

PUNJAB & SIND BANK



REQUEST FOR PROPOSAL

FOR

SELECTION OF BIDDER FOR SUPPLY INSTALLATION, IMPLEMENTATION,
MAINTENANCE & MANAGEMENT OF NEXTGEN SOC & RELATED SERVICES

BID NO: PSB/ HO-CISO CELL/2025-26/RFP2 DATED 18/08/2025

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

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1 KEY INFORMATION

Particulars	Details
Tender Title	RFP for Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services
Tender document / Participation Fee (Non-Refundable) *	<p>Rs. 10,000 + 18% GST (Non-refundable) should be submitted online only in favor of Punjab & Sind Bank before the last date of bid submission in the following account:</p> <p>IFSC Code: PSIB0009004 Bank: Punjab & Sind Bank, Account No. 90045040070003 (14 digits) Punjab and Sind Bank IT (GST No. 07AAACP1206G3ZX)</p> <p>Proof of NEFT to be submitted at the time of physical bid submission.</p>
Security Deposit/Earnest Money deposit	Rs. 3.05 Crore (INR Three Crore Five Lakh Only)
Bid validity	180 days from the date of opening of the bid.
Performance Bank Guarantee	<p>5 % of the total project cost.</p> <p>The selected bidder shall be responsible for providing the PBG for the duration of the contract (Including the extension) + claim period (12 months) of the Bank guarantees</p>
Date of Publishing the tender on Bank's Website	18/08/2025
Last Date for submission of Pre-Bid Query	<p>25/08/2025</p> <p>Pre bid queries should be submitted as per Annexure 23 in MS- excel format.</p> <p>Queries must be mailed to soc.tender@psb.co.in only quoting tender reference number in the subject. Subject of the email should be given as "Pre-Bid Queries for XXXX dated XXXX". Queries reaching afterwards will not be entertained.</p>
Date and Time for Pre-Bid Meeting	<p>27/08/2025 at 3:00 PM</p> <p>Pre-Bid meeting will be held Online, and participants are requested to attend the meeting Online.</p> <p>Those who are interested in participating the Prebid meeting should share the participant details to soc.tender@psb.co.in</p> <p>Upon perusal of the same, the link / meeting id will be shared to the participant to participate in the virtual meeting.</p>
Last Date and Time for submission of Bids	18/09/2025 at 3:00 PM

Date and Time of Opening of Bids	18/09/2025 at 3:30 PM
Date and Time of opening Commercial Bids	To be notified later to the qualifying bidders only.
Place of Opening of Bids	STAFF TRAINING CENTRE PUNJAB AND SIND BANK Punjab & Sind Bank, CISO cell 3rd Floor, B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B, Rohini, Delhi, 110085
Submission of Bids	https://gem.gov.in/
Contact Persons for any clarifications	Name: Deep Kumar (Manager) Contact No.: 011-41455521 Email ID: soc.tender@psb.co.in
Project Office Location	STAFF TRAINING CENTRE PUNJAB AND SIND BANK Punjab & Sind Bank, CISO cell 3rd Floor, B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B, Rohini, Delhi, 110085
Other Details	<ol style="list-style-type: none"> Subsequent changes made based on the suggestions and clarifications as per pre-bid meeting shall be deemed to be part of the RFP document and shall be published. No suggestions or queries shall be entertained after pre-bid meeting. This document can be downloaded from https://punjabandsindbank.co.in/ ,https://gem.gov.in/, and https://eprocure.gov.in/ Any Amendments, Modifications, Pre-Bid Replies, Clarifications & any communication etc. will be uploaded on the GeM Portal i.e. https://gem.gov.in/. No individual communication will be sent to the individual bidders. An announcement regarding the publication of the RFP will also be made in newspapers, informing bidders that the document can be downloaded from the following websites: https://punjabandsindbank.co.in/ ,https://gem.gov.in/, and https://eprocure.gov.in/
<p>Information for Online Participating:</p> <p>The following activities will be conducted online through the https://gem.gov.in/ website:</p> <ol style="list-style-type: none"> Purchase of RFP document including all Annexures. Addendums to the RFP. Submission of Technical Bid & Commercial Bid by the Bidder. Opening of Technical Bid & Commercial Bid by the Bank. Announcement of results, if any. <p>Instructions:</p> <ol style="list-style-type: none"> Bidders who wish to participate will have to register with GeM Portal and follow respective guidelines. In case of any clarification/ queries regarding online registration/ participation, Bidders may reach out to: Email: soc.tender@psb.co.in 	

* All MSEs(Micro & Small Enterprises) having registration as per provisions of the Public Procurement Policy for Micro and Small Enterprises i.e. District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or directorate of Handicrafts and Handlooms or Udyog Aadhaar Memorandum or any other body specified by Ministry of MSME and Start-ups (recognized by DIPP) are exempted from submission of Participation Fee, EMD amount only. Relevant Certificates should be submitted by the bidder in this regard to avail exemption

Note:

1. If any of the dates given above happens to be Holiday in Banks in Delhi the related activity shall be undertaken on the next working day at the same time.
2. All Claims made by the Bidder will have to be backed by documentary evidence.
3. Bidders should submit bids well before time rather than waiting for the last moment to avoid any technical glitches or networking issues etc. at their end.
4. Bidders are requested to use a reliable internet connection (data cable / broadband) to safeguard themselves. The bank is not responsible for telephone line glitch, internet response issues, hardware hangs etc. at bidder's end.
5. No Claim of any bidder shall be entertained, whatsoever for delayed submission of their bid at any stage because of any reason. Therefore, bidders are advised to submit their bids well before the scheduled time.

The tender document may also be downloaded from the Bank's official website also <https://punjabandsindbank.co.in>

2 GLOSSARY

S. No.	Acronym	Abbreviation
1	ADC	Application Delivery Controller
2	AI/ML	Artificial Intelligence / Machine Learning
3	AMC	Annual Maintenance Contract
4	API	Application Programming Interface
5	ATS	Applicant Tracking System
6	BAS	Breach and Attack Simulation
7	BCP	Business Continuity Planning
8	BFSI	Banking, Financial Services, and Insurance
9	BOQ	Bill of Quantity
10	BRD	Business Requirements Document
11	CBS	Core Banking Solution/System
12	CBOM	Cryptographic Bill of Materials
13	CCSA	Check Point Certified Security Administrator
14	CEH	Certified Ethical Hacker
15	CISA	Certified Information Systems Auditor
16	CISO	Chief Information Security Officer
17	CSP	Cloud Service Provider
18	CSPM	Cloud Security Posture Management
19	DAST	Dynamic Application Security Testing
20	DAM	Database Activity Monitoring
21	DB	Database
22	DC	Data Center
23	DIC	District Industries Centre
24	DLP	Data Loss Prevention
25	DPDP	Digital Personal Data Protection
26	DR	Disaster Recovery
27	EMD	Earnest Money Deposit
28	EOD/BOD	End of Day / Beginning of Day
29	EPS	Event Per Second
30	FMS	Facility Management System
31	FRSM	Functional Requirements Specification Matrix
32	GCIA	GIAC Certified Intrusion Analyst
33	GCIH	GIAC Certified Incident Handler
34	GDPR	General Data Protection Regulation
35	GUI	Graphical User Interface
36	GST	Goods and Services Tax
37	HIPS	Host Intrusion Prevention System
38	HLD	High-Level Design
39	IDAM	Identity and Access Management
40	IOPS	Input/Output Operations Per Second
41	IPS/IDS	Intrusion Prevention/Detection System
42	IT	Information Technology

