date, product development path, etc.)		
37	Solution should integrate seamlessly with Bank's existing network Infrastructure.		
38	The Router should support redundant hot-swappable power supply.		
39	Should have 3 years warranty service. The successful bidder should ensure that the equipment proposed in this RFP, should not be declared as End of Life (EOL) or End of Support (EOS) by the OEM within next 5 years from the date of installation. In the event of the supplied equipment being declared End of support/End of Life during the contract period, the bidder has to replace the equipment with compatible equipment having equivalent or higher configurations without any additional cost to the Bank. Offered product must not be End of Life or End of Support for next 5 years.		
40	should be at least EAL2/EAL3/or above/NIAP/NDPP/NDcPP or above Certified		

Sl. No	Table L: Minimum Technical requirement for Branch Router	Compliance (Yes/No)	Remark
1	Modular architecture for scalability and should be a single box configuration for ease of management.		
2	Should have a dedicated console port and USB port for storage of configuration/image.		
3	Should have at least 4 Nos. 10/100/1000 Mbps Ethernet Interfaces LAN Interface from day one		
4	Should have at least 2 No. of Gigabit Ethernet WAN Port and out of that one port should be OFC WAN port with compatible SFP from day one.		
5	Should support debugging capabilities to assist in problem Resolution		

6	Should have hardware assisted VPN acceleration.		
7	Router should support minimum 10 Mbps real world WAN bandwidth with all the services enabled on the router		
8	Should have other IP Services like GRE tunneling, ACLs, IPSEC VPNs, NAT services, Router should support HSRP or VRRP for Redundancy		
9	Routers should have queuing		
10	Routers should have marking, policing and shaping.		
11	Routers should have IPV6 compliance from day one		
12	Routers should IPv6 transport packets between IPv6-only and IPv4-only endpoints, ICMPv6, IPv6 DHCP.		
13	Support for the following IP v6 features: RIP NG , OSPF v3 , BGP Support for V6, IP V6 Dual Stack, NAT 64/Suitable Network address translation/tunneling for IPv6, IP v6 Policy based Routing, and IP v6 QoS, SNMP V3 over IPv6		
14	Router should support protocols like IPv4, IPv6, VRRP, Static Routes, RIPv1, RIPv2, OSPF, IS-IS, BGP, MBGP, BFD, Policy based routing, IPv4 and IPv6 tunneling from day 1		
15	The router should have WAN protocols like PPP / Multilink PPP / PPPoE, etc.		
16	Dynamic Host Control Protocol (DHCP) server/relay/client		
17	Dynamic DNS Support		
18	Support for 802.1q VLANs, Demilitarized Zone (DMZ)/security zones/Equivalent		
19	Should have IGMP v1/v2/v3, PIM-DM, PIMSM, Source Specific Multicast (SSM)		
20	Routers should have Configuration rollback		
21	Should support network traffic monitoring, Security, Denial of Service (DoS) capabilities and network monitoring		
22	Routers should support Software upgrades as and when Necessary		
23	Routers should have SNMPv2 and SNMPv3		
24	Routers should have AAA authentication using RADIUS and TACACS		
25	Routers should have Packet Filters like: Standard ACL, Extended ACL, etc.		
26	Router should support advanced application inspection and Control		
27	Routers should have Tunnels (GRE, IPSec)		
28	The router should support IPSec Framework for Secured Data transfer Key Exchange : Internet Key Exchange (IKE), IKEv2, Pre-Shared Keys (PSK), Public Key Infrastructure PKI (X.509),		

	RSA encrypted nonces/ RSA Signatures etc, IPsec Data Encapsulation AH and ESP.		
29	NAT transparency, Firewall support for clients		
30	IPsec 3DES termination/initiation, IPsec passthrough		
31	Routers should have DES, 3DES, AES encryption, encryption. Authentication Algorithm: SHA1 and SHA2, Group: Diffie-Hellman (DH) Group 1, 2, 5		
32	Routers should have generation of SNMP traps and syslog		
33	Routers should have Network address translation (NAT) and PAT		
34	Extensive debugs on all protocols		
35	Shall have Secure Shell for secure connectivity		
36	Management should support: Telnet, Simple Network Management Protocol (SNMP), CLI/Web based HTTP management, RADIUS		
37	Attach solution document containing detailed bill of material (make, model, OS details: version, date of release, date of release of next version, end of sale & support date, product development path, etc.)		
38	Solution should integrate seamlessly with Bank's existing network Infrastructure.		
39	should be at least EAL2/EAL3/or above/NIAP/NDPP/ NDcPP or above Certified		
40	The Router should not have any perforations at the top to prevent any type of contamination effect.		

SI No.	Table M : Minimum Technical requirement for Core Switch	Compliance (Yes/No)	Remarks
1	General Features & Performance :		
2	Switch should have minimum 48 port 10G populated with 48 x 10G SR optics from day 1. Bidder should provide switch port compatible with proposed server requirement.		
3	Switch should have minimum 2 x 40/100G Port and redundant Power supply (hot pluggable) from day 1.		
4	Switch should support field replaceable components such as Supervisor, Linecards , Power-supply and Fan trays and have embedded RFID tag which facilitates easy asset/inventory management using commercial RFID readers.		
5	The switch will have at least 500 Gbps switching capacity.		

6	The switch should support minimum forwarding of 1Bpps for IPv4 and IPv6		
7	IPv4 Routing entry support : Minimum 30K		
8	IPv6 Routing entry support : Minimum 25K		
9	Multicast Routing entry support : Minimum 4K		
10	MAC addresses support: Minimum 32K		
11	VLANs support: Minimum 2000 VLANs		
12	ACL & QoS entry support : minimum 16K ACL & minimum 16K QoS entry		
13	The device should be IPv6 ready from day one		
14	Shall support In Service Software Upgrade (ISSU) to provide an upgrade of the entire chassis or an individual task/process without impacting hardware forwarding		
15	BGP, IS-IS, OSPF Routed Access, RIP, Policy-Based Routing (PBR), PIM SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1		
16	STP, PVLAN, First Hop Security(IPv6 Snooping Policy,IPv6 FHS Binding Table Content,IPv6 Neighbor Discovery Inspection,IPv6 Source Guard,IPv6 Prefix Guard,IPv6 Destination Guard etc), Link Aggregation Protocol (LACP)		
17	STP, Trunking, Private VLAN (PVLAN), Q-in-Q, Shaped Round Robin (SRR) scheduling, Committed Information Rate (CIR), and eight egress queues per port		
18	During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.		
19	OS should have support for Management automation vis Netconf/Yang or equivalent		
20	Should support Streaming Telemetry, Netflow/Sflow/Jflow, SPAN, RSPAN or equivalent		
21	Proposed Switch should support dual serviceable FAN trays for cooling that is accessible from both front and rear side of chassis		
22	Switch should support Layer 2 Traceroute to identifies the Layer 2 path that a packet takes from a source device to a destination device		
23	Switch should support PIM Spare Mode (PIM-SM), PIM Dense Mode (PIM-DM), PIM Sparse-Dense Mode (PIM-SDM), and PIM Source Specific Multicast Mode (PIM-SSM) .		
24	Switch should support MPLS Layer 3 VPN for secure end-end		

	segmentation and traffic separation using VRF.		
25	Proposed switch should support minimum 8 power supply from day 1.		
26	Interface		
27	Switch should have Interfaces compatible with all types of servers to be supplied under scope of the RFP.		
28	Should have capabilities to seamless upgrade/replacement (without interrupting running processes and services) for modular interfaces.		
29	Switch should support 144 numbers of 1G copper PoE+ ports OR UPOE ports		
30	Switch should support 48 nos. of 10G ports for future		
	Switch should support 24 Multigigabit 100/1000 Mbps		
31	Switch must support the ability to roll back to a previous configuration		
32	Switch must provide Application visibility using Deep packet inspection technology or equivalent		
33	Switch must support packet capture utility like Wireshark		
34	Switch should support scale of 256VRFs from logical segmentation perspective		
35	Switch should provide streaming telemetry to network management station to find out the root cause of the network, behaviour change of the network devices, deviations from the existing attributes		
36	Switch should support a blue beacon LED which allows easy identification of the switch being accessed.		
37	Switch must support BFD for agile convergence with the help of routing protocols		
38	Switch should support GRE tunnels and NAT (Static.Dynamic, PAT) for integration with 3rd party or migration kind of scenarios		
39	Switch should have capability to share netflow traffic to Security solution to identify the anomalous behaviour change over the network.		
40	Certification:		
41	The switch should be CE Marking, UL 60950, EN 60950 and ROHS5		
42	Switch should be at least EAL2 (Common Criteria) or above or NDPP Certified.		
43	The Switch should be IPv6 Ready		

44	5 years 8x5 Next Business Day Hardware replacement required		
45	Switches and SFP should be from same OEM		

Sl. No	Table N: Minimum Technical requirement for Network Switch (Extranet, Internet & Branch)	Compliance (Yes/No)	Remark
For Extranet & Internet Switch			
1	48 port 1G switch needs maximum 100 Gbps Switching capacity with all the services enabled on switch		
2	Switch should have minimum 48 100/1000 Mbps Ethernet port		
3	Switch should have minimum throughput of 75 Mpps.		
4	Switch should have minimum 4 nos. of fully populated SFP ports		
For Branch Switch			
1	24 port 1G switch needs maximum 10 Gbps Switching capacity with all the services enabled on switch		
2	Switch should have minimum 24 100/1000 Mbps Ethernet port		
3	Switch should have minimum throughput of 20 Mpps.		
For both type of Switches			
1	The switch should support Port based ACL		
2	Should be a fixed/single box configuration for ease of management		
3	Switch should support IPv4 and IPv6 switching in hardware from day 1.		
4	The Switch must have support for AC supply		
5	The Switch should be Rack Mountable and supplied with necessary rack mounting kit.		
6	The Switch should be having adequate protection towards any type of infestation and should have adequate ventilation to prevent overheating condition.		
7	The Switch should have minimum 512 MB DRAM.		
8	Switch should support half as well as full duplex support for all ports.		
9	Switch should support auto negotiation in all its ports.		
10	Auto MDI/MDI-X support on all ports for easy cable detection		
11	Provides store-and-forward forwarding scheme		
12	The Switch should support 9K bytes of Jumbo Frames.		
13	The Switch should support minimum 250 Access lists (ACL) from day 1.		

14	VLAN encapsulation. Up to 64 VLANs should be supported. Support for 4000 VLAN IDs. Centralized VLAN Management. VLANs created on the Core Switches should be propagated automatically. Should support 802.1d, 802.1s, 802.1w, 802.3ad, Port Aggregation Protocol (PAgP), Link Aggregation Protocol (LACP). Support for Detection of Unidirectional Links and to disable them to avoid, Per-port broadcast, multicast, and storm control to prevent faulty end stations from degrading overall systems performance..		
15	Efficient MAC Address learning engine supports up to 8K MAC Addresses		
16	Should support Private VLAN , VLAN Aggregation , Translation and 802.1v		
17	Must support Ping and Traceroute for connectivity and Fault Management		
18	Should support SNMP and syslog Notification for MAC addition, deletion and movement across ports		
19	Should have out of band management through console or an external modem for remote management		
20	Management should support : Telnet, Simple Network Management Protocol (SNMP), CLI/Web based HTTP management, RADIUS		
21	Attach solution document containing detailed bill of material (make, model, OS details: version, date of release, date of release of next version, end of sale & support date, product development path, etc.)		
22	Solution should integrate seamlessly with Bank's existing network Infrastructure.		
23	Should have 3 years warranty along with FM Support. Product must not be End of Life or Support for next 5 years. If offered product declared End of Life or Support within 5 years contact period, then Vendor should provide latest product with same specification or higher without any cost to the Bank. Offer product must not be End of Life or Support for next 5 years.		
24	The Switch should have Port security to secure the access to an access or trunk port based on MAC address to limit the number of learned MAC addresses to deny MAC address flooding.		
25	The Switch should support Dynamic ARP inspection (DAI) or equivalent feature to ensure user integrity by preventing malicious users from exploiting the insecure nature of ARP.		
26	The Switch should support IP source guard or equivalent feature to prevent a malicious user from spoofing or taking		

	over another user's IP address by creating a binding table between the client's IP and MAC address, port, and VLAN.		
27	The Switch should support flexible & multiple authentication mechanism, including 802.1X, MAC authentication bypass, and web authentication using a single, consistent configuration.		
28	The Switch should support RADIUS change of authorization and downloadable Access List for comprehensive policy management capabilities.		
29	The Switch should support Private VLANs or equivalent to restrict traffic between hosts in a common segment by segregating traffic at Layer 2, turning a broadcast segment into a non-broadcast multi access like segment to provide security & isolation between switch ports, which helps ensure that users cannot snoop on other users' traffic.		
30	The Switch should support Port-based ACLs for Layer 2 interfaces to allow security policies to be applied on individual switch ports.		
31	The Switch should support Secure Shell (SSH) Protocol, and Simple Network Management Protocol Version 3 (SNMPv3) to provide network security by encrypting administrator traffic during Telnet and SNMP sessions.		
32	The Switch should support TACACS+ and RADIUS authentication to facilitate centralized control of the switch and restricts unauthorized users from altering the configuration		
33	The Switch should support Multilevel security on console access to prevent unauthorized users from altering the switch configuration.		
34	The Switch should support Bridge protocol data unit (BPDU) Guard to shut down Spanning Tree Port Fast when BPDUs are received to avoid accidental topology loops.		
35	The Switch should support Spanning Tree Root Guard (STRG) to prevent edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes.		
36	The Switch should support software image update and switch configuration without user intervention. - Optional		
37	The Switch should support automatic interface configuration as devices connect to the switch port.		
38	The Switch should support system health checks within the switch or through external software.		
39	The Switch should support Auto QoS or QoS or equivalent for certain device types and enable egress queue configurations.		