S. No.	Acronym	Abbreviation
43	ITSM	IT Service Management
44	KVIC	Khadi and Village Industries Commission
45	KVIB	Khadi and Village Industries Board
46	LAN	Local Area Network
47	LDAP	Lightweight Directory Access Protocol
48	LB	Load Balancer
49	LLD	Low-Level Design
50	LOI	Letter of Intent
51	MTBF	Mean Time Between Failures
52	MTTD	Mean Time to Detect
53	MTTR	Mean Time to Respond/Repair
54	MSME	Micro, Small and Medium Enterprises
55	NAC	Network Access Control
56	NBAD	Network Behaviours Anomaly Detection
57	NDR	Network Detection and Response
58	NGFW	Next-Generation Firewall
59	NIST	National Institute of Standards and Technology
60	NSIC	National Small Industries Corporation
61	OEM	Original Equipment Manufacturer
62	OOTB	Out Of The Box
63	OS	Operating System
64	PBG	Performance Bank Guarantee
65	PII	Personally Identifiable Information
66	PIM	Privileged Identity Management
67	PSE	Public Sector Enterprise
68	PSB	Public Sector Bank
69	PSU	Public Sector Undertaking
70	RACI	Responsible, Accountable, Consulted, Informed
71	RBI	Reserve Bank of India
72	RFP	Request for Proposal
73	RPO	Recovery Point Objective
74	RRB	Regional Rural Bank
75	RTO	Recovery Time Objective
76	SAN	Storage Area Network
77	SAST	Static Application Security Testing
78	SBOM	Software Bill of Materials
79	S-BDL	SOC Big Data Lake
80	SCD	Secured Configuration Document
81	SDLC	Software Development Life Cycle
82	SIEM	Security Information and Event Management
83	SIT	System Integration Testing
84	SLA	Service Level Agreement
85	SMS	Short Message Service
86	SMTP	Simple Mail Transfer Protocol

S. No.	Acronym	Abbreviation
87	SNMP	Simple Network Management Protocol
88	SOA	Service-Oriented Architecture
89	SOC	Security Operations Center
90	SOAR	Security Orchestration, Automation and Response
91	SOP	Standard Operating Procedure
92	SRS	System Requirements Specification
93	SSO	Single Sign-On
94	TAT	Turnaround Time
95	TCC	Terms and Conditions of Contract
96	TCO	Total Cost of Ownership
97	TIP	Threat Intelligence Platform
98	TTP	Tactics, Techniques, and Procedures
99	UAT	User Acceptance Testing
100	UEBA	User and Entity Behavior Analytics
101	ULA	Unlimited License Agreement
102	UI/UX	User Interface / User Experience
103	URL	Uniform Resource Locator
104	VAPT	Vulnerability Assessment and Penetration Testing
105	VPC	Virtual Private Cloud
106	WAF	Web Application Firewall
107	XDR	Extended Detection and Response

3 DISCLAIMER

- The information contained in this Request for Proposal (RFP document) or any information provided subsequently to Bidder(s) whether verbally or in documentary form by or on behalf of the Bank, is provided to the Bidder(s) on the terms and conditions set out in this RFP document and all other terms and conditions subject to which such information is provided. This document shall not be transferred, reproduced or otherwise used for purposes other than for which it is specifically issued.
- This RFP is neither an agreement nor an offer and is only an invitation by the Bank to the interested parties for submission of bids. No contractual obligation whatsoever shall arise from the RFP process until a formal contract is executed by the duly authorized signatory of the Bank and the Bidder. The purpose of this RFP is to provide the Bidder(s) with information to assist in the formulation of their proposals.
- This RFP does not claim to contain all the information each bidder may require. Each Bidder should conduct its own investigations and analysis and is free to check the accuracy, reliability, and completeness of the information in this RFP and obtain independent advice, wherever necessary. Bank may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP.
- The bank reserves the right to reject any or all Request for Proposals received in response to this RFP document at any stage without assigning any reason whatsoever. The decision of Punjab & Sind Bank shall be final, conclusive, and binding on all the parties.
- This RFP Document may not be appropriate for all people, and it is not possible for the Bank Representatives, their employees, or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP Document.
- The Bank, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Applicant or Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form or arising in any way for participation in this bidding process.
- The provisions of this Agreement shall be governed by the laws of India and the competent court at Delhi shall have exclusive jurisdiction in relation thereto even though other Courts in India may also have similar jurisdictions.

4 INTRODUCTION

Punjab & Sind Bank, a body corporate constituted under the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1980, one of the nationalized banks of India, has a national presence through a widespread network of 1607 branches, 29 Zonal Offices, 74 Departments in Head Office, 3 Regional Clearing Centers and 12 Currency Chests all networked under Centralized Banking Solution. It also has a network of 1000 ATMs spread across the country including onsite and offsite ATMs. With more than 116 years of customer services, the Bank has a large, satisfied clientele throughout the country. For enhancing customer convenience levels and overall inter-branch efficiency, the Bank has been a frontrunner in implementing various IT enabled products.

5 PROJECT OBJECTIVE

The bidder has to quote the prices as per Appendix 2: Commercial Bill of material. If required, the bank will procure software/ hardware/services in line with the terms and conditions defined in the RFP as per unit cost mentioned in Bill of material.

For this purpose, The Bank invites bids as per the specifications indicated in Functional and Technical Specifications and Scope of work mentioned in the RFP document. These prices shall remain valid for all orders placed with the selected bidder for the entire contract period and duly accepted by the bidder. The interested bidders are requested to send your technical proposal and Commercial proposal as per the enclosed formats.

The methodology for submission of the proposals is enumerated in Section 6: Instruction to the bidders. Terms and Conditions of Contract (TCC) are given in Section 13.

This request for proposal document ('RFP document' or RFP) has been prepared solely for the purpose of enabling Punjab and Sind Bank (hereinafter referred to as the 'BANK') for Selection of bidder for supply installation, implementation, maintenance & management of NextGEN SOC & related services

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

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

6 INSTRUCTION TO BIDDER

6.1 Cost of Tender

The tender document may also be downloaded from the Bank's official website <https://punjabandsindbank.co.in>. The bidder downloading the tender document from the website is required to submit a non-refundable fee online as mentioned in Key-Information in favor of PUNJAB & SIND BANK, (Bank a/c details given in Key Information) before the last date and time of submission of bid, failing which the bid of the concerned Bidder will be rejected. It may be noted that the amount will not be refunded to any prospective bidder under any circumstances including cancellation of RFP.

6.2 Language of the Bid

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

6.3 Bid Currency & Price Structure

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

6.4 Bid System Offer

1. The Bid Proposal being submitted would be binding on the Bidder. As such it is necessary that authorized personnel of the firm or organization sign the Bid. The designated personnel should be authorized by a senior official of the Organization having such authority to do so. The same person or a different person should be authorized who should have authority to quote. The Xerox copy of necessary Original Resolutions/ Authority/ Power of Attorney having authority to authorize the person to submit Bid Documents, on behalf of the Company shall be enclosed. The proposal must be accompanied by an undertaking letter duly signed by the designated personnel providing a Bid commitment. The letter should also indicate the complete name and designation of the designated personnel.
2. The bidder shall submit his response to the present tender with the price which will contain the pricing information.
3. Any effort by a Bidder to influence the Bank in evaluation of his bid, bid comparison or contract award decision would result in the rejection of the said bid. The Bank's decision in this case would be final and without prejudice and will be binding on all parties.
4. The Bank reserves the right to accept or not to accept any bid or to reject a particular bid at its sole discretion without assigning any reason whatsoever.
5. The Bids containing erasures or alterations will not be considered. There should be no handwritten material, corrections or alterations in the Bids. All details must be filled in.
6. Bidder staff, personnel and labour will be liable to pay personal income taxes in India in respect of such of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and Bidder shall perform such duties regarding such deductions thereof as may be imposed on him by such laws and regulations.
7. Bidder warrants that it shall be solely liable and responsible for compliance of applicable Labour Laws in respect of its employee, agents, representatives and subcontractors (if allowed) and in particular laws relating to terminal benefits such as pension, gratuity, provident fund, bonus or other

benefits to which they may be entitled and the laws relating to contract labour, minimum wages, etc., and the BANK shall have no liability in this regard.

6.5 Two Bid System:

This is two bid system which has the following 2 parts:

Part A- Technical cum Eligibility Proposal: Indicating the response to the Pre-Qualification Criteria, Technical evaluation criteria, Appendix & annexures for Technical and Eligibility requirement, Compliance to Scope of Work and other terms & conditions. The format for submission of Technical Proposal is as per Annexure 1: Submission checklist along with Appendix 1A: Functional Compliance Sheet, Appendix 1B: Technical Compliance Sheet and Appendix 3: Bill of Quantity.

Part B-Commercial Bid: Furnishing all relevant information as required as per Bill of Material as per Appendix 2. The format for submission of Commercial bid is as per Annexure 14.

6.5.1 Preparation of Bids:

6.5.1.1 Part A – Technical cum Eligibility Proposal

1. Before submitting the bid, the bidders should ensure that they conform to the Pre-Qualification Criteria as stated in RFP. Only after satisfying themselves of the Pre-Qualification Criteria, the Offer should be submitted.
2. Technical cum eligibility Proposal should be submitted as per the format in Annexure 1: Submission Checklist. Relevant technical details and documentation should be provided along with Technical Proposal.
3. It is mandatory to provide compliance with the scope required by the bank.
4. The offer may not be evaluated and may be rejected by the Bank without any further reference in case of non-adherence to the format or partial submission of technical information as per the format given in the offer.
5. The Bank shall not allow / permit changes in the technical/functional requirements once it is submitted.
6. The relevant solution information, brand, and solution offered, printed product brochure, technical/functional specification sheets etc. should be submitted along with the Offer. Failure to submit this information along with the offer may result in disqualification.
7. The Technical Proposal should be complete in all respects and contain all the information sought for. Masked Bill of Material must be attached in Technical Offer and should not contain any price information. The Part A - Technical cum Eligibility Proposal should be complete and should cover all products and services. Technical Proposal without masked Bill of Materials will be liable for rejection. Masked Bill of Material which is not as per instruction will make Bid liable for rejection. Masked bill of material should be a replica of actual Bill of Material except that it should not contain any price information (with Prices masked). It should not provide any price information like, unit price, tax percentage, tax amount etc.

6.5.1.2 Part B - Commercial Bid

1. Commercial Bid should be submitted as per instruction in Annexure 14.

2. Commercial Bid shall be submitted as per Bill of Material and other terms and conditions of RFP on prices. The Commercial Bid should give all relevant price information as per Appendix 2. Any deviations from the Bill of Material / non submission of prices as per the format shall make the bid liable for rejection.
3. The bidder must quote the best competitive price in the commercial bid.
4. The bid must be made in an organized and structured manner.

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

6.6 Cost of Preparation

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

6.7 Normalization of Bids

The Bank will go through a process of technical evaluation and normalization of the bids to the extent possible and feasible to ensure that Bidders are on the same technical ground. After the normalization process, if the Bank feels that any of the bids needs to be normalized and that such normalization has a bearing on the commercial bid; the Bank may at its discretion ask all the technically shortlisted Bidders to resubmit the technical and commercial bids once again for scrutiny. The Bank can repeat this normalization process at every stage of technical submission or till the Bank is satisfied. The Bidders agree that they have no reservation or objection to the normalization process and all the technically short-listed Bidders will, by responding to this RFP, agree to participate in the normalization process and extend their co-operation to the Bank during this process. The Bidders, by submitting the response to this RFP, agree to the process and conditions of the normalization process.

6.8 Submission of Bid and communication

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

Bids duly signed and sealed is to be submitted in following form on or before the last Date and Time for bid submission as defined in the Section 1: Key information:

- a) Technical Bid – Mandatory both Online (on GEM Portal) and Offline(Physical Envelopes - PSB STAFF TRAINING CENTRE PUNJAB AND SIND BANK, CISO Cell)
- b) Commercial Bid – Only Online (on GEM Portal), **Hard copy of the bid should not contain any Commercial information.**

Any other mode of submission, e.g. by fax, e-mail etc. will not be accepted. No Claim of any Bidder(s) shall be entertained, whatsoever for delayed submission of their bid at any stage because of any reason. Therefore, Bidder (s) are advised to submit their bid well before the scheduled time.

The Assistant General Manager (Cyber Security)
Punjab & Sind Bank
CISO Cell
B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,
Rohini, Delhi, 110085
E-mail: soc.tender@psb.co.in

Online and Hard Copy bid submission is mandatory. The hard copies of bids of only those bidders who submitted bid documents online will be accepted. The hard copies of documents submitted should be same as submitted online without any commercials. Bids will be opened in the presence of the bidder representatives who choose to attend the opening of tender on the specified date, time and place of bid opening. No separate intimation will be given in this regard.

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

6.9 Late bids

1. Any bid received after the due date and time for receipts of bids as prescribed in this RFP will be rejected. However, in case of the specified date of submission of bids being declared a holiday for the bank, the bids will be received up to the specified time on the next working day.
2. The bank may, at its discretion, extend this deadline for submission of bids by amending the bid documents, in which case all rights and obligations of the Bank and bidders, previously subject to the deadline, will thereafter be subject to the deadline extended.
3. All such information will be published on Bank's website or <https://gem.gov.in/> only. The bidders have to take note of it.
4. The Bidder must submit the bid both online and in hardcopy. Failure to submit the bid through both modes shall render the bid ineligible for evaluation. Additionally, if the Bidder submits the online bid but fails to submit the hardcopy by the deadline specified in Section 1: Key Information, bank has all the right to disqualify the bidder.

6.10 Modifications and/ or Withdrawal of Bids

1. Bids once submitted will be treated as final and no modification will be permitted. No Correspondence in this regard will be entertained.
2. The Bid should contain no alterations, erasures, or overwriting. The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of bid not substantially / conclusively responsive to the bidding documents in every respect will be at the Bidders risk and may result in rejection of the bid.
3. No bidder shall be allowed to withdraw the bid after the deadline for submission of bids.
4. In the case of the successful bidder, he will not be allowed to withdraw/back out from the bid commitments. The bid earnest money in such eventuality shall be forfeited and all interests/claims of such bidder shall be deemed as foreclosed