40	The Switch should support 802.1p CoS and DSCP Field classification using marking and reclassification on a per-packet basis by source and destination IP address, MAC address, or Layer 4 Transmission Control Protocol/User Datagram Protocol (TCP/UDP) port number.		
41	The Switch should support Shaped round robin (SRR) or weighted round robin scheduling to ensure differential prioritization of packet flows by intelligently servicing the ingress queues and egress queues. Switch should support congestion avoidance at the ingress and egress queues before a disruption occurs. Strict priority queuing to ensure that the highest priority packets are serviced ahead of all other traffic.		
42	The Switch should support Rate limiting based on source and destination IP address, source and destination MAC address, Layer 4 TCP/UDP information, or any combination of these fields, using QoS ACLs (IP ACLs or MAC ACLs), class maps, and policy maps.		
43	The Switch should support Four egress queues per port to enable differentiated management of different traffic types across the stack for traffic.		
45	The Switch should support Full Flexible Netflow v9 or equivalent which provides ability to characterize IP traffic and identify its source, traffic destination, timing, and application information and is critical for network availability, performance, and troubleshooting.		
46	Switch Should support all the mentioned Standards IEEE 802.1s, IEEE 802.1w, IEEE 802.1x, IEEE 802.3ad, IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports, IEEE 802.1D Spanning Tree Protocol, IEEE 802.1p CoS Prioritization, IEEE 802.1Q VLAN, IEEE 802.3 10BASE-T specification, IEEE 802.3u 100BASE-TX specification, IEEE 802.3ab 1000BASE-T specification, IEEE 802.3z 1000BASE-X specification, RMON I and II standards or Sflow, SNMPv1, SNMPv2c, and SNMPv3 or higher,		
47	Proposed switch should support any OEM Network Access Control (NAC) solution whenever bank deploys in it's network. All the required features should be available in the proposed switch from Day 1 for integration with any OEM NAC solution.		
48	TAC support should be provided by OEM directly on 24x7 basis.		
49	Access from CLI to configure the ACL automatically from NAC solution		

50	Should have 3 years warranty service. The Vendor should ensure that the equipment proposed in this Bid, should not be declared as End of Life (EOL) or End of Support (EOS) by the OEM within next 5 years from the date of installation. In the event of the supplied equipment being declared End of support/End of Life during the contract period, the Vendor has to replace the equipment with compatible equipment having equivalent or higher configurations without any additional cost to the Bank. Offered product must not be End of Life or End of Support for next 5 years		
51	Should be at least FIPS/EAL2/EAL3 /NIAP/NDPP/NDcPP certified or above.		
52	The switch should have feature of enable and disable specific ports of the switch.		
53	The Switch should have feature of configuration of settings for duplex(half or full), as well as for Bandwidth Ingress Rate(Upload Limit) and Egress Rate(Download Limit) for the switches.		
54	The switch should support feature of setting quality of service (Qos) levels for a specific switch port.		
55	The switch should support enabling of MAC filtering and other access control features such as User and group accounts with password encryption and authentication, Access privilege levels configurable for login classes and user templates.		
56	The Switch should support configuration of port mirroring for monitoring network traffic.		

Sl.	Table O: Minimum Technical requirement for Core Firewall, Peripheral Firewall, Internet & Extranet Firewall	Compliance (Yes/No)	Remark
Core Firewall			
1	The appliance must be fully populated with at least 4 X 10G SFP+ and 8 X 1G Gigabit Base-T and interfaces from day 1 with dual power supply		
2	The appliance hardware should be with at least 6 physical with hyper-threading enable/12 virtual cores, 16 GB RAM and with option of compact flash.		
3	NGFW must have minimum Next Generation Firewall with IPS and application visibility throughput of 15 Gbps.		
4	NGFW must have minimum Firewall with IPS throughput of 10 Gbps		
5	NGFW must support at least 330K connection per second and 7M concurrent connections from day 1		

Peripheral Firewall, Internet & Extranet Firewall

1	The appliance must be fully populated with at least 6 X 10G SFP+ and 8 X 1G Gigabit Base-T and interfaces from day 1 with dual power supply		
2	The appliance hardware should be with atleast 6 physical with hyperthreading enabled /12 virtual cores, 16 GB RAM with option of compact flash.		
3	NGFW must have minimum Next Generation Firewall with IPS and application visibility throughput of 5 Gbps.		
4	NGFW must have minimum Firewall with IPS throughput of 5 Gbps		
5	NGFW must support at least 220K connection per second and 5M concurrent connections from day 1		

Hardware & Networking/Interface features for all firewalls

1	Solution should be purpose build hardware appliance with Access & Threat prevention controls. The next generation firewall gateway must be capable of supporting these next generation security applications on the platform - Stateful Inspection Firewall, Next Gen Firewall, Intrusion Prevention System, User Identity Acquisition, Application Control, URL filtering, Anti – Bot and Anti – Virus, HTTPS Inspection, Advance Sandboxing, Security Policy Management, Monitoring and Logging, Logging and Status, Event Correlation and Reporting, Virtual Systems, Networking & Clustering. These security controls must be exclusively supported, supplied by and managed by the vendor.		
2	NGFW solution must be a dedicated hardware appliance		
3	Proposed Firewall should be proprietary ASIC based in nature/should be open architecture based on multi-core CPU's to protect & scale against dynamic latest security threats		
4	Vendor must be able to supply a recommended hardware configuration based on the criteria of real world traffic and next generation security applications provided by the customer and sizing should be based on following parameters: <ul style="list-style-type: none"> a. Total Throughput requirements b. Security gateway with 100 security rules c. Network Address Translation enabled d. Logging Enabled e. Maximum Users 		

	f. IMIX traffic blend of HTTP, SMTP, DNS		
	Intelligent mode/flow mode should be turned off while providing the details about performance number. SI may be asked to do the proof of concept to establish the fact that device meets the following performance requirement.		
5	Appliance must have onboard 10/100/1000Base-T OOB management and USB ports dedicated for console management		
6	The appliance must be fully populated with at least 4 X 10G SFP+ and 8 X 1G Gigabit Base-T and interfaces from day 1 with dual power supply		
7	The appliance hardware should be with atleast 16 physical and 32 virtual cores with hyperthreading enabled, 64 GB RAM and atleast 1 X 480 GB SSD storage from day 1		
8	NGFW must have minimum Next Generation Firewall with IPS and application visibility throughput of 20 Gbps.		
9	NGFW must have minimum Firewall with IPS throughput of 20 Gbps		
10	The Next Generation Threat Prevention Throughput must be at least 5 Gbps from day 1		
11			
12	NGFW must support at least 330K connection per second and 16M concurrent connections from day 1		
13	Firewall must support NAT 66, NAT 64 and NAT 46 functionality from day 1		
14	The firewall solution should support Internet Key Exchange (IKE) Version 1 (IKEv1) or Version 2 (IKEv2) for IPSEC VPN		
15	Solution should be supplied with High Availability with Active-Active Load Sharing functionality and commissioned in Active-Active mode with load balancing between the two devices. Solution must support gateway high availability and load sharing with state synchronization		
16	The proposed solution of appliances should support the dynamic routing protocols with readiness for BGPv4 & OSPF		
17	The proposed solution must support different actions in the policy such as deny, drop, Allow, accept		
18	Solution should have hardened OS for both, the appliance, and the management platform.		
19	Vendor must provide evidence of year over year leadership position of Gartner Magic Quadrant for Enterprise network Firewall Gartner Magic Quadrant for last 5 years		

NGFW Features

20	NGFirewall should support Identity based controls for Granular user, group and zone-based visibility and policy enforcement		
21	Application control database must contain more than 3000+ known applications. The proposed solution must allow free custom application signatures for Homegrown and custom applications.		
22	NGFirewall should support the Identity based logging, application detection and usage controls		
23	Should enable securities policies to identify, allow, block or limit application regardless of port, protocol etc		
24	The Firewall shall provide static as well as hide Network Address Translation (NAT) and Port Address Translation (PAT) functionality using automatic and manual NAT		
25	The communication between the management servers and the security gateways must be encrypted and authenticated with PKI Certificates.		
26	Solution must support Configuration of dual stack gateway on a bond interface, OR on a sub-interface of a bond interface		
27	IPS module must be based on the following detection mechanisms: exploit signatures, protocol anomalies, application controls and behavior-based detection		
28	IPS module must provide at least two pre-defined profiles/policies that can be used immediately		
29	IPS module must support a software-based fail-open mechanism, configurable based on thresholds of security gateways CPU and memory usage		
30	IPS application must have a event correlation and reporting mechanism		
31	IPS must support network exceptions based on source, destination, service or a combination of the three.		
32	The administrator must be able to automatically activate new protections, based on configurable parameters (performance impact, threat severity, confidence level, client protections, server protections)		
33	IPS must provide an automated mechanism to activate or manage new signatures from updates		
34	IPS must have a mechanism to convert new signatures in open language like SNORT ; and upload in the IPS signatures database.		
35	IPS must have options to create profiles for either client or server based protections, or a combination of both.		

36	Threat Protection detection engine be capable of detecting and preventing a wide variety of threats(e.g. network probes/reconnaissance,C&C,VoIP attacks, buffer overflows,P2P attacks etc.).		
37	The solution should Maintain flexibility with options to maintain the original file format and specify the type of content to be removed		
38	Should support more than 5,000 IPS signatures or more. Should support capability to configure correlation rule where multiple rules/event can be combined together for better efficacy		
Threat prevention			
39	Vendor must have an integrated Anti-Bot and Anti-Virus application on the next generation firewall		
40	Anti-bot application must be able to detect and stop suspicious abnormal network behavior		
41	Anti-Bot application must use a multi-tiered detection engine, which includes the reputation of IPs, URLs and DNS addresses and detect patterns of bot communications		
42	Anti-Bot and Anti-Virus must be have real time updates from a cloud based reputation services. Look for C&C traffic patterns, not just at their DNS destination		
43	The solution should have detection and prevention capabilities for DNS tunneling attacks		
44	Solution must protect from DNS Cache Poisoning, and prevents users from accessing blocked domain addresses.		
45	Antivirus engine must be integrated on the NGFW platform with inspection of multiple file types like zip, RAR, torrents, javascripts		
46	Anti-virus application must be able to prevent access to malicious websites		
47	Anti-Virus must be able to scan archive files. Anti-Virus policies must be centrally managed with granular policy configuration and enforcement		
48	The solution should support detection & prevention of Cryptors & ransomware viruses and variants (e.g. Wannacry, Crypt locker , CryptoWall...) through use of static and/or dynamic analysis		
49	The solution should have mechanisms to protect against spear phishing attacks		
50	Solution should be capable of providing inline Zero-Day Phishing Prevention which should prevent access to phishing websites, both known and completely unknown		

51	Solution must detect and block access to Zero phishing sites by scanning all form fields. Solution should not be only dependent on url reputation based Techniques to identify phishing URL's.		
52	NGFW should be able to remove malicious executables		
53	The solution should Eliminate threats and remove exploitable content , including active content and embedded objects.		
54	The detection engine must incorporate multiple approaches for detecting threats, including at a minimum exploit-based signatures, vulnerability-based rules, protocol anomaly detection, and behavioral anomaly detection techniques.		
55	Real-Time Prevention-unknown malware patient-0 . The solution must offer the sandboxing capability to scan the malicious weaponized files using static and dynamic analysis.		
Administration, Management and Logging			
56	Management and Firewall should be two separate systems. Management can be virtual appliance or bare metal hardware installation. SI has to provide the pre-requisites to implement the solution.		
57	NGFW appliances must be managed from a dedicated management system separate from the NGFW appliance		
58	Device Management system includes Management, logging, reporting and basic event correlation functionality		
59	Device Management system should provide the real time health status of all the firewall modules on the dashboard for CPU & memory utilization, state table, total no. of concurrent connections and the connections per second counter. It must provide a security rule hit counter in the security policy.		
60	Management platform should provide autonomous threat prevention security policy.		
61	Solution must be able to segment the rules base in favor of delegation of duties in which changes in one segment will not affect other segments on the same autonomous system.		
62	The device must provide a minimum basic statistic about the health of the firewall and the amount of traffic traversing the firewall.		
63	optionally, Solution must have capabilities for multi-domain management and support the concept of global security policy across domains.		

64	Support an Attacks reporting view to investigate security issues, and extract immediate action items based on the mitigation flow		
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Table P Recommended Response Application time and RTO	Compliance (Yes/No)
Simple transactions like Balance Enquiry, Limit Update, etc. can achieve a 0.15 to 0.2 seconds.	
Medium Financial transactions like POS, ATM, IMPS,UPI, Internet Banking, Mobile Banking cash withdrawal can achieve a 0.5 to 0.7 seconds response time.	
Complex transactions like Account Opening, Customer Creation, etc. can achieve 2 to 3 seconds response time.	
Any other transaction that is fetching large amount of data or having multiple channel interfaces which will take more time and same needs to be validated during System interface Testing.	
Archive Replication gap should be less than <15 min for DC & DR replication.	
Recovery point objective (RPO) is 30 mins	
Recovery Time objective (RTO) is 90 mins.	

Table Q Growth Projections Considered for the RFP					
Parameters	Year 1	Year 2	Year 3	Year 4	Year 5
Number of Business Offices/Branches	237	237	240	245	250
Users (Total)	1045	1097	1151	1208	1268
Users(Concurrent)	840	880	920	960	1000
Finacle CRM solution at any point of time	929	974	1018	1062	1106
Total number of customers	57,23,907	62,96,298	69,25,928	76,18,520	83,80,373

Note:

- Concurrent users are those who are not idle while logged in and are performing any kind of enquiry or update transactions
- Each branch is assumed to have an average of 4 users

Parameters	Year 1	Year 2	Year 3	Year 4	Year 5
Number of Saving (SB) accounts	43,10,127	47,41,139	52,15,253	57,36,779	63,10,457
Number of Current (CA) accounts	14,792	16,271	17,898	19,688	21,657
Number of Over draft (OD) accounts	4,475	4,922	5,415	5,956	6,552
Number of Term deposit (TD) accounts	12,31,993	13,55,193	14,90,712	16,39,783	18,03,762
Number of Loan accounts(LA)	4,49,015	4,93,916	5,43,308	5,97,638	6,57,402
Any other type of account	6,02,617	6,62,879	7,29,167	8,02,083	8,82,292
Avg. No. of Financial transaction per day from Branch network	51,37,38	6,16,486	7,39,783	8,87,739	10,65,287
Avg. No. of Financial transaction per day from channels (Through ISO 8583 format)	1,50,086	1,50,086	1,95,112	2,53,646	3,29,740
Avg. No. of Non-Financial transaction per day from Branch network	2,46,166	2,83,091	3,25,555	3,74,388	4,30,546
Avg. No. of Non-Financial transaction per day from channels (Through ISO 8583 format)	72,157	90,196	1,12,745	1,40,932	1,76,164
Avg. No. of Financial Batch transaction per day from Branch network	2,34,291	2,57,720	2,83,492	3,11,842	3,43,026
Expected EOD/BOD Time Window in Hours	3	3	3	3	3

Commercial Bid

Table A Hardware Cost with 3 years Warranty

SI	Item	Make & Model No.	Qty at DC	Qty at DR	Total Qty	Unit Price	Total cost	GST Amount	Total cost with GST
1	Physical server								
a	Type A - Production DB server		2	2					
b	Type B - CSIS DB server		2	2					
c	Type C – App and Web servers		3	3					
d	Type D – CSIS App, C24 & UNISER server		2	2					
e	Type E - UAT DB server		1						
f	Type F - UAT CSIS DB Server		1						
g	Type G- UAT App, Web and other servers		4						
2	Storage								
a	Enterprise Class San storage		1	1					
b	NAS Storage		1	1					
c	SAN Switch		2	2					
3	Back UP								
a	Backup Server		2	2					
b	Tape Backup Library		1	1					
4	Load Balancer								
a	Hardware Load balancer		3	2					
5	Any other Hardware required for CBS Application								
6	Network Equipment								
a	Core Router		1	1					
b	Core Switch		2	2					
c	Extranet Router		1	1					

d	Extranet Switch		2	2					
e	Internet Router		1	1					
f	Internet Switch		1	1					
g	Core Firewall		2	2					
h	Perimeter Firewall		2	2					
i	Internet Firewall		1	1					
j	Extranet Firewall		1	1					
k	Authentication Server – ACS		1	1					
	Other Applications								
7	Centralised Antivirus for Desktops & Servers								
a	Hardware		As per requirement	As per requirement					
b	Any other Hardware required								
8	Active Directory System for Desktops & servers								
a	Hardware		As per requirement	As per requirement					
d	Any other Hardware required								
9	Biometric System for CBS Users								
a	Hardware		As per requirement	As per requirement					
e	Any other Hardware required								
10	Enterprise Management System								
a	Hardware / Appliance		As per requirement	As per requirement					
e	Any other Hardware if required								

1									
1	Branch Network Equipment								
a	Branch Router		250 (to be delivered at branches)						
b	Branch Switch		250 (to be delivered at branches)						
1									
2	Total cost of Hardware								

Table B: Software Cost with 1-year Enterprise Premium/standard support

Sl	Item	Make & Version	Qty	Unit Price	Total cost	GST Amount	Total cost with GST
1	Finacle Solution						
a	Red Hat Linux OS License version 8.6 or above		As per requirement				
b	Software load balancer		5				
c	JBOSS Middleware		As per requirement				
d	Back up Software		As per requirement				
e	Any other Software required for Finacle Application						
2	EMS solution						
a	EMS Application		License as per requirement				
b	Operating System for EMS Application						
c	Database for EMS Application						
d	Other software for EMS Application, , if any						
3	Active Directory Solution						

a	Windows server 2022 for Active Directory		1300 desktops				
b	Other software for Active Directory, if any						
4	Anti Virus Solution						
a	Anti Virus Application		1300 Desktop & 200Servers				
b	Operating System for Anti Virus Application						
c	Database for Anti Virus Application						
d	Other software for Anti Virus Application, , if any						
5	Biometric Software Solution						
a	Biometric Software Application		1000 Users				
b	Operating System for Anti Virus Application						
c	Database for Anti Virus Application						
d	Other software for Anti Virus Application, , if any						
6	Total Software Cost						

Table C 4th and 5th Year comprehensive AMC Cost for Hardware

SI	Item	Make & Model No.	Qty at DC	Qty at DR	Total Qty	4th Year AMC Cost	5th Year AMC Cost	GST Amount	Two yrs Total AMC cost with GST
1	Physical server								
a	Type A - Production DB server		2	2					

b	Type B - CSIS DB server		2	2					
c	Type C - App, Web and other servers		3	3					
d	Type D – CSIS App, C24 & UNISER server		2	2					
e	Type E - UAT DB server			1					
f	Type F - UAT CSIS DB Server			1					
g	Type G- UAT App, Web and other servers			4					
2	Storage								
a	Enterprise Class San storage		1	1					
b	NAS Storage		1	1					
c	SAN Switch		2	2					
3	Back UP								
a	Backup Server		2	2					
c	Tape Backup Library		1	1					
4	Load Balancer								
a	Hardware Load balancer		3	2					
5	Any other Hardware required for CBS Application								
6	Network Equipment								
a	Core Router		1	1					
b	Core Switch		2	2					
c	Extranet Router		1	1					
d	Extranet Switch		2	2					
e	Internet Router		1	1					
f	Internet Switch		1	1					
g	Core Firewall		2	2					
h	Perimeter Firewall		2	2					
i	Internet Firewall		1	1					
j	Extranet Firewall		1	1					
k	Authentication Server – ACS		1	1					
	Other Applications								

7	Centralised Antivirus for Desktops & Servers								
a	Hardware		As per requirement	As per requirement					
b	Any other Hardware required								
8	Active Direcopy System for Desktops & servers								
a	Hardware		As per requirement	As per requirement					
d	Any other Hardware required								
9	Biometric System for CBS Users								
a	Hardware		As per requirement	As per requirement					
e	Any other Hardware required								
10	Enterprise Management System								
a	Hardware / Appliance		As per requirement	As per requirement					
e	Any other Hardware required								
11	Branch Network Equipment								
a	Branch Router		250 (to be delivered at branches)						
b	Branch Switch		250 (to be						

			delivered at branches)						
12	Total cost for Hardware AMC								

Table D Software ATS and Enterprise premium/Standard support Cost (2nd ,3rd 4th and 5th year)

SI	Item	Make & Version.	Qty	2 nd Yr. ATS Cost	3 rd Yr. ATS Cost	4 th yr. ATS Cost	5 th Yr. ATS Cost	GST Amount	Total cost with GST
1	Finacle Solution								
	Red Hat Linux OS License version 8.6 or above		As per requirement						
	Software load balancer		5						
	JBOSS Middleware		As per requirement						
	Back up Software		As per requirement						
	Any other Software required for Finacle Application								
2	EMS solution								
	EMS Application		License As per requirement						
	Operating System for EMS Application								
	Database for EMS Application								
	Other software for EMS Application, , if any								
3	Active Directory Solution								
	Windows server 2022 for Active		1300 desktops						

	Directory								
	Other software for Active Directory, if any								
4	Anti Virus Solution								
	Anti Virus Application		1300 Desktop & 200 Servers						
	Operating System for Anti Virus Application								
	Database for Anti Virus Application								
	Other software for Anti Virus Application, , if any								
5	Biometric Software Solution								
	Biometric Software Application		1000 Users						
	Operating System for Anti Virus Application								
	Database for Anti Virus Application								
	Other software for Anti Virus Application, , if any								
6	Total Software ATS Cost								

TABLE E: HARDWARE, SOFTWARE, NETWORK ONE TIME IMPLEMENTATION COST

SI	Description	Cost	GST Amount	Cost with GST
1	Core Banking Hardware Implementation cost at DC & DR sites			
2	Core Banking System Software Implementation cost at DC & DR sites			

3	Core Network Implementation cost at DC & DR sites			
4	Branch Network equipment installation cost			
5	200 nos. of LTO 4/ LTO 6 Tape migration cost (including cost of LTO 9 tapes)			
6	Performance testing of proposed hardware infrastructure, UAT/functional testing, security testing & data migration testing			
	Total Cost of Table F			

**TABLE F : OTHER APPLICATIONS (ACTIVE DIRECTORY, ANTIVIRUS, BIOMETRIC, EMS)
ONE TIME IMPLEMENTATION COST**

S I	Description	Cost	GST Amount	Cost with GST
1	Implementation cost of Centralised Antivirus at DC, DR & Branches			
2	Implementation cost of Active Directory at DC, DR & Branches			
3	Implementation cost of Biometric Solution at DC, DR & Branches			
4	Implementation cost of EMS solution at DC & DR			
	Total Cost of Table G			

TABLE G : FACILITY MANAGEMENT COST

SI	Description	Cost	GST Amount	Cost with GST
1	Facility Management cost of Hardware & Software related to Core banking System for five years			
2	Facility Management cost of Network Management for five years			
3	Facility Management cost of other applications (CAV, AD, EMS, Biometric) for five years			
	Total Cost of FM Services			

TABLE H: TOTAL PROJECT COST

SI	Description	Cost	GST Amount	Cost with GST
1	Hardware Cost with 3 years Warranty – Total of Table A			
2	Software Cost with 1-year Enterprise Premium/standard support Total of Table B			
3	4th and 5th Year comprehensive AMC Cost for Hardware – Total of Table C			
4	Software ATS and Enterprise premium/Standard support Cost (2 nd ,3 rd 4 th and 5 th year) – Total of Table D			
5	Hardware, Software, Network One Time Implementation Cost - Total of Table E			
6	Other Applications_Active Directory, Antivirus, Biometric & Ems Solution One Time Implementation Cost - Total of Table F			
6	Facility Management Cost - Total of Table G			
	Total Project Cost (TCO)			