6.11 Earnest Money Deposit (EMD):

1. The bidder shall furnish Noninterest earning Earnest Money Deposit (EMD) amount as mentioned in the Bid Schedule by way of Bank Guarantee drawn on any Scheduled Bank in India (except Cooperative Bank, RRB & Punjab & Sind Bank) in favor of Punjab & Sind Bank, payable at Delhi.
2. The same should be valid for an additional 45 days beyond bid validity period. Bank at its discretion can demand for extension for the validity of EMD. The format for submission of EMD in the form of Bank Guarantee is as per Annexure 15.
3. The Bank Guarantee issued by the issuing Bank on behalf of Bidder in favor of Bank shall be in paper form as well as issued under the "Structured Financial Messaging System" (SFMS) sent to Punjab & Sind Bank, Sector 44 Branch, Gurgaon, IFSC PSIB0021509. Any bank guarantee submitted in physical mode, including EMD/bid guarantee which cannot be verifiable through SFMS will be rejected summarily.
4. Non submission of EMD leads to rejection of Bid.
5. All MSEs having registration as per provisions of the Public Procurement Policy for Micro and Small Enterprises i.e. District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or directorate of Handicrafts and Handlooms or Udyog Aadhaar Memorandum or any other body specified by Ministry of MSME and Start-ups (recognized by DIPP) are exempted from submission of Tender Fee and EMD only. Relevant certificates should be submitted by the bidder in this regard to avail of exemption. Bid Security Declaration should be submitted by eligible MSEs/Startups on Company's letter head with company seal and signature of the authorized person as per Annexure-4.
6. The EMD may be forfeited/ Bank Guarantee may be invoked:
 - a) If the bidder withdraws/amends the bid during the period of bid validity (180 days from the date of opening of bid).
 - b) If the bidder makes any statement or encloses any form which turns out to be false, incorrect and / or misleading at any time prior to signing of contract and/or conceals or suppresses material information; and / or
 - c) The selected bidder withdraws his tender before furnishing the unconditional and irrevocable Performance Bank Guarantee.
 - d) The bidder violates any of the provisions of the terms and conditions of this tender specification.
 - e) In case of the successful bidder, if the bidder fails:
 - i To sign the contract in the form and manner to the satisfaction of Punjab & Sind Bank.
 - ii To furnish the Performance Bank Guarantee in the form and manner to the satisfaction of Punjab & Sind Bank.
 - iii Bank may proceed against the selected bidder in the event of any evasion, avoidance, refusal or delay on the part of the bidder to sign and execute the Purchase Order / Service Level Agreements or any other documents, as may be required by the Bank, if the bid is accepted.
 - iv The Execution of Bid Security Declaration/ Invocation of EMD may suspend participation of the Bidder in any tender in this Bank for three (03) years.

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

6.12 Performance Bank Guarantee/Security Deposit (PBG)

1. The successful bidder/s should submit a Security Deposit / Performance Guarantee as specified in **Key Information within 30 days from the date of acceptance of Purchase Order.**
2. Security Deposit / Performance Guarantee should be submitted by way of Bank Guarantee in favor of Punjab & Sind Bank payable at Delhi / Bank Guarantee may be obtained from any of the Scheduled Commercial Banks (except Cooperative Bank, RRB & Punjab & Sind Bank) for an amount as mentioned in Section 1: KEY INFORMATION.
3. The selected bidder shall be responsible for providing the PBG for the duration of the contract (Including the extension) + claim period (12 months) of the Bank guarantees
4. The Bank Guarantee issued by the issuing Bank on behalf of Bidder in favor of Punjab & Sind Bank shall be in paper form as well as issued under the "Structured Financial Messaging System" (SFMS) sent to Punjab & Sind Bank, Sector 44 Branch, Gurgaon, IFSC PSIB0021509. Any bank guarantee submitted in physical mode, including EMD/bid guarantee which cannot be verifiable through SFMS will be summarily rejected.
5. The PBG applicable must be duly accompanied by a forwarding letter issued by the issuing bank on the printed letterhead of the issuing bank.
6. Security Deposit/Performance Bank Guarantee should be valid for the complete duration of contract period.
7. The selected bidder shall be responsible for extending the validity date and claim period of the Bank guarantees as and when it is due, on account of incompleteness of the project and contract period.
8. If the Contract is extended, the selected bidder has to submit fresh PBG for 5% of the extended Contract value and period along with claim period and also execute fresh/extension of Contract with the Bank within 15 days from the date of issuance of Purchase Order for renewal.
9. In the event of the Service Provider committing a breach of the terms and conditions of the contract, Bank shall provide a cure period of 30 days and thereafter invoke the PBG, if the Service Provider is unable to service the contract for whatever reason.

6.13 No commitment to accept lowest or any bid

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

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

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

PUNJAB & SIND BANK reserves the right to accept or reject in part or full any or all offers without assigning any reason thereof even after issuance of letter of Intent. Any decision of Punjab & Sind Bank in this regard shall be final, conclusive and binding upon the bidders. The Bank reserves the right to accept or reject any Bid

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

6.15 Correction of Errors

Bidders are advised to exercise greatest care in entering the pricing figures. No corrigendum or requests for prices to be corrected will be entertained after the bids are opened. If there are any corrections in the bid document, the authorized signatory should initial them all, failing which the figures for such item shall not be considered. Discrepancies in bids will be corrected as follows:

1. Where there is a discrepancy between the amounts in figures and in words, the amount in words shall prevail.
2. If there is a discrepancy between percentage and amount, the amount calculated as per the stipulated percentage basis shall prevail
3. Where there is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by the quantity, the unit rate will govern unless, in the opinion of Bank, there is an obvious error such as a misplacement of a decimal point, in which case the line-item total will prevail.
4. Where there is a discrepancy between the amount mentioned in the bid and the line-item total present in the schedule of prices, the amount obtained on totaling the line items in the Bill of Materials will prevail.
5. The amount stated in the correction form, adjusted in accordance with the above procedure, shall be considered as binding, unless it causes the overall price to rise, in which case the bid price shall prevail.
6. In case the bidder does not accept the correction of the errors as stated above, the bid shall be rejected.
7. The Highest Technical bidder shall not automatically qualify for becoming a selected bidder and for award of contract by the bank.
8. The Lowest Commercial Bidder shall not automatically qualify for becoming selected Bidder and for award of contract by the Bank.
9. The commercials will be calculated till two decimal points only. If the third decimal point is greater than .005 the same shall be scaled up else, it shall be scaled down to arrive at two decimal points. Bank will make similar treatment for 4th or subsequent decimal point to finally arrive at two decimal points only.
10. If for some reason, negotiations with the successful bidder fail to result in an agreement within a specified timeline, the Bank reserves the right to award the contract to the next most eligible bidder based on the evaluation.
11. The Bank shall not incur any liability to the affected Bidder on account of such rejection.

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

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

6.16 Soft copy of tender document

The soft copy of the tender document will be made available on the Bank's website <https://gem.gov.in/>, <https://eprocure.gov.in/> & <https://punjabandsindbank.co.in/>. However, the Bank shall not be held responsible in any way, for any errors / omissions / mistakes in the downloaded copy.

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

6.17 Bid validity period

Bids shall remain valid for the period as defined in section 1: Key Information. The Bank holds the right to reject a bid valid for a period shorter than validity period defined in the RFP as non-responsive, without any correspondence. In exceptional circumstances, The Bank may solicit the Bidder's consent to an extension of the validity period. The request and the response thereto shall be made in writing. The extension of validity period by the Bidder should be unconditional and irrevocable. The Bid Security provided should 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.

6.18 Pre-bid meeting

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

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

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

The format to be used for seeking clarification is mentioned in Annexure 23 (Pre-bid Query Format). It may be noted that all queries, clarifications, questions etc., relating to this RFP, technical or otherwise, must be in writing only and should be sent to the email-id as stated earlier. No oral or individual consultation will be entertained.

The bank do not have the responsibility to consider any other queries raised by the bidder's representative during the pre-bid meeting.