Eligibility Criteria Compliance

Sl. No.	Eligibility Criteria	(Proof of documents required / must be submitted)
1	<p>Bidder should be a limited company (Public/Private) registered in India under the Companies Act, 1956 or 2013 and amendments thereafter or Companies registered as MSME Entrepreneur & still categorized as MSME for the last 3 years as on RFP issuance date.</p> <p>In case of wholly owned subsidiary, parent company should have been registered in India for at least 3 years.</p> <p>Bidder & Parent Company/ Partner/ Investor must adhere cross border sharing/FDI/FEMA and other regulatory guidelines of Govt of India.</p>	<p>7. Certificate of Incorporation issued by Registrar of Companies along with</p> <p>8. Copies of Memorandum of Association</p> <p>9. Copies of Articles of Association</p> <p>10. Shareholding pattern</p> <p>11. PAN, TAN, GSTIN Certificate and any other tax related document if applicable is required to be submitted along with the eligibility bid.</p> <p>12. Registration from DIC, KVIB, NSIC, KVIC, DIHH, UAA or any other body specified by Ministry of MSME.</p>
2	<p>The bidder must have minimum annual turnover of Rs. 300 Crore each in last three financial years i.e. 2019-20, 2020-21 & 2021-22. This must be the individual company turnover and not that of any group companies. In case of wholly owned subsidiary, the parent company should comply with above criteria.</p>	<p>Copy of Audited Balance sheet for the financial years i.e. 2019-20, 2020-21 & 2021-22 should be submitted. Also a Certificate signed by the Chartered Accountants regarding company's financial capability to be submitted.</p>
3	<p>The Bidder should have operating Profit in the last three financial years (2019-20, 2020-21 & 2021-22). In case of wholly owned subsidiary, the parent company should comply with above criteria.</p>	<p>Copy of Audited balance sheet of the financial years i.e. (2019-20, 2020-21 & 2021-22) should be submitted.</p>

4	The bidder should be Original Equipment Manufacturer (OEM) of Hardware or their authorized representative or System Integrator (SI) in India.	The bidder needs to submit Manufacturer Authorization Form (MAF), having reference of this RFP, from respective OEMs as per Annexure-C stating that bidder is authorized partner/ System Integrator of OEM and is authorized to participate in this RFP. In case of OEM, self-declaration on Company Letter Head as per Annexure-C format duly signed & stamped to be submitted.
5	Proposed x86 Enterprise Class Server OEM should have installation base in at least one Public Sector Bank / Regional Rural Bank in India having minimum 20 nos. of x86 Enterprise Class Servers with minimum 400 cores with Red hat Linux Operating System and running successfully on Finacle 10.x environment at least one year as on date submission of RFP.	Copy of purchase order and reference letters/ completion certificates mentioning details of hardware used along with Finacle 10.x environment to be enclosed containing contact details of the signing authority of the masked purchase order / authorization letter.
6.	Proposed OEMs for storage, load balancer, SAN switch, NAS Tool, Core Router, Core Switch, Core Firewall should have been supplied, integrated and running successfully as on date in at least one Public Sector Bank / Regional Rural Bank in India.	Copy of purchase order and reference letters/ completion certificates to be enclosed containing contact details of the signing authority of the masked purchase order / authorization letter.
7	Proposed OEMs for Anti-Virus, EMS Tool & Biometric Solutions should have been running successfully as on date in at least one Scheduled Commercial Bank in India.	Copy of purchase order and reference letters/ completion certificates to be enclosed containing contact details of the signing authority of the masked purchase order / authorization letter.
8.	The proposed OEMs hardware/software like servers, storage, load balancer, SAN switch/director, Network Equipment, and backup solution, NAS, operating system, EMS Tool, Anti-virus solution, Biometric solutions, operating system and any other license software	A written confirmation to be provided from the OEM on OEM's letterhead (signed & stamped by OEM) as per Annexure-C

	required for implementation of Finacle 10.x should have a clear support roadmap for minimum Seven (7) years from date of submission of RFP and upgrades (if required) must be made available during the contract period.	
9.	The bidder should have experience in delivery, integration, installation, management & maintenance of Hardware & Network Infrastructure in at least one Public Sector Bank / Regional Rural Bank in India as on date having more than 500 branches operation in the last 5 years along with the following areas of Banking setup: c) IT Infrastructure like Management of Servers, Storage, Network & security Equipment, SAN Switch, Backup solution. d) Database & Operating System administration & management	A copy of Purchase Order and the necessary experience certificate along with reference letter having delivery, integration, installation, management and maintenance of Server Infrastructure experience in Public / Regional Rural Bank to be enclosed with the bid documents.
10.	Bidder should have a tie-up arrangement with external agencies (Maximum two agencies) having experience in below mentioned area for Finacle 10.x migration in Scheduled Commercial Bank in India as on date having more than 500 branches a. Functional Testing & UAT of all modules, Interface & automation experience b. Security testing c. Performance Testing d. Pre and post Data Migration checking & testing	Relevant Credential letters having name of proposed testing agency along with Purchase Order, Contract Copy with the Bank's confirmation on having executed the PO/Contract having name of proposed testing agency.
11.	The Bidder/OEM should have service / support infrastructure in Kolkata and Bengaluru for after sale support and maintenance of offered hardware and software.	List of branch / support offices full details of Name, Address / Telephone Numbers on the company's letter head should be submitted.

12.	Bidder and OEM should not have been black-listed by any Public sector bank / government institution in India as on RFP date.	An undertaking to this effect must be submitted in their respective letter head.
13	The bidder should ensure that there are no legal proceedings / inquiries / investigations have been commenced / pending against selected bidder by any statutory or regulatory agencies which may result in liquidation of company / firm and / or deterrent on continuity of business.	Declaration in the letterhead of the bidder's company to that effect should be submitted.

Note: - In this tender process, either authorized representative / distributor in India on behalf of Principal OEM (Original Equipment Manufacturer) or Principal OEM itself can bid but both cannot bid simultaneously. In such case OEM bid will only be accepted. If an agent / distributor submits bid on behalf of the Principal OEM, the same agent / distributor shall not submit a bid on behalf of another Principal OEM in the same tender for the same item or product. Bank right to verify the credential letter submitted by bidder directly from respective client. Credential letter should be undersigned with the rank of DGM/VP or above.

PROFORMA FOR PERFORMANCE GUARANTEE

(To be stamped in accordance with the stamp act)

In consideration of Paschim Banga Gramin Bank, body corporate constituted under the Regional Rural Bank Act, 1976 having its head office at Natabar Pal Road, Tikiapara, Howrah - 711101 (hereinafter called "BANK") having agreed to exempt M/s (Name of the bidder Company) a Company incorporated under the Companies Act, 1956 having its registered office at (Address of the bidder company) (hereinafter called "the said BIDDER") from the demand, under the terms and conditions of BANK's purchase order/ Letter of Intent bearing no.dated..... issued to the Bidder and an Agreement to be made between Bank and the Bidder for a period of In pursuance of Request For Proposal no.....dated....., as modified, (hereinafter called "the said Agreement"), of security deposit for the due fulfillment by the said BIDDER of the Terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs..... (Rupees..... Only).

We, [indicate the name of the bank ISSUING THE BANK GUARANTEE] (hereinafter referred to as "the Bank") at the request of [BIDDER] do hereby undertake to pay to BANK an amount not exceeding Rs.....against any loss or damage caused to or suffered or would be caused to or suffered by BANK by reason of any breach by the said BIDDER of any of the terms or conditions contained in the said Agreement.

2. We [indicate the name of the bank ISSUING THE BANK GUARANTEE] do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from BANK stating that the amount claimed is due by way of loss or damage caused to or breach by the said BIDDER of any of the terms or conditions contained in the said Agreement or by reason of the BIDDER'S failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....

3. We undertake to pay to BANK any money so demanded notwithstanding any dispute or disputes raised by the BIDDER in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment as made by us under this bond shall be a valid discharge of our liability for payment there under and the BIDDER for payment there under and the BIDDER shall have no claim against us for making such payment.

4. We [indicate the name of the bank ISSUING THE GUARANTEE] further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of BANK under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till BANK certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said BIDDER and accordingly discharged this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before (Expiry of claim period), we shall be discharged from all liabilities under this guarantee thereafter.

5. We [indicate the name of bank ISSUING THE GUARANTEE] further agree with BANK that BANK shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said BIDDER from time or to postpone for any time, or from time to time any of the powers exercisable by BANK against the said BIDDER and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any variation, or extension being granted to the said BIDDER or for any forbearance, act or omission on the part of BANK of any indulgence by BANK to the said BIDDER or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the BIDDER.

7. We [Indicate the name of Bank ISSUING THE GUARANTEE] lastly undertake not to revoke this guarantee during its currency except with the previous consent of BANK in writing.
Notwithstanding anything contained herein:

- i) Our liability under this Bank Guarantee shall not exceed Rs..... (Rupees.....) only.
- ii) This Bank Guarantee shall be valid upto and
- iii) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before(date of expiry of Guarantee including claim period).

8. Dated the day of for..... [indicate the name of Bank]

Yours' faithfully,

For and on behalf of

_____ Bank.
Authorized Official.

NOTE:

1. Selected bidder should ensure that the seal and CODE No. of the signatory is put by the bankers, before submission of the bank guarantee.
2. Bidder guarantee issued by banks located in India shall be on a Non-Judicial Stamp Paper of requisite value as applicable to the place of execution.

INTEGRITY PACT

(To be stamped as per the Stamp Law of the Respective State)

Whereas Paschim Banga Gramin Bank, body corporate constituted under the Regional Rural Bank Act, 1976 having its head office at Natabar Pal Road, Tikiapara, Howrah - 711101 (hereinafter called "BANK") In consideration of acting through its Department of IT, represented by Authorised Signatory hereinafter referred to as the Buyer and the first party, proposes to procure (Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years) hereinafter referred to as Stores and / or Services.

And

M/s _____ represented by _____ Authorised signatory, (which term, unless expressly indicated by the contract, shall be deemed to include its successors and its assignee), hereinafter referred to as the bidder/seller and the second party, is willing to offer/has offered the Stores and / or Services.

2. Whereas the Bidder/Seller is a private company/public company/ /partnership/registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Public Sector Undertaking and registered under Companies Act 1956. Buyer and Bidder/Seller shall hereinafter be individually referred to as –Party or collectively as the –parties, as the context may require.

3. Preamble

Buyer has called for tenders under laid down organizational procedures intending to enter into contract /s for supply / purchase / etc. of **Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years** and the Bidder /Seller is one amongst several bidders /Proprietary Bidder /Customer Nominated Source/Licenser who has indicated a desire to bid/supply in such tendering process. The Buyer values and takes primary responsibility for values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder (s) and / or Seller(s).

In order to achieve these goals, the Buyer will appoint Independent External Monitor(s) (IEM) in consultation with Central Vigilance Commission, who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

4. Commitments of the Buyer

4.1 The Buyer commits itself to take all measures necessary to prevent corruption and fraudulent practices and to observe the following principles:-

- (i)** No employee of the Buyer, personally or through family members, will in connection with the tender, or the execution of a contract demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- (ii)** The Buyer will during the tender process treat all Bidder(s) /Seller(s) with equity and reason. The Buyer will in particular, before and during the tender process, provide to all Bidder (s) /Seller(s) the same information and will not provide to any Bidders(s) /Seller(s) confidential /additional information through which the Bidder(s) / Seller(s) could obtain an advantage in relation to the process or the contract execution.
- (iii)** The Buyer will exclude from the process all known prejudiced persons.

4.2 If the Buyer obtains information on the conduct of any of its employees which is a criminal offence under the Indian Legislation Prevention of Corruption Act 1988 as amended from time to time or if there be a substantive suspicion in this regard, the Buyer will inform to its Chief Vigilance Officer and in addition can initiate disciplinary action.

5. Commitments of the Bidder(s) /Seller(s):

5.1 The Bidder(s)/ Seller(s) commit itself to take necessary measures to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

- (i)** The Bidder(s) /Seller(s) will not directly or through any other persons or firm, offer promise or give to any of the Buyer's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage during the tendering or qualification process or during the execution of the contract.
 - (ii)** The Bidder(s) /Seller(s) will not enter with other Bidders / Sellers into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - (iii)** The bidder(s) /Seller(s) will not commit any offence under the Indian legislation, Prevention of Corruption Act, 1988 as amended from time to time. Further, the Bidder(s) /Seller(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Buyer as part of the business relationship,
-

regarding plans, technical proposals and business details, including information constrained or transmitted electronically.

5.2 The Bidder(s) /Seller(s) shall ensure compliance of the provisions of this Integrity Pact by its sub-supplier(s) / sub-contractor(s), if any, Further, the Bidder /Seller shall be held responsible for any violation /breach of the provisions by its sub-supplier(s) /sub-contractor(s).

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

5.4 Agents / Agency Commission

The Bidder /Seller confirms and declares to the Buyer that the bidder/Seller is the original manufacturer/authorized distributor / stockiest of original manufacturer or Govt. Sponsored /Designated Export Agencies (applicable in case of countries where domestic laws do not permit direct export by OEMS of the stores and /or Services referred to in this tender / Offer / contract / Purchase Order and has not engaged any individual or firm, whether Indian or Foreign whatsoever, to intercede, facilitate or in any way to recommend to Buyer or any of its functionaries, whether officially or unofficially, to the award of the tender / contract / Purchase order to the Seller/Bidder; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller / Bidder agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in anyway incorrect or if at a later stage it is discovered by the Buyer that the Seller incorrect or if at a later stage it is discovered by the Buyer that the Seller/Bidder has engaged any such individual /firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract /Purchase order, the Seller /Bidder will be liable to refund that amount to the Buyer. The Seller will also be debarred from participating in any RFP / Tender for new projects / program with Buyer for a minimum period of five years. The Buyer will also have a right to consider cancellation of the Contract / Purchase order either wholly or in part, without any entitlement of compensation to the Seller /Bidder who shall in such event be liable to refund agents / agency commission payments to the buyer made by the Seller /Bidder along with interest at the rate of 2% per annum above LIBOR (London Inter -Bank Offer Rate) (for foreign bidders) and Base Rate of SBI (State Bank of India) plus 2% (for Indian bidders). The Buyer will also have the right to recover any such amount from any contracts / Purchase order concluded earlier or later with Buyer.

6. Previous Transgression

- 6.1** The Bidder /Seller declares that no previous transgressions have occurred in the last three years from the date of signing of this Integrity Pact with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify Bidder's /Seller's exclusion from the tender process.
- 6.2** If the Bidder /Seller makes incorrect statement on this subject, Bidder /Seller can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason without any liability whatsoever on the Buyer.

7. Company Code of Conduct

Bidders /Sellers are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behaviour) and a compliance program for the implementation of the code of conduct throughout the company.

8. Sanctions for Violation

- 8.1** If the Bidder(s) /Seller(s), before award or during execution has committed a transgression through a violation of Clause 5, above or in any other form such as to put his reliability or credibility in question, the Buyer is entitled to disqualify the Bidder(s) /Seller (s) from the tender process or take action as per the procedure mentioned herein below:
- (i)** To disqualify the Bidder /Seller with the tender process and exclusion from future contracts.
 - (ii)** To debar the Bidder /Seller from entering into any bid from Buyer for a period of two years.
 - (iii)** To immediately cancel the contract, if already signed /awarded without any liability on the Buyer to compensate the Bidder /Seller for damages, if any. Subject to Clause 5, any lawful payment due to the Bidder/Seller for supplies effected till date of termination would be made in normal course.
 - (iv)** To encash EMD /Advance Bank Guarantees / Performance Bonds / Warranty Bonds, etc. which may have been furnished by the Bidder /Seller to the extent of the undelivered Stores and / or Services.
- 8.2** If the Buyer obtains Knowledge of conduct of Bidder /Seller or of an employee or representative or an associate of Bidder /Seller which constitutes corruption, or if the Buyer has substantive suspicion in this regard, the Buyer will inform to its Chief Vigilance Officer.

9. Compensation for Damages

- 9.1** If the Buyer has disqualified the Bidder(s) /Seller(s) from the tender process prior to the award according to Clause 8, the Buyer is entitled to demand and recover the damages equivalent to Earnest Money Deposit in case of open tendering.
- 9.2** If the Buyer has terminated the contract according to Clause 8, or if the Buyer is entitled to terminate the contract according to Clause 8, the Buyer shall be entitled to encash the advance bank guarantee and performance bond / warranty bond, if furnished by the Bidder / Seller, in order to recover the payments, already made by the Buyer for undelivered Stores and / or Services.

10. Law and Place of Jurisdiction

This Integrity Pact is subject to Indian Laws, and exclusive Jurisdiction of Courts at Kolkata, India.

11. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provision of the extant law in force relating to any civil or criminal proceedings.

12. Integrity Pact Duration.

- 12.1** This Integrity Pact begins when both parties have legally signed it. It expires of order / finalization of contract.
- 12.2** If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Integrity Pact as specified above, unless it is discharged / determined by MD & CEO, Bank .
- 12.3** Should one or several provisions of this Integrity Pact turn out to be invalid, the reminder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

13 Other Provisions

- 13.1** Changes and supplements need to be made in writing. Side agreements have not been made.
- 13.2** The Bidders (s)/ Sellers (s) signing this IP shall not initiate any Legal action or approach any court of law during the examination of any allegations/complaint by IEM and until the IEM delivers its report.
- 13.3** In view of nature of this Integrity Pact, this Integrity Pact shall not be terminated by any party and will subsist throughout its stated period.

- 13.4** Nothing contained in this Integrity Pact shall be deemed to assure the bidder / Seller of any success or otherwise in the tendering process.
- 14.** This Integrity Pact is signed with Bank exclusively and hence shall not be treated as precedence for signing of IP with MoD or any other Organization.
- 15.** In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.
- 16.** The Parties here by sign this Integrity Pact at _____ on _____ (Seller/Bidder) and at _____ on _____ (Buyer)

BUYER

BIDDER /SELLER

Signature:
Authorized Signatory
Bank
Department of IT

Signature:
Authorized Signatory

Place:

Date:

Witness:
(Name & Address)

Witness:
(Name & Address)

Format of Pre-Bid Queries to be submitted by the Bidder(s)

Name of the Bidder:

Name of the Contact Person of the Bidder:

Contact Number of the Contact Person:

Email id of the Contact Person:

Sl. No.	RFP Page No.	RFP Clause No.	Original RFP Clause	Query sought/Suggestions of the Bidder

Format of Bank Guarantee (EMD)

To
The General Manager- DIT
Paschim Banga Gramin Bank,
Head Office, Howrah

Dear Sir,

In response to your invitation to respond to your RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years M/s _____ having their registered office at _____ hereinafter called the 'Bidder') wish to respond to the said Request for Proposal (RFP) and submit the proposal for Selection of System Integrator (SI) for Supply, Installation, Integration, Implementation and Maintenance of Hardware, Software, Facility Management Services for Finacle Core Banking (Version 10.x) at DC, DR and Near DR Site.

Whereas the 'Bidder' has submitted the proposal in response to RFP, we, the _____ Bank having our Head Office _____ hereby irrevocably guarantee an amount of **Rs. 1 Cores (Rupees One Core Only)** as bid security as required to be submitted by the 'Bidder' as a condition for participation in the said process of RFP.

The Bid security for which this guarantee is given is liable to be enforced/invoked:

1. If the Bidder withdraws his proposal during the period of the proposal validity; or
2. If the Bidder, having been notified of the acceptance of its proposal by the Bank during the period of the validity of the proposal fails or refuses to enter into the contract in accordance with the Terms and Conditions of the RFP or the terms and conditions mutually agreed subsequently.

We undertake to pay immediately on demand to BANK the said amount of Rupees Twenty Lacs without any reservation, protest, demur, or recourse. The said guarantee is liable to be invoked/ enforced on the happening of the contingencies as mentioned above and also in the RFP document and we shall pay the amount on any Demand made by BANK which shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder.

Notwithstanding anything contained herein:

1. Our liability under this Bank guarantee shall not exceed Rs.1.00 Cr. only
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(Rupees One Crore Only).

2. This Bank guarantee will be valid upto _____; and
3. We are liable to pay the guarantee amount or any part thereof under this Bank guarantee only upon service of a written claim or demand by you on or before _____.

In witness whereof the Bank, through the authorized officer has sets its hand and stamp on this _____ day of _____ at _____.

Yours faithfully,

For and on behalf of

_____ Bank

Authorised Official

Note: This guarantee will require stamp duty as applicable and shall be signed by the official whose signature and authority shall be verified. The signatory shall affix his signature, name and designation.

(The value of the stamp paper will be as applicable at the place of issuing of Bank Guarantee.)

Undertaking for Non-Blacklisting / Non-Debarment of the bidder

To
The General Manager- DIT
Paschim Banga Gramin Bank,
Head Office, Howrah

Dear Sir(s),

Sub: RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide “RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023.”

- a. We M/s _____, the undersigned hereby confirm that we have read and understood the eligibility criteria and fulfil the same.
- b. We further confirm that all the information as per requirement of the Bank have been included in our bid.
- c. Further we hereby undertake and agree to abide by all terms and conditions and guidelines stipulated by the Bank. We understand that any deviation may result in disqualification of our bid.
- d. We have not been blacklisted by any Nationalized Bank/RBI/IBA or any other Government agency/ICAI. No legal action is pending against us for any cause in any legal jurisdiction.
- e. We undertake that adequate number of resources, if required by the Bank, will be deployed for the project to complete the assignment within stipulated time.
- f. (Deviation to the above if any, the Bidder must provide details of such action(s)

1.

2.

(Signature and the capacity of the person duly authorized to sign the bid for and on behalf of)

Undertaking to abide by all By-Laws / Rules / Regulations

(TO BE EXECUTED ON NON-JUDICIAL STAMP PAPER OF REQUISITE VALUE)

To
**The General Manager- DIT
Paschim Banga Gramin Bank,
Head Office, Howrah**

Sub: Declaration-Cum-Undertaking regarding compliance with all statutory requirements

In consideration of Paschim Banga Gramin Bank, body corporate constituted under the Regional Rural Bank Act, 1976 having its head office at Natabar Pal Road, Tikiapara, Howrah - 711101 (hereinafter called "BANK") which expression shall include its successors and assigns), we, M/s....., having its Registered Office at....., do hereby, having examined the **Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide "RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023.."**

including all Annexure, confirm and agree to comply with all Laws, Rules, Regulations, Bye-Laws, Guidelines, Notifications etc.

We do also hereby irrevocably and unconditionally agree and undertake to save and keep the Bank, including its respective directors, officers, and employees and keep them harmless from and against any claim, demand, losses, liabilities or expenses of any nature and kind whatsoever and any damage caused from and against all suits and other actions that may be instituted taken or preferred against the Bank by whomsoever and all losses, damages, costs, charges and expenses arising out of non-compliance with or non-adherence to any statutory/regulatory requirements and/or any other law for the time being in force.

Dated this _____ day of _____, 20 _____.

Place:

For M/s.

.....

[Seal and Signature(s) of the Authorized Signatory (s)]

Undertaking by the bidder

To
The General Manager- DIT
Paschim Banga Gramin Bank,
Head Office, Howrah

Dear Sir(s),

Sub: RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide “RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023.”

Further to our proposal dated, in response to the Request for Proposal (Bank’s tender No. hereinafter referred to as “RFP”) issued by Bank, we hereby covenant, warrant and confirm as follows:

The soft-copies of the proposal submitted by us in response to the RFP and the related addendums and other documents including the changes made to the original tender documents issued by the Bank, conform to and are identical with the hard-copies of aforesaid proposal required to be submitted by us, in all respects.

We hereby confirm that we are agreeable to provide services as per SLA for a period of 5 years, may be extended on the basis of performance. All the Annexures with other Technical documents duly filled in and signed are enclosed. We understand that the Bank is not bound to accept the offer either in part or in full and that the Bank has right to reject the offer in full or in part without assigning any reasons whatsoever.

If our bid is accepted, we are responsible for the due performance as per the scope of work and terms & conditions as per mentioned in RFP and shall keep the price valid for the entire contract period.

Yours faithfully,

For.....

(Signature and seal of authorized person)

Place:

Date:

Undertaking Letter to the Bank on the Bidder's Letterhead

**To
The General Manager- DIT
Paschim Banga Gramin Bank,
Head Office, Howrah**

Dear Sir(s),

Sub: RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide "RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023."

Further to our proposal dated, in response to the Request for Proposal (Bank's tender No. hereinafter referred to as "**RFP**") issued by Bank, we hereby covenant, warrant and confirm as follows:

We hereby agree to comply with all scope of work , all technical requirement (Annexure D) and all other terms and conditions / stipulations as contained in the RFP and the related addendums and other documents including the changes made to the original tender documents if any, issued by the Bank. The Bank is not bound by any other extraneous matters or deviations, even if mentioned by us elsewhere either in our proposal or any subsequent deviations sought by us, whether orally or in writing, and the Bank's decision not to accept any such extraneous conditions and deviations will be final and binding on us.

Yours faithfully,

For.....

Designation:

(Signature and seal of authorized person)

Bidder's corporate name:

Place:

Date:

Undertaking Letter on the vendor's letterhead for GST Law

**To
The General Manager- DIT
Paschim Banga Gramin Bank,
Head Office, Howrah**

Dear Sir(s),

Sub: RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide "RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023."