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

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

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

6.19 Amendment to RFP Contents

At any time prior to the last date for bid-submission, the Bank may, for any reason, whether at its own initiative or in response to clarification(s) requested by a prospective bidder, modify the RFP contents by Corrigendum. However, it is the bidder's responsibility to keep its communication channels (face-to-face, phone, fax, e-mail etc.) alive including observing Bank's website for the latest development in this regard. The Bank will not be liable for any communication gap. To provide prospective bidders, reasonable time to take the amendment into account for preparation of their bid, the Bank may, at its discretion, extend the last date for bid-submission.

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

6.20 Disqualification

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

6.21 Fixed Price

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

6.22 Project Execution

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

6.23 Confidentiality of the Bid Document

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

7 SCOPE OF WORK

Bank intends to implement NextGEN SOC technologies, related services and Bank's other Security Solutions for protecting information assets at Data Centre and Disaster Recovery Site at Mumbai and Noida respectively.

Bank expects bidder to provide full-fledged services including but not limited to design, supply, implementation, configuration, customization, integration, migration, monitor, manage, backup, documentation, training, maintenance support, arrangement with OEM and any other activities related to or connected to the Information Technology / Cyber Security Solutions & services, devices, applications & technologies together at the Bank during the entire contract period.

The complete implementation including **requirement gathering, designing, installation, configuration and implementation of the solution till the Go-live** is to be done by the OEM.

Bidder has to arrange for OEM's resources and the bidder will be responsible for all co-ordination with the OEM and for completion of the implementation, within the timelines.

At the end of the implementation, the bidder has to arrange for a Certificate from the OEM, certifying that the implementation has been done by OEM's Resources and the deployed solution meets all the technical/functional specification of the solution as sought in the RFP.

1. Bidder – Supply nextGEN SOC technologies, integrate nextGEN SOC with source IT & Cyber systems, provide onsite L1, L2 & L3 human resources for the duration of the contract and manage the project.
2. Respective solution OEM – Deploy, install, integrate their own solution with every other solution / technology deployed in the nextGEN SOC setup, deploy required resources, migration of data and logs from current SOC to new nextGEN SOC.
3. The solution and instances deployed within the bank's infrastructure shall be extended to the Virtual Private Cloud (VPC) environment. This extension ensures that the monitoring, security, and management capabilities are consistent across both on-premises and cloud-based resources. Example SIEM Log collector instance would be deployed on VPC as well to collect the VPC logs.
4. Respective solution OEM along with the bidder shall be responsible for implementing all configurations, customizations, designs, and related development activities as communicated by the Bank up to the System Requirements Specification (SRS) sign-off phase. This includes, but is not limited to, modifications to user interfaces, workflows, business rules, reports, dashboards, alerts, notifications, and any other functional or non-functional requirements identified during this period.
5. It is explicitly clarified that any such configurations or customizations that do not result in additional licensing costs, require procurement of additional hardware, or necessitate an increase in system capacity or performance beyond the originally proposed infrastructure and licensing, shall be carried out by the Bidder at no additional cost to the Bank.
6. Respective solution OEM along with the bidder shall ensure timely implementation of such requirements within the agreed project timelines. Any attempt to reclassify such requirements as change requests at a later stage, where they were previously communicated before SRS sign-off and fall within the above criteria, shall not be accepted by the Bank
7. As and when Bank provide the bidder with automated DR solution for the proposed applications, Bidder is required to ensure integration and configuration of the proposed solution with the provided ADR tool at no additional cost to the Bank.

Bidder to ensure all the commissioning, Integration, migration, relocation, updates, Upgrades, Patching, de-commissioning, Enhancements, Troubleshooting, Analysis, Health Checks, Backups, Audits, Documentation, SOP's, Creation of Knowledge Articles at Onsite for proposed nextGEN SOC.

Every technology deployed in the NextGEN SOC should collaborate with every other technology in NextGEN SOC on the real-time basis without manual intervention to leverage strengths of each other for studied analytics, correlation, reporting incidents and maintain overall false positive alerts within the threshold.

Dynamic, intuitive, parameterized and customizable dashboards should empower personnel resources in the NextGEN SOC to take prudent decisions. The proposed SOC Solution must have advanced AI/ML capabilities to enable intelligent automation and insight generation. Multi-dimensional, analytical, trend & pattern-based dashboards should be recommended by individual technology based on their own self-learning capability.

Bank's security solutions agents (as identified by the bank like Third Firewall, PIM, DAM, xDR, HIPS, WAF, etc.) will also be deployed in the proposed cloud (if any proposed by the bidder) to maintain a consistent security posture across both cloud and on-premises environments.

The proposed solution, tools and IT Infrastructure must be OEM-supported, production-grade and stable (GA release), and should be implemented by/under OEM-certified resource supervision.

The supporting/underlying software like OS, DB etc. should be OEM supported software and shall be part of overall IT (On-premises and Cloud) infrastructure provided.

Proposed Solution/Tools/Services/IT & Cloud Infrastructure should be able to comply with:

- a) Bank's IT, IS, Cyber Security Policy, Cloud Security Policy, Data Governance Policy, Master directions on "Digital Payment Security Controls" and IT Policy and regulatory requirements and implement all the recommendations/close all the vulnerabilities reported in the various information security reviews, IS audit, UAT etc. conducted by the Bank, bank appointed third party professionals, Regulators during the contact period without any additional cost to the Bank.
- b) Prevalent regulatory guidelines
- c) Data protection laws in India
- d) Should be able to integrate with bank's on-premises security controls.
- e) During the Contract period, if any software or any component thereof is supplied by the bidder is inoperable or suffers degraded performance as sought in the RFP, Bidder shall, at the Bank's request, promptly replace the software or specified component with new/augmented software of the same type and quality. Such replacement shall be accomplished without any adverse impact on the Bank's operations within agreed time frame and without any additional cost to the Bank.
- f) Bidder hereby undertakes the responsibility to take all possible measures, at no additional cost, to avoid or rectify any issues which thereby result in non-performance of software/ hardware/ deliverables within reasonable time. The Bank shall report as far as possible all material defects to bidder without undue delay ensuring expected performance covered under scope of work.
- g) The Proposed solution shall include all components and subcomponents like software licenses, accessories, IT Infrastructure and the Bidder should supply other components at no extra cost to the Bank (required for commissioning of the solution as a part of RFP).

- h) Any Software, hardware, and services, which might not have been specifically mentioned in this RFP but, are necessary for the installation, Configuration, testing, commissioning, performance or completeness of the order, shall be provided / made available as per the time schedule for smooth and efficient Implementation, configuration, operation and maintenance of the system under Indian conditions. The Bidder shall be responsible for any discrepancies, assumptions, errors and omissions in the technical details submitted by them, irrespective of whether these have been approved, reviewed or otherwise, accepted by the Bank or not. The Bidder shall take all corrective measures arising out of discrepancies, assumption, errors and omissions in drawing and other information as mentioned in the RFP & its technical proposal within the time schedule and without additional cost to the Bank.

7.1 RACI (Responsible, Accountable, Consultant, Informed)

S.No.	Activity	Bidder	OEM	Bank
1	Requirement Analysis	A,R	A,R	C,I
2	System Design	A,R	A,R	C,I
3	Development and Installation	A,R	A,R	C,I
4	Configuration, policy, rules, posture definition, re-definition, assessment etc.	A,R	A,R	C,I
5	Documentation	A,R	A,R	C,I
6	Testing	A,R	A,R	R,C,I
7	Deployment & Go-live	A,R	A,R	C,I
8	Facility Management	R,A	C	C,I
9	NextGEN SOC Operations	R,A	C	C,I
10	Business Continuity Management	R,A	C	C,I
11	Architecture assessment	A,R	A,R	C,I
12	Rectification of any Points raised during assessment & reviews	A,R	C,I	I
13	Impact Analysis and Change management	A,R	A,R	C,I
14	Problem Management, Incident management, Service Support	A	A,R	C,I
15	Business Continuity Management	A,R	A,R	C,I

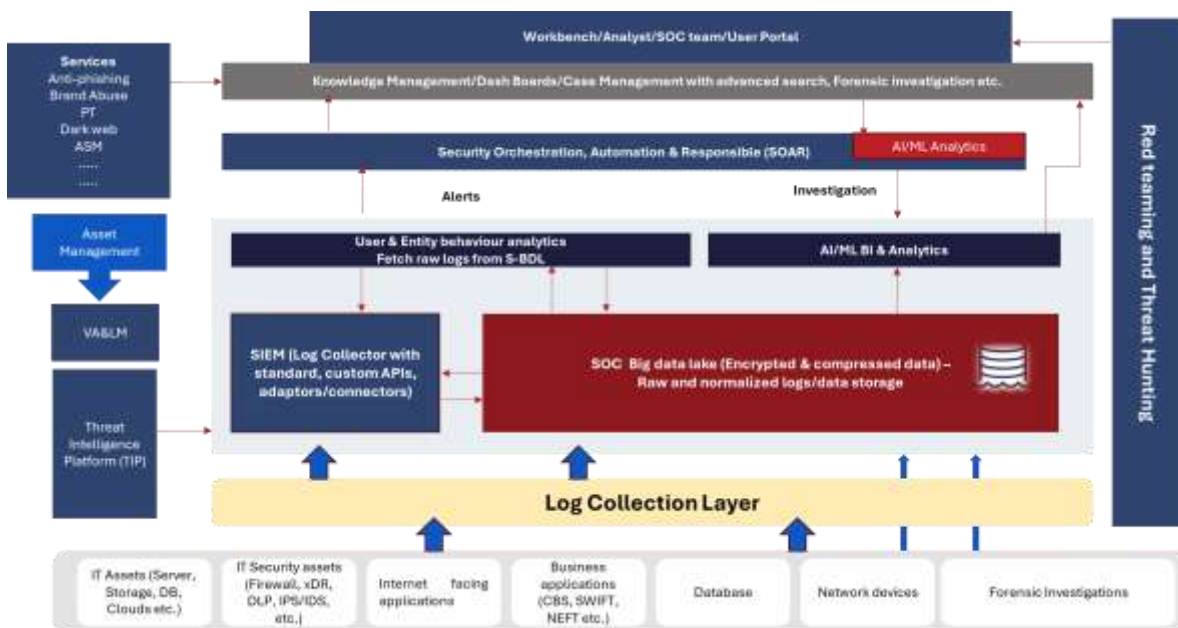
7.2 SOC solutions & Services

Summary of the solution and services required by bank as a part of this RFP is provided below:-

#	Solution & Services	Deployment Mode
SOLUTIONS		

#	Solution & Services	Deployment Mode
1	SIEM	On-premise/ On-Cloud
2	SOC Big Data Lake	On-premise/ On-Cloud
3	SOAR	On-premise/ On-Cloud
4	UEBA	On-premise/ On-Cloud
5	Decoy/Honeypot	On-premise/ On-Cloud
6	XDR	On-Cloud
7	Threat Intelligence Platform	On-premise/ On-Cloud
8	Vulnerability Assessment, lifecycle & management	On-premise
9	Application Security Testing Tool	On-premise
10	Cloud Security (CSPM) Tool	On-premise/ On-Cloud
SERVICES		
1	Breach Attack & Simulation	SaaS
2	Red Teaming Services	SaaS
3	Attack Surface management	SaaS
4	Phishing Simulation	SaaS
5	Anti-Phishing	SaaS
6	Dark Web Monitoring	SaaS
7	Threat Intelligence Feed	SaaS
8	Threat Hunting Services	SaaS
9	Brand Protection and Monitoring	SaaS

Highlights of baseline NextGen SOC deployment Architecture



Indicative architecture for the DC and DR

The Bidder and OEMs are responsible for following: –

7.3 Functional Requirements

7.3.1 Solution

7.3.1.1 Security Information and Event Management

As part of the SIEM solution implementation, the bank expects the system to meet the requirements of a Next-Generation Security Operations Center (SOC) enhanced with AI/ML capabilities (e.g., anomaly detection, false positive reduction, threat prediction). The Solution should provide following modules, i.e., Log Collection, Log Aggregation, Log storage, Event Correlation, Alerting, Dashboard & reporting.

As a part of the deployment bidder to consider that logs shall be collected from a **wide range of sources** across the bank's IT environment both on-premises as well as on-cloud (public & private).

The bidder must ensure that the solution is architected to store raw logs in the S-BDL, with the storage specifically designed and implemented at the Bank's on-premises Data Center (DC) in Mumbai and Disaster Recovery (DR) site in Noida.

The solution design must account for redundancy, failover mechanisms of all the SIEM components irrespective of the deployment model. The SIEM Solution must have feature for predictive detection and enhance overall threat management capabilities.

Bank Currently has deployed SIEM from RSA (Netwitness).

Features & modules:

1. Technologies proposed to be deployed in the NEXTGEN SOC by bidder and OEMs should leverage self-learning, analytics models powered by Artificial Intelligence / Machine Learning (AI/ML) and should be capable of handling extremely high IOPS without latency.
2. Self-learning, proactive, predictive & cognitive by completely leveraging AI/ML and deep analytics.
3. For correlation and report generation purpose, the solution will be able to retain logs online on primary storage and post that on Archival for the defined period as per Annexure 21: Sizing/Volumetrics
4. The solution shall provide the following modules & functionality:
 - a) Log Collection - Logs from all devices / appliances / servers / applications / databases/IT sources located at the geographically dispersed location should be collected. Bidder should develop the baseline for the level of logs to be enabled from different components of IT infrastructure assets. Only in the case where remote log collection is not feasible, Bidder should install agent on the servers and applications for collection of logs. All the Raw Logs collected by Log Collection module should be stored in S-BDL
 - b) the SIEM should be compatible with Data Lakes or any other central database system so that the same can be used as a centralized repository aimed at maintaining and managing all log or other data sources.
 - c) The log baseline should be in line with global best practices. In case the systems/applications are writing logs to the local hard disks, solution should be capable to pull the logs from these devices through secure transfer.

- d) Log Aggregation- Logs collected from all the devices should be aggregated as per configured parameters
- e) SIEM Log Storage - Logs collected from all the devices should be stored in a non-tamper format on the archival device in the compressed and encrypted form
- f) Event Co-relation- Collected logs should be correlated according to various predefined criteria for generation of alert and identification of the incident. The correlation rules should be predefined and also user configurable.
- g) Alerting - Solution should be capable to generate alerts, register and send the same through message formats like SMTP, SMS, Syslog, SNMP as per user configurable parameters
- h) Dashboarding and Reporting
 - i SIEM Solution should provide web-based facilities to view security events and security posture of the Bank's Network and register incidents.
 - ii Solution should have drill down capability to view deep inside the attack and analyse the attack pattern. Dashboard should have filtering capability to view events based on various criteria like geographical location, Device type, attack type etc.
 - iii Dashboard should have Role based as well as Discretionary access control facility to restrict access to incidents based on user security clearance level.
 - iv Solution should provide various reports based on user configurable parameters and standard compliance reports like ISO 27001:2022, ISO 31000:2018, ISO 27017:2019, ISO 27701:2019, ISO 22301:2019, PCI-DSS etc., and from regulatory and statutory authorities.
- i) Integration of IT Security Solution with SOC Capabilities Including AI, ML, and Automation. The SOC Platform should be full integrable with organisation's IT security solution. This integration shall:
 - i Support Bi-directional Data Exchange: Enable seamless, real-time exchange of threat intelligence, alerts, logs, and incident data between the IT security solution and the SOC systems (e.g., SIEM, SOAR).
 - ii Enable Automated Response Workflows: Integrate with SOC automation tools (e.g., SOAR platforms) to:
 - Trigger automated incident response actions based on predefined playbooks.
 - Support auto-remediation, quarantine, or escalation steps based on severity levels.
 - Provide audit trails for automated decisions and actions : -
 - Ensure Interoperability and Extensibility: Support open standards and APIs (e.g., STIX/TAXII, REST APIs) to ensure compatibility with current and future SOC tools and frameworks
 - Maintain Security and Compliance: All data exchanged between the IT security solution and SOC must be encrypted in transit and at rest, and comply with relevant regulatory standards (e.g., ISO 27001, NIST, GDPR).