Further to our proposal dated, in response to the Request for Proposal (Bank's tender No. hereinafter referred to as "RFP") issued by Bank, we hereby covenant, warrant and confirm as follows:

We, the bidder M/s, hereby agree to comply with all applicable GST Laws including GST Acts, Rules, Regulations, Procedures, Circulars & Instructions thereunder applicable in India from time to time and to ensure that such compliance is done.

Yours faithfully,

For.....

Designation:

(Signature and seal of authorized person)

Bidder's corporate name:

Place:

Date:

Undertaking Letter on the bidder's letterhead for Central Minimum Wages Act & Labour Laws.

To
The General Manager- DIT
Paschim Banga Gramin Bank,
Head Office, Howrah

Dear Sir(s),

Sub: RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide "RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023."

Further to our proposal dated, in response to the Request for Proposal (Bank's tender No. hereinafter referred to as "RFP") issued by Bank, we hereby covenant, warrant and confirm as follows:

In this regard we confirm that the employees engaged by our Company to carry out the services in your bank for the above said contract are paid minimum wages / salaries as stipulated in the Government (Central / State) Minimum Wages / Salaries act in force. All the employees/operator deployed as part of this solution/activity must comply with government's rules and regulations like minimum wages act, Provident Fund and ESIC facility standard. We also indemnify the Bank against any action / losses / damages that arise due to action initiated by Commissioner of Labour for non-compliance to the above criteria.

We further authorize the Bank to deduct from the amount payable to the Company under the contract or any other contract of the Company with the Bank if a penalty is imposed by Labour Commissioner towards non-compliance to the "Minimum Wages / Salary stipulated by government in the Act by your company.

(Proof of compliance and labour license needs to be submitted along with the quotation).

Yours faithfully,

For.....

Designation:

(Signature and seal of authorized person)

Bidder's corporate name:

Place:

Date:

NON-DISCLOSURE AGREEMENT
(To be stamped in accordance with the stamp act)

This Non-Disclosure Agreement is entered into on thisday of, 2020

BETWEEN

Paschim Banga Gramin Bank, body corporate constituted under the Regional Rural Bank Act, 1976 having its head office at Natabar Pal Road, Tikiapara, Howrah - 711101 (hereinafter called "BANK") hereinafter referred to as "**the Bank**" (which expression shall unless excluded by or repugnant to the subject or context be deemed to mean and include its assigns, administrators and successors) **of the FIRST PART/ DISCLOSING PARTY**

AND

.....
..... (Which expression shall unless excluded by or repugnant to the subject or context be deemed to mean and include its assigns, administrator and successors) of the **SECOND PART/ RECEIVING PARTY**

(Each of Bank and the bidder is sometimes referred to herein as a "**Party**" and together as the "**Parties**").

WHEREAS the Bidder/Receiving Party is *inter alia* engaged **for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide "RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023"**. The Bidder/Receiving Party would be the single point of contact for this project.

WHEREAS Bank/Disclosing Party is *inter alia* engaged in the business of Banking; and

WHEREAS the Parties presently desire to discuss and/or consult with each other's business for the purposes of entering into Agreements for for Supply, Installation, Integration, Implementation and Maintenance of Hardware, Software (Application Server and Backup), Facility Management Services for Finacle Core Banking (Version 10.x) at DC, DR and Near DR Site.

WHEREAS the Parties recognize that each other's business involves specialized and proprietary knowledge, information, methods, processes, techniques and skills peculiar to their security and growth and that any disclosure of such methods, processes, skills, financial data, or other confidential and proprietary information would substantially injure a Party's business, impair a Party's investments and goodwill, and jeopardize a Party's relationship with a Party's clients and customers; and

WHEREAS in the course of consultation with respect to the potential business venture, the Parties anticipate disclosing to each other certain information of a novel, proprietary, or confidential nature, and desire that such information be subject to all of the terms and conditions set forth herein below;

NOW THEREFORE the Parties hereto, in consideration of the promises and other good and valuable consideration, agree such information shall be treated as follows:

1. Confidential Information: "Confidential Information" shall mean and include any information which relates to the financial and/or business operations of each Party, including but not limited to, specifications, drawings, sketches, models, samples, reports, forecasts, current or historical data, computer programs or documentation and all other technical, financial or business data, information related to each Party's customers, products, processes, financial condition, employees, intellectual property, manufacturing techniques, experimental work, trade secrets.

2. Use of Confidential Information: The Bidder/Receiving Party agrees not to use the Bank/Disclosing Party's confidential Information for any purpose other than for the specific consultation regarding the potential business venture. Any other use of such Confidential Information by the Receiving Party shall be made only upon the prior written consent from an authorized representative of the Disclosing Party which wishes to disclose such information or pursuant to subsequent agreement between the Parties hereto.

3. Restrictions: Subject to the provisions of paragraph 4 below, the Party receiving Confidential Information (the "**Receiving Party**") shall, for contract period of three (3) years from the date of the last disclosure of Confidential Information made under this Agreement (except for personal customer data which shall remain confidential forever), use the same care and discretion to limit disclosure of such Confidential Information as it uses with similar confidential information of its own and shall not disclose, lecture upon, publish, copy, modify, divulge either directly or indirectly, use (except as permitted above under clause (2) or otherwise transfer the Confidential Information to any other person or entity, including taking reasonable degree of care and steps to:

(a) restrict disclosure of Confidential Information solely to its concerned employees, agents, advisors, consultants, contractors and /or subcontractors with a need to know and not disclose such proprietary information to any other parties; and

(b) advise all receiving Party's employees with access to the Confidential Information of the obligation to protect Confidential Information provided hereunder and obtain from agents, advisors, contractors and/or consultants an agreement to be so bound.

(c) use the Confidential Information provided hereunder only for purposes directly related to the potential business venture.

4. Exclusions: The obligations imposed upon Receiving Party herein shall not apply to information, technical data or know how, whether or not designated as confidential, that:

- (a) is already known to the Receiving Party at the time of the disclosure without an obligation of confidentiality;
- (b) is or becomes publicly known through no unauthorized act of the Receiving Party;
- (c) is rightfully received from a third Party without restriction and without breach of this Agreement;
- (d) is independently developed by the Receiving Party without use of the other Party's Confidential Information and is so documented;
- (e) is disclosed without similar restrictions to a third party by the Party owning the Confidential Information;
- (f) is approved for release by written authorization of the Disclosing Party; or
- (g) is required to be disclosed pursuant to any applicable laws or regulations or any order of a court or a governmental body; provided, however, that the Receiving Party shall first have given notice to the Disclosing Party and made a reasonable effort to obtain a protective order requiring that the Confidential Information and/or documents so disclosed be used only for the purposes for which the order was issued.

5. Return of Confidential Information: All Confidential Information and copies and extracts of it shall be promptly returned by the Receiving Party to the Disclosing Party at any time within thirty (30) days of receipt of a written request by the Disclosing Party for the return of such Confidential Information.

6. Ownership of Information: The Receiving Party agrees that all Confidential Information shall remain the exclusive property of the Disclosing Party and its affiliates, successors and assigns.

7. No License Granted: Nothing contained in this Agreement shall be construed as granting or conferring any rights by license or otherwise in any Confidential Information disclosed to the Receiving Party or to any information, discovery or improvement made, conceived, or acquired before or after the date of this Agreement. No disclosure of any Confidential Information hereunder shall be construed by the Receiving Party to be a public disclosure of such Confidential Information for any purpose whatsoever.

8. Breach: In the event the Receiving Party discloses, disseminates or releases any Confidential Information received from the Disclosing Party, except as provided above, such disclosure, dissemination or release will be deemed a material breach of this Agreement and the Disclosing Party shall have the right to demand prompt return of all Confidential Information previously provided to the Receiving Party and in such case, the Receiving party shall be bound to return all information within 30 days from the date of such demand. The provisions of this paragraph are in addition to any other legal right or remedies, the Disclosing Party may have under the Law for the time being in force.

9. Arbitration and Equitable Relief

(a) Arbitration: *The Parties shall endeavour to settle any dispute/difference arising out of or relating to this Agreement through consultation and negotiation. In the event no settlement can be reached through such negotiation and consultation, the Parties agree that such disputes shall be referred to and finally resolved by arbitration under the provisions of the Arbitration and Conciliation Act, 1996 and the rules made thereunder from time to time. The arbitration shall be held in Kolkata. The language used in the arbitral proceedings shall be English. The arbitration proceeding shall be conducted by a panel of three arbitrators, each party shall appoint his own arbitrator and the two appointed arbitrators shall appoint the third arbitrator who shall act as presiding Arbitrator.*

(b) Equitable Remedies: *The Parties agree that in event of breach of any of the covenants contained in this Agreement due to negligence/fault/laches of the Receiving Party, the Disclosing party shall have, in addition to any other remedy, the right:*

- i) *to obtain an injunction from a court of competent jurisdiction restraining such breach or threatened breach; and*
- ii) *to specific performance of any such provisions of this Agreement. The Parties further agree that no bond or other shall be required in obtaining such equitable relief and the Parties hereby consent to the issuance of such injunction and to the ordering of specific performance.*

(c) Legal Expenses: *If any action and proceeding is brought for the enforcement of this Agreement, or because of an alleged or actual dispute, breach, default, or misrepresentation in connection with any of the provisions of this Agreement, each Party will bear its own expenses, including the attorney's fees and other costs incurred in such action.*

(d) Indemnification: *The Receiving Party shall indemnify the Bank and hold the Bank harmless against any loss caused to it as a result of the non-performance or improper performance of this Agreement by the Receiving Party, or its servants or agents to perform any aspect of its obligations forming part of the subject matter of this Agreement.*

10. Term: *This Agreement may be terminated by either Party giving sixty (60) days' prior written notice to the other Party; provided, however, the obligations to protect the Confidential Information in accordance with this Agreement shall survive for a period of three (3) years from the date of the last disclosure of Confidential Information made under this Agreement (except for personal customer data which shall remain confidential forever).*

11. No Formal Business Obligations: *This Agreement shall not constitute create, give effect to or otherwise imply a joint venture, pooling arrangement, partnership, or formal business organization of any kind, nor shall it constitute, create, give effect to, or otherwise imply an obligation or commitment on the part of either Party to submit a proposal or to perform a contract with the other Party or to refrain from entering into an agreement or negotiation with any other Party. Nothing herein shall be construed as providing for the sharing of profits or loss arising out of the efforts of either or both Parties. Neither Party will be liable*

for any of the costs associated with the other's efforts in connection with this Agreement. If the Parties hereto decide to enter into any licensing arrangement regarding any Confidential Information or present or future patent claims disclosed hereunder, it shall only be done on the basis of a separate written agreement between them.

12. General Provisions

(a) Governing Law: This Agreement shall be governed by and construed in accordance with the laws of India.

(b) Severability: If one or more of the provisions in this Agreement is deemed void by law, then the remaining provisions shall remain valid and continue in full force and effect.

(c) Successors and Assign: This Agreement will be binding upon the successors and/or assigns of the Parties, provided however that neither Party shall assign its rights or duties under this Agreement without the prior written consent of the other Party.

(d) Headings: All headings used herein are intended for reference purposes only and shall not affect the interpretation or validity of this Agreement.

(e) Entire Agreement: This Agreement constitutes the entire agreement and understanding of the Parties with respect to the subject matter of this Agreement. Any amendments or modifications of this Agreement shall be in writing and executed by a duly authorized representative of the Parties.

(f) Jurisdiction of Court: All disputes under this Non-Disclosure Agreement are subject to the jurisdiction of Courts of Kolkata only.

(g) Two original sets of Non Disclosure Agreement are executed and retained by either parties, Bank and _____ (the selected bidder)

The Parties, by the signature of their authorized representatives appearing below, acknowledge that they have read and understood each and every term of this Agreement and agree to be bound by its terms and conditions.

For and on behalf of

.....

Signature: _____
Name: _____
Designation: _____
Date: _____

For and on behalf of

.....