Architecture/Deployment model:

1. The solution should have feature to import the logs on real time and on-demand basis of any endpoint/server/device(s)/database/applications/APIs/JSON/XML/IT sources into the system (SIEM and S-BDL) for analysis based on various parameters/inputs and processed data and findings should be available on screen and for download & export to various entities.
2. Log Collector Instance/Agents should collect the raw logs from all the IT Assets whether on-premises or on-cloud (Private and Public).

3. Architecture should have multi-tier, distributed, high availability (DC and DR) deployment.
4. During the system design phase and implementation phase, it is imperative to design the mechanism to handle automatic failover across all the modules of the SIEM architecture in a DC-DR setup. It is mandatory requirement of setting up an architecture in failover mode across a DC-DR (Data Center–Disaster Recovery) setup involves designing each tier—Presentation, Application, and Data—with high availability and disaster recovery at each layer
 - a) Log Collection layer:
 - i If DC collector fails, Syslog sources automatically switch to DR collector and vice versa.
 - ii Configure Syslog sources (e.g., firewalls, routers) to send logs to both DC and DR collectors
 - b) Processing & Correlation Tier comprising of indexers, correlation engines, and data enrichment modules:
 - i If DC processing nodes fail:
 - DR nodes take over indexing and correlation.
 - Forwarders or ingestion agents reroute logs to DR indexers
 - ii Presentation Layer Fails (UI/Portal):
 - If DC UI fails, users are automatically redirected to DR UI.
 - System should ensure session continuity and replication of knowledge objects
5. In case the bidder proposes a cloud-based solution, all correlated and analyzed logs must be backed up at the Bank's DC and DR as per the frequency specified in the RFP.
6. All raw Logs, Data & information pertaining to the SIEM solution should be extracted, transformed and should also be stored on the S-BDL.
7. The solution should be capable of integrating with the Bank's Existing ManageEngine health monitoring tool.
8. Bidder to ensure adequate storage is factored on cloud/On-premise to store the data, logs (structured & unstructured) on primary cloud/On-Premise (SSD/NvME) and Object Storage especially for SIEM for period defined in the Volumetrics sheet (Annexure 21).
9. In case of bidder proposing the SIEM (Cloud Based)
 - a) It is the responsibility of the bidder to ensure the compliance to technical requirement (Cloud Requirement mentioned in Appendix 2).
 - b) Bidder to ensure that deployment at primary sites and secondary sites are done in line with the requirement mentioned in the RFP. The proposed solution should be deployed on a dedicated instance (Dedicated Logical Infrastructure) for PSB. Details of primary site, the secondary site should be provided along with the technical bid.
 - c) All Log exports (structured/unstructured) from Cloud SIEM should be pushed into Big Data Lake and on-premise storage solution periodically and on a Real time basis.
 - d) The bank will implement its security solutions such as agents, dedicated instances, and tools like HIPS, RASP, WAF, DAM, and third-party firewalls on a dedicated instance specifically provisioned for the bank.
 - e) The Virtual Private Cloud (VPC) in the cloud environment must be configured to align with the bank's on-premise security policies and controls, ensuring consistent enforcement of security standards across both infrastructures

Bidder/OEM Responsibility:

1. Integrate with existing & new security Technologies such as Firewall, IPS/IDS WAF, DAM, ADC (LB & SSL Inspection), Antivirus, AD, IDAM Endpoint & Network APT, Deception, NAC, DLP, SSO, PIM etc.
2. Integrate with Operational technologies including OS, databases, web servers, applications, networking technologies, middleware, virtualization and cloud technologies (private/hybrid/public) i.e., entire IT infrastructure and business applications (like CBS, Internet Banking, Mobile Banking etc.). These are feeder technologies / source system of logs provided to the SOC.
3. Integrating with the emerging technologies including but not limited to Chat-bots, voice-bots, block chain, cryptocurrency, augmented & virtual reality, zero trust, IOT. These are feeder technologies / source system of logs provided to the SOC.
4. Any Customization & Configuration required in reports/dashboards for ensuring compliance with regulatory and statutory bodies is to be provided at no additional cost to bank.
5. Integrate with the bank's existing & new applications, IT Infrastructures, network infrastructures, Endpoints (if required by bank) etc.
6. Maintain, manage, design & finetune rules, configuration and other settings and change them as per Bank's requirements / security requirements
7. Bidder must ensure that the existing data remain usable for necessary searching, link analytics, threat hunting, regulatory requirements, forensic investigation etc.
8. Development of connectors/parsers for customized applications/devices
 - a) While it is expected that connectors for all the standard applications, APIs and devices will be readily available in the collector and Log management devices, connectors not available for devices will need to be developed. It is the responsibility of the Bidder to develop connector applications for all devices.
9. OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, parser etc.

Key Deliverables:

1. The service delivery (SLA Management) and periodic reporting through automated dashboards.
2. Log Baselining
3. Creation of parser for unknown log sources
4. Creation of required Rules and policies and fine-tuned rules
5. Ensure that the reports are extracted from online / warehouse storage etc. Restore the logs/data from backup for forensic investigation and as per bank requirement without any additional cost.
6. The bidder must provide a consolidated and unified dashboard as part of the Enterprise SOC setup. This dashboard should present an integrated view of SIEM, XDR, SOAR, UEBA, and other related Information security/ cybersecurity components in a single interface. It should enable centralized monitoring, incident tracking, and analytics to support efficient security operations.
7. Integrated dashboard with customized views depending on role of the user and provide an online secured portal (web-based dashboard) for viewing real-time incidents/events, alerts, status of actions taken, etc. The views required by Bank are as follows:
 - a) Top Management (Organization level view)
 - b) Department Heads (View the data associated with their function group/business line)

- c) CISO (Complete and detailed dashboard of the Security posture of the organization set-up being monitored through this NextGen SOC).
- d) System Administrator (View of systems associated with this administrator)
- e) Network / Security Administrator (View of devices/equipment for which they are an administrator)
- f) Application Administrator (View of systems associated with this administrator)
- g) Auditor (Internal Auditors, IT Auditors, ISO Certification Auditor, or any other authorized official of the organization).

8. Report highlighting the following:

- a) Total number of rules triggered alerts
- b) False positive vs True Positive
- c) MITRE ATT&CK Coverage
- d) Number of rules with no events

7.3.1.2 SOC Big Data Lake (S-BDL)

A SOC Big Data Lake should be designed as centralized, scalable, and high-performance data repository designed to collect, store, and analyze massive volumes of structured and unstructured security data from diverse sources across the Bank IT environment.

The S-BDL should be designed to store not just SIEM logs (normalized/parsed) but also additional contextual data, such as raw logs, threat intelligence feeds, vulnerability management data, or even user behavior analytics (UEBA), alerts, configuration changes, network traffic data etc.

Normalized Logs- Normalized logs from the SIEM solution shall be stored on the S-BDL (Security Big Data Lake) in an open, Bidder -neutral format to ensure compatibility with the S-BDL Analytics Engine and other ETL tools for processing and analysis. Normalized logs should be usable by other downstream systems and tools as and when required.

Bank intends to position SBDL as technology for independent research, data science and statistical analysis. SBDL should store and process all security data and logs reliably, efficiently, consistently, securely and optimally for desired duration as outline in the scope of work enabling advanced analytics and visualizations to produce accurate, actionable and timely insights into latent security threats.

SBDL design should be open and scalable, having ability to ingest, store and process complex data in real time from semi-structured and unstructured data sources, along with conventional structural data processing for delivering analytics capabilities to uncover hidden threat patterns and trends which may not be apparent by analyzing data for short period

Features & modules:

1. Structured and unstructured data i.e. all the events to be stored in data lake like environment.
2. A robust database management system to securely store vast amounts of structured and unstructured data. This system will need to support efficient data retrieval and processing, ensuring quick access to relevant information, including assessments and recommendations of capacity needs.

3. The proposed solution should be able to receive, ingest and index structured or unstructured data without schema or normalization and no events should be dropped if log source changes the format of log data. Unparsed events should be usable for co-relation and machine learning models.
4. The proposed solution must act as a Security Analytics Platform with AI & ML capabilities to assess and analyze patterns and model.
5. AI ML and automation of reports , Automatic reporting and generative AI capabilities for reports generation and analysis
6. The proposed solution must be able to support sophisticated statistical and summary analysis by pipelining advanced search commands together.
7. The proposed solution should provide end-to end capability to setup an Analytics Platform for storage, indexing, searching, analysis, correlation, reporting, visualization, orchestration of different types of structured / semi structured data generated within the organization.
8. The proposed solution must be to be able to build an unstructured index or store data in its original format without any rigid schema.
9. The proposed solution will be continuously used in the SOC so that solution builds specific repository which includes categories like including event types, tags, lookups, parsing/normalizing, actions and saved searches etc. It should help to discover and analyze various aspects of data. For example, event types should enable analysts to quickly classify and group similar events; then use them to perform analytics on events.
10. The solution must support viewing data in different formats or schemas without re-ingesting, re-indexing, redundant storage. Historical data also should be viewed as per new format or schema without re-ingesting or without additional storage utilization. Indicative Use Case: Referencing old data for predictive analytics, proactive monitoring etc. By not reindexing and re- ingesting security analysts would save storage cost and identify and pinpoint attacks in time.
11. The proposed solution should act as a common data lake for Correlation, SOAR, XDR, UEBA, threat hunting, other security solutions etc.
12. Integration of IT Security Solution with SOC Capabilities Including AI, ML, and Automation. The SOC Platform should be full integrable with organisation's IT security solution. This integration shall:
 - a) Support Bi-directional Data Exchange: Enable seamless, real-time exchange of threat intelligence, alerts, logs, and incident data between the IT security solution and the SOC systems (e.g., SIEM, SOAR).
 - b) Enable Automated Response Workflows: Integrate with SOC automation tools (e.g., SOAR platforms) to:
 - i Trigger automated incident response actions based on predefined playbooks.
 - ii Support auto-remediation, quarantine, or escalation steps based on severity levels.
 - iii Provide audit trails for automated decisions and actions
 - c) Ensure Interoperability and Extensibility: Support open standards and APIs (e.g., STIX/TAXII, REST APIs) to ensure compatibility with current and future SOC tools and frameworks
 - d) Maintain Security and Compliance: All data exchanged between the IT security solution and SOC must be encrypted in transit and at rest, and comply with relevant regulatory standards (e.g., ISO 27001, NIST, GDPR).

Architecture/Deployment model:

1. The solution should have feature to import the logs on real time and on-demand basis of any endpoint/server/device(s)/database/applications/APIs/JSON/XML/IT sources into the system (SIEM

and S-BDL) for analysis based on various parameters/inputs and processed data and findings should be available on screen and for download & export to various entities.

2. Architecture should be multi-tier, distributed, high availability deployment.
3. Collect logs/events/telemetry from all relevant data sources — endpoints, network devices, cloud platforms, and security tools (Deployed On-premises or on-cloud) — and store them in a **centralized Big Data Lake** for security monitoring, detection, forensics, and compliance.
4. **The S-BDL shall store raw logs on Object storage for period** defined in the Volumetrics sheet (Annexure 21).
5. The solution should be deployed in a manner that ensures the Data, Logs, and other information (Line of Origin repository) remain available on-premises for the duration specified in the RFP.
6. The analytics solution for S-BDL can be deployed either on-premises or on-cloud, depending on the bidder's proposed architecture. However, if a cloud-based analytics solution is proposed, the bidder must provide detailed architecture that clearly demonstrates how all logs, data, and other relevant information will also be stored on-premises in a readable format, and is regularly tested to ensure data sanctity and integrity.

Bidder/OEM Responsibility:

1. Create a data dictionary and design database schemas for optimum security and efficiency for storage, processing and analysis.
2. Integrate the solution with all the IT sources (Bank's existing & new applications, IT Infrastructures, network & Security infrastructures, Endpoints (if required by bank) etc.) for collecting the required logs, alerts and data.

Key Deliverables:

1. Dynamic, intuitive, parameterized, and customizable dashboards should empower personnel resources to take prudent decisions.
2. Multidimensional, analytical, trend & pattern-based dashboards should be recommended by individual technology based on their own self-learning capability.
3. Ensure that the reports are extracted from online / warehouse storage etc. Restore the logs/data from backup for forensic investigation and as per bank requirement without any additional cost.
4. Parser for data ingestion for all the current data sources and their respective updates & upgrades
5. OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, parser etc.

7.3.1.3 SOAR (Security Orchestration, Automation, & Response)

The bank requires a solution that can efficiently manage and respond to security incidents while ensuring regulatory compliance. A SOAR

platform can automate the incident response lifecycle, from detecting security threats to executing predefined actions for containment, remediation, and recovery enabling bank to optimize its security operations, improve incident management, and ensure a faster, more effective response to cyber threats.

Features & modules:

1. Proposed Security Orchestration, Automation, and Response Solution should provide a single platform for running attack simulations to test the attack possibility of the latest threats in the environment.

2. Solution should provide automated remediation of threats on IT infrastructure (OS, DB, networking techs etc.), security implementation / threat prevention / mitigation technologies on a real-time basis and update its conclusive action taken status back into security monitoring technologies immediately
3. The solution should also provide an insight into the security tools which are utilized to prevent the attack in case the simulation is not successful. Also, the solution should suggest rules/controls to prevent attack in case the simulation is successful.
4. The data associated with incidents captured on a real-time basis should be available for review on the dashboard.
5. The solution should be able to create playbooks to trigger any specified event at periodic intervals as & when required by the bank, either in an automated way or with an option to trigger it manually.
6. The solution should have the capability of having playbook editor functionality for custom creation of playbooks
7. The solution should support manual and automated task management & support for categorizing the same during creation and execution of playbook / use-case.
8. The solution should record timestamps for all the actions taken in an incident including the automated tasks and manual