(The selected bidder)

Signature: _____
Name: _____
Designation: _____
Date: _____

Technical Bill of Material

SI	Item	Make & Model No.	Qty	Detail Configuration	Remarks
	At DC				
1	Physical server				
a	Type A - Production DB server		2		
b	Type B - CSIS DB server		2		
c	Type C – App and Web		3		
D	Type D – CSIS App, C24, and UNISER server		2		
	Virtual Server				
d	C/ C++ Application server		3		
e	J2EE application server		3		
d	Web Sever		3		
e	CSIS App Server		2		
d	C24 Server		2		
e	UNISER server		2		
2	Storage				
a	Enterprise Class San storage		1		
b	NAS Storage		1		
c	SAN Switch		2		
3	Back UP				
a	Backup Server		4		
b	Back up Software				
c	Tape Backup Library		2		
4	Load Balancer				
a	Hardware Load balancer		2		
b	Software Load balancer		3		
5	System Software				
5a	Operating System				
5b	Middleware				
6a	Any other Hardware required for CBS Application				
6b	Any other Software required for CBS Application				
7	Network Equipment				

a	Core Router		1		
b	Core Switch		2		
c	Extranet Router		1		
d	Extranet Switch		2		
e	Internet Router		1		
f	Internet Switch		1		
g	Core Firewall		2		
h	Perimeter Firewall		2		
i	Internet Firewall		1		
j	Extranet Firewall		1		
k	Authentication Server – ACS		1		
	Other Applications				
8	Centralised Antivirus for Desktops & Servers				
a	Hardware				
b	Operating System				
c	Database				
d	Antivirus Application				
e	Any other Hardware required				
f	Any other Software required				
9	Active Directory System for Desktops & servers				
a	Hardware				
b	Operating System				
c	Database				
d	Any other Hardware required				
e	Any other Software required				
10	Biometric System for CBS Users				
a	Hardware				
b	Operating System				
c	Database				
d	Biometric Application				
e	Any other Hardware required				
f	Any other Software required				
12	Enterprise Management System				

a	Hardware / Applinace				
b	Operating System				
c	Database				
d	EMS Application				
e	Any other Hardware required				
f	Any other Software required				
	At DR				
1	Physical server				
a	Type A - Production DB server		2		
b	Type B - CSIS DB server		2		
c	Type C – App and Web servers		3		
d	Type d – CSIS App, C24 and UNISER server		2		
e	Type E - UAT DB server		1		
f	Type F - UAT CSIS DB Server		1		
g	Type G- UAT App, Web and other servers		4		
	Virtual Server				
g	C/ C++ Application server		3		
h	J2EE application server		3		
i	Web Sever		3		
j	CSIS App Server		2		
k	C24 Server		2		
l	UNISER server		2		
m	Migration DB server		1		
n	Migration C/C++ server		1		
o	Migration J2EE server		1		
p	UAT C/C++ App server		1		
q	UAT J2EE server		1		
r	UAT Web server		1		
s	Training DB server		1		
t	Training C/C++ server		1		
u	Training J2EE server		1		
v	Training Web server		1		
w	UAT CSIS App Server		1		
X	UAT C24 Server		1		
y	UAT UNISER server		1		

2	Storage				
a	Enterprise Class San storage		1		
b	NAS Storage		1		
c	SAN Switch		2		
3	Back UP				
a	Backup Server				
b	Back up Software				
c	Tape Backup Library				
4	Load Balancer				
a	Hardware Load balancer		3		
b	Software Load balancer		2		
5	System Software				
5a	Operating System				
5b	Middleware				
6a	Any other Hardware required for CBS Application				
6b	Any other Software required for CBS Application				
7	Network Equipment				
a	Core Router		1		
b	Core Switch		2		
c	Extranet Router		1		
d	Extranet Switch		2		
e	Internet Router		1		
f	Internet Switch		1		
g	Core Firewall		2		
h	Perimeter Firewall		1		
i	Internet Firewall		1		
j	Extranet Firewall		1		
k	Authentication Server – ACS		1		
	Other Applications				
8	Centralised Antivirus for Desktops & Servers				
a	Hardware				
b	Operating System				
c	Database				
d	Antivirus Application				
e	Any other Hardware required				

f	Any other Software required				
9	Active Direcory System for Desktops & servers				
a	Hardware				
b	Operating System				
c	Database				
d	Any other Hardware required				
e	Any other Software required				
10	Biometric System for CBS Users				
a	Hardware				
b	Operating System				
c	Database				
d	Biometric Application				
e	Any other Hardware required				
f	Any other Software required				
12	Enterprise Management System				
a	Hardware / Applinace				
b	Operating System				
c	Database				
d	EMS Application				
e	Any other Hardware required				
f	Any other Software required				
13	Branch Network Equipment				
a	Branch Router		235		
b	Branch Switch		235		

Masked Commercial BidTable A Hardware Cost with 3 years Warranty

SI	Item	Make & Model No.	Qty at DC	Qty at DR	Total Qty	Unit Price	Total cost	GST Amount	Total cost with GST
1	Physical server					XXXX	XXXX	XXXX	XXXX
a	Type A - Production DB server		2	2		XXXX	XXXX	XXXX	XXXX
b	Type B - CSIS DB server		2	2		XXXX	XXXX	XXXX	XXXX
c	Type C - App, Web and other servers		3	3		XXXX	XXXX	XXXX	XXXX
d	Type D - UAT DB server		1			XXXX	XXXX	XXXX	XXXX
e	Type E - UAT CSIS DB Server		1			XXXX	XXXX	XXXX	XXXX
f	Type F- UAT App, Web and other servers		4			XXXX	XXXX	XXXX	XXXX
2	Storage					XXXX	XXXX	XXXX	XXXX
a	Enterprise Class San storage		1	1		XXXX	XXXX	XXXX	XXXX
b	NAS Storage		1	1		XXXX	XXXX	XXXX	XXXX
c	SAN Switch		2	2		XXXX	XXXX	XXXX	XXXX
3	Back UP					XXXX	XXXX	XXXX	XXXX
a	Backup Server		2	2		XXXX	XXXX	XXXX	XXXX
b	Tape Backup Library		1	1		XXXX	XXXX	XXXX	XXXX
4	Load Balancer					XXXX	XXXX	XXXX	XXXX
a	Hardware Load balancer		3	2		XXXX	XXXX	XXXX	XXXX
5	Any other Hardware required for CBS Application					XXXX	XXXX	XXXX	XXXX
6	Network Equipment					XXXX	XXXX	XXXX	XXXX
a	Core Router		1	1		XXXX	XXXX	XXXX	XXXX
b	Core Switch		2	2		XXXX	XXXX	XXXX	XXXX
c	Extranet Router		1	1		XXXX	XXXX	XXXX	XXXX
d	Extranet Switch		1	1		XXXX	XXXX	XXXX	XXXX
e	Internet Router		1	1		XXXX	XXXX	XXXX	XXXX
f	Internet Switch		1	1		XXXX	XXXX	XXXX	XXXX
g	Core Firewall		2	2		XXXX	XXXX	XXXX	XXXX

h	Perimeter Firewall		2	2		XXXX	XXXX	XXXX	XXXX
i	Internet Firewall		1	1		XXXX	XXXX	XXXX	XXXX
j	Extranet Firewall		1	1		XXXX	XXXX	XXXX	XXXX
k	Authentication Server – ACS		1	1		XXXX	XXXX	XXXX	XXXX
	Other Applications					XXXX	XXXX	XXXX	XXXX
7	Centralised Antivirus for Desktops & Servers					XXXX	XXXX	XXXX	XXXX
a	Hardware		As per requirement	As per requirement		XXXX	XXXX	XXXX	XXXX
b	Any other Hardware required					XXXX	XXXX	XXXX	XXXX
8	Active Directory System for Desktops & servers					XXXX	XXXX	XXXX	XXXX
a	Hardware		As per requirement	As per requirement		XXXX	XXXX	XXXX	XXXX
d	Any other Hardware required					XXXX	XXXX	XXXX	XXXX
9	Biometric System for CBS Users					XXXX	XXXX	XXXX	XXXX
a	Hardware		As per requirement	As per requirement		XXXX	XXXX	XXXX	XXXX
e	Any other Hardware required					XXXX	XXXX	XXXX	XXXX
10	Enterprise Management System					XXXX	XXXX	XXXX	XXXX
a	Hardware / Appliance		As per requirement	As per requirement		XXXX	XXXX	XXXX	XXXX
e	Any other Hardware if required					XXXX	XXXX	XXXX	XXXX
11	Branch Network Equipment					XXXX	XXXX	XXXX	XXXX
a	Branch Router		250 (to be delivered at branches)				XXXX	XXXX	XXXX
b	Branch Switch		250 (to be delivered at branches)				XXXX	XXXX	XXXX
12	Total cost of Hardware						XXXX	XXXX	XXXX

Table B: Software Cost with 1-year Enterprise Premium/standard support

SI	Item	Make & Version	Qty	Unit Price	Total cost	GST Amount	Total cost with GST
1	Finacle Solution			XXXX	XXXX	XXXX	XXXX
a	Red Hat Linux OS License version 8.6 or above		As per requirement	XXXX	XXXX	XXXX	XXXX
b	Software load balancer		5	XXXX	XXXX	XXXX	XXXX
c	JBOSS Middleware		As per requirement	XXXX	XXXX	XXXX	XXXX
d	Back up Software		As per requirement	XXXX	XXXX	XXXX	XXXX
e	Any other Software required for Finacle Application			XXXX	XXXX	XXXX	XXXX
2	EMS solution			XXXX	XXXX	XXXX	XXXX
	EMS Application		License as per requirement	XXXX	XXXX	XXXX	XXXX
	Operating System for EMS Application			XXXX	XXXX	XXXX	XXXX
	Database for EMS Application			XXXX	XXXX	XXXX	XXXX
	Other software for EMS Application, , if any			XXXX	XXXX	XXXX	XXXX
3	Active Directory Solution			XXXX	XXXX	XXXX	XXXX
	Windows server 2022 for Active Directory		1300 desktops	XXXX	XXXX	XXXX	XXXX
	Other software for Active Directory, if any			XXXX	XXXX	XXXX	XXXX
4	Anti Virus Solution			XXXX	XXXX	XXXX	XXXX
	Anti Virus Application		1300 Desktop & 200 Servers	XXXX	XXXX	XXXX	XXXX
	Operating System for Anti Virus Application			XXXX	XXXX	XXXX	XXXX

	Database for Anti Virus Application			XXXX	XXXX	XXXX	XXXX
	Other software for Anti Virus Application, , if any			XXXX	XXXX	XXXX	XXXX
5	Biometric Software Solution			XXXX	XXXX	XXXX	XXXX
	Biometric Software Application		1000 Users	XXXX	XXXX	XXXX	XXXX
	Operating System for Anti Virus Application			XXXX	XXXX	XXXX	XXXX
	Database for Anti Virus Application			XXXX	XXXX	XXXX	XXXX
	Other software for Anti Virus Application, , if any			XXXX	XXXX	XXXX	XXXX
6	Total Software Cost			XXXX	XXXX	XXXX	XXXX

Table C 4th and 5th Year comprehensive AMC Cost for Hardware

SI	Item	Make & Model No.	Qty at DC	Qty at DR	Total Qty	4th Year AMC Cost	5th Year AMC Cost	GST Amount	Two yrs Total AMC cost with GST
1	Physical server					XXXX	XXXX	XXXX	XXXX
a	Type A - Production DB server		2	2		XXXX	XXXX	XXXX	XXXX
b	Type B - CSIS DB server		2	2		XXXX	XXXX	XXXX	XXXX
c	Type C - App, Web and other servers		3	3		XXXX	XXXX	XXXX	XXXX
d	Type D - UAT DB server			1		XXXX	XXXX	XXXX	XXXX

						XXXX	XXXX	XXXX	XXXX
e	Type E - UAT CSIS DB Server			1					
f	Type F- UAT App, Web and other servers			4		XXXX	XXXX	XXXX	XXXX
2	Storage					XXXX	XXXX	XXXX	XXXX
a	Enterprise Class San storage	1	1			XXXX	XXXX	XXXX	XXXX
b	NAS Storage	1	1			XXXX	XXXX	XXXX	XXXX
c	SAN Switch	2	2			XXXX	XXXX	XXXX	XXXX
3	Back UP					XXXX	XXXX	XXXX	XXXX
a	Backup Server	2	2			XXXX	XXXX	XXXX	XXXX
c	Tape Backup Library	1	1			XXXX	XXXX	XXXX	XXXX
4	Load Balancer					XXXX	XXXX	XXXX	XXXX
a	Hardware Load balancer	3	2			XXXX	XXXX	XXXX	XXXX
5	Any other Hardware required for CBS Application					XXXX	XXXX	XXXX	XXXX
6	Network Equipment					XXXX	XXXX	XXXX	XXXX
a	Core Router	1	1			XXXX	XXXX	XXXX	XXXX
b	Core Switch	2	2			XXXX	XXXX	XXXX	XXXX
c	Extranet Router	1	1			XXXX	XXXX	XXXX	XXXX
d	Extranet Switch	1	1			XXXX	XXXX	XXXX	XXXX
e	Internet Router	1	1			XXXX	XXXX	XXXX	XXXX
f	Internet Switch	1	1			XXXX	XXXX	XXXX	XXXX
g	Core Firewall	2	2			XXXX	XXXX	XXXX	XXXX
h	Perimeter Firewall	2	2			XXXX	XXXX	XXXX	XXXX
i	Internet Firewall	1	1			XXXX	XXXX	XXXX	XXXX
j	Extranet	1	1			XXXX	XXXX	XXXX	XXXX

	Firewall								
k	Authentication Server – ACS		1	1		XXXX	XXXX	XXXX	XXXX
	Other Applications					XXXX	XXXX	XXXX	XXXX
7	Centralised Antivirus for Desktops & Servers					XXXX	XXXX	XXXX	XXXX
a	Hardware		As per requirement	As per requirement		XXXX	XXXX	XXXX	XXXX
b	Any other Hardware required					XXXX	XXXX	XXXX	XXXX
89	Active Directory System for Desktops & servers					XXXX	XXXX	XXXX	XXXX
a	Hardware		As per requirement	As per requirement		XXXX	XXXX	XXXX	XXXX
d	Any other Hardware required					XXXX	XXXX	XXXX	XXXX
9	Biometric System for CBS Users					XXXX	XXXX	XXXX	XXXX
a	Hardware		As per requirement	As per requirement		XXXX	XXXX	XXXX	XXXX
e	Any other Hardware required					XXXX	XXXX	XXXX	XXXX
10	Enterprise Management System					XXXX	XXXX	XXXX	XXXX
a	Hardware / Appliance		As per requirement	As per requirement		XXXX	XXXX	XXXX	XXXX
e	Any other Hardware					XXXX	XXXX	XXXX	XXXX

	required								
11	Branch Network Equipment					XXXX	XXXX	XXXX	XXXX
a	Branch Router		235 (to be delivered at branches)			XXXX	XXXX	XXXX	XXXX
b	Branch Switch		235 (to be delivered at branches)			XXXX	XXXX	XXXX	XXXX
12	Total cost for Hardware AMC					XXXX	XXXX	XXXX	XXXX

Table D Software ATS and Enterprise premium/Standard support Cost (2nd ,3rd 4th and 5th year)

SI	Item	Make & Version.	Qty	2nd Yr. ATS Cost	3rd Yr. ATS Cost	4th yr. ATS Cost	5th Yr. ATS Cost	GST Amount	Total cost with GST
1	Finacle Solution								
A	Red Hat Linux OS License version 8.6 or above		As per requirement	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
B	Software load balancer		5	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
C	JBOSS Middleware		As per requirement	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
D	Back up Software		As per requirement	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
E	Any other Software required for Finacle Application			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
2	EMS solution			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
A	EMS Application		As per requirement	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX

B	Operating System for EMS Application			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
C	Database for EMS Application			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
D	Other software for EMS Application, , if any			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
3	Active Directory Solution			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
a	Windows server 2022 for Active Directory		1300 desktops	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
b	Other software for Active Directory, if any			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
4	Anti Virus Solution			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
A	Anti Virus Application		1300 Desktop & 200 Servers	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
B	Operating System for Anti Virus Application			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
C	Database for Anti Virus Application			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
D	Other software for Anti Virus Application, , if any			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
5	Biometric Software Solution			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
A	Biometric Software Application		1000 Users	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
B	Operating System for Anti Virus Application			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
C	Database for Anti Virus Application			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX

d	Other software for Anti Virus Application, , if any			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
6	Total Software ATS Cost			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX

TABLE E: HARDWARE, SOFTWARE, NETWORK ONE TIME IMPLEMENTATION COST

SI	Description	Cost	GST Amount	Cost with GST
1	Core Banking Hardware Implementation cost at DC & DR sites	XXXX	XXXX	XXXX
2	Core Banking System Software Implementation cost at DC & DR sites	XXXX	XXXX	XXXX
3	Core Network Implementation cost at DC & DR sites	XXXX	XXXX	XXXX
4	Branch Network equipment installation cost	XXXX	XXXX	XXXX
5	200 nos. of LTO 4/ LTO 6 Tape migration cost (including cost of LTO 9 tapes)	XXXX	XXXX	XXXX
6	Performance testing of proposed hardware infrastructure, UAT/functional testing, security testing & data migration testing	XXXX	XXXX	XXXX
	Total Cost of Table F	XXXX	XXXX	XXXX

TABLE F : OTHER APPLICATIONS (ACTIVE DIRECTORY, ANTIVIRUS, BIOMETRIC, EMS) ONE TIME IMPLEMENTATION COST

S I	Description	Cost	GST Amount	Cost with GST
1	Implementation cost of Centralised Antivirus at DC, DR & Branches	XXXX	XXXX	XXXX
2	Implementation cost of Active Directory at DC, DR & Branches	XXXX	XXXX	XXXX
3	Implementation cost of Biometric Solution at DC, DR & Branches	XXXX	XXXX	XXXX
4	Implementation cost of EMS solution at DC & DR	XXXX	XXXX	XXXX
	Total Cost of Table G	XXXX	XXXX	XXXX

TABLE G : FACILITY MANAGEMENT COST

SI	Description	Cost	GST Amount	Cost with GST
1	Facility Management cost of Hardware & Software related to Core banking System services for five years	XXXX	XXXX	XXXX
2	Facility Management cost of Network Management for five years	XXXX	XXXX	XXXX
3	Facility Management cost of other applications (CAV, AD, EMS, Biometric) for five years	XXXX	XXXX	XXXX
	Total Cost of FM Services	XXXX	XXXX	XXXX

TABLE H: TOTAL PROJECT COST

SI	Description	Cost	GST Amount	Cost with GST
1	Hardware Cost with 3 years Warranty – Total of Table B	XXXX	XXXX	XXXX
2	Software Cost with 1-year Enterprise Premium/standard support Total of Table C	XXXX	XXXX	XXXX
3	4th and 5th Year comprehensive AMC Cost for Hardware – Total of Table D	XXXX	XXXX	XXXX
4	Software ATS and Enterprise premium/Standard support Cost (2 nd ,3 rd 4 th and 5 th year) – Total of Table E	XXXX	XXXX	XXXX
5	Hardware, Software, Network One Time Implementation Cost - Total of Table F	XXXX	XXXX	XXXX
6	Other Applications_Active Directory, Antivirus, Biometric & Ems Solution One Time Implementation Cost - Total of Table G	XXXX	XXXX	XXXX
7	Facility Management Cost - Total of Table H	XXXX	XXXX	XXXX
	Total Project Cost (TCO)	XXXX	XXXX	XXXX

Certificate from Chartered Accountant (signed & stamped) showing company's financial position in last 3 years (annual turnover, profit / loss, net-worth etc.)

	2019-20	2020-21	2021-22
Turnover			
Profit / Loss			
Net worth			

Place:

AUTHORISED SIGNATORY

Date:

Name:

Designation:

Restriction on Procurement due to National Security

This Certificate should be submitted on the letterhead of the bidder duly signed by an authorized signatory

**To,
The General Manager- DIT
Paschim Banga Gramin Bank,
Head Office, Howrah**

Dear Sir,

Sub: RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide “RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023.”

1. "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country and is eligible to be considered."
2. "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; / certify that this bidder is not from such a country or, if from such a country, have been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. (Where applicable, evidence of valid registration by the Competent Authority shall be attached.)"

Yours Faithfully,

**Authorised Signatory,
Name:
Designation:
Vendors Corporate Name:
Address:
Email:
Contact No.**

Format Power of Attorney

(On Stamp paper of relevant value)

Know all men by the present, we _____ (name of the company and address of the registered office) do hereby appoint and authorize _____ (full name and residential address) who is presently employed with us holding the position of _____ as our attorney, to do in our name and on our behalf, deed and things necessary in connection with or incidental to our proposal for **RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide “RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023..** in response to the RFP by PBGB, including signing and submission of all the documents and providing information/responses to PBGB in all the matter in connection with our bid. We hereby agree to ratify all deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all deeds and things done by our aforesaid attorney shall always be deemed to have been done by us.

Signature of Attorney

Dated this _____ day of _____ 2023
For _____

Accepted

(Signature)
(Name Designation)
Date:

(TO BE PROVIDED ON Rs.100/- STAMP PAPER)

Self-Certificate for Local Content

Date: __/__/____

I.....S/o, D/o, W/o.....resident of.....do hereby solemnly affirm and declare as under:

- 1) That I will agree to abide by the terms and conditions mentioned in the tender specification issued vide ref. no.....dated.....
- 2) That the information furnished hereinafter is correct to the best of my knowledge and belief and that I undertake to produce the relevant records before to any authority nominated by Bank for the purpose of assessing the Local Content.
- 3) That the Local Content for all inputs which constitute the Goods (mention the procurement) has been verified by me and that I am responsible for the correctness and accuracy of the claims made therein.
- 4) That in the event of the Local Content mentioned herein is found to be incorrect and not meeting the prescribed norms of Local Content, based on the assessment of an authority so nominated by Bank and that I will be liable as under Clause 9(f) of Public Procurement (Preference to Make in India) Order 2017, as amended.
- 5) That I agree to maintain all the information regarding my claim for Local Content in our records and that I shall make the requisite information available to Bank as and when required.
- 6) That *I (name of Manufacturer) do hereby confirm in respect of quoted item(s) that the Local Content is equal to or more than 50% and come under 'Class-I Local Supplier' Category. As being 'Class-I Local Supplier', I am eligible for Purchase Preference under 'Make in India' Policy vide Government of India Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide Orders dated 28.05.2018, 29.05.2019 and 04.06.2020)

OR

That *I (name of Manufacturer) do hereby confirm in respect of quoted item(s) that Local Content is more than 20% but less than 50% and come under 'Class-II Local Supplier' Category.

7) That I submit as under:

Name & Details of the Local Supplier (Regd. Office, Manufacturing Unit, Location, Nature of legal entity)	
Date on which this Certificate was issued	
Product for which the Certificate is issued	
Procuring Agency to whom the Certificate is furnished	
Percentage of Local Content claimed	
Name & details of the unit of the Manufacturer	
Sale Price of the Product	
Ex-Factory Price of the Product	
Freight, Insurance and handling	
Total bill of Material	
List & Total cost value of inputs used manufacture of the proposed Goods	
List & Total cost value of inputs which are locally sourced (Attach Certificates of Local Content from Local Suppliers, if the input is not in-house)	
List and cost of inputs which are imported (directly or indirectly)	
Any other information	

8) That the details of the location(s) at which the local value addition made is/are as under:

Sl. No.	Product Details	Name of Place

For & on behalf of

Signature of the Authorised Signatory of the Bidder (insert name, designation & contact number)

Official Seal of the Bidder

Date:

*** Strike out whichever is not applicable**

Escalation Matrix

Ref: Your REQUEST FOR PROPOSAL (RFP) TO SELECT SERVICE INTEGRATOR FOR MIGRATION OF CBS FROM FINACLE 7.0.18 TO FINACLE 10.2.25

Name of the Company :

Delivery Related Issues :

SL	Name	Designation	Full Office Address	Phone No	Mobile No	Email Address
1		First Level				
2		Second Level				
3		Regional/Zonal Head				
4		Country Head				

Service Related Issues :

SL	Name	Designation	Full Office Address	Phone No	Mobile No	Email Address
1		First Level				
2		Second Level				
3		Regional/Zonal Head				
4		Country Head				

COMPLIANCE CHART

RFP for Selection of System Integrator for Supply, Installation, Integration, Implementation, Maintenance and Facility Management Services of Hardware, Software, Network for Core Banking System (Finacle 10.2.25) for Five Years (Re-Tender) (e-Tender) vide “RFP Ref No: PBGB/HO/DIT/746/2023-24 Date 23/06/2023.”

Sl. No.	Particulars	Compliance Status (Yes / No)	Page No. Of the bid document
1.	Are Technical & Commercial bid submitted separately?		
2	Is the Technical bid made in conformity with technical bid template as per Annexure D?		
3.	Is the Commercial bid made in conformity with Commercial template as Annexure E?		
4.	Are the Technical & Commercial Bids organized properly?		
5.	Are all the pages numbered properly and signed and stamped?		
6	Is Earnest Money Deposit submitted?		
7	Duly signed relevant Annexures are enclosed		
8.	Is the softcopies of the response of Technical, Functional and Commercial RFP submitted in separate?		
9.	Are document in support of all eligibility criteria submitted?		
10.	Are your solution complied with all Scope of work.		
11.	Is the Manufacturer Authorization Form submitted?		
12.	Audited Balance Sheet and Profit & Loss Account documents for the last 3 years		
13.	Power of Attorney/Authority letter issued by the competent authority for signing the Bid document on behalf of the company.		
14	Whether duly signed &stamped Integrity pact submitted		

For.....

(Signature and seal of authorized person)

Place: Date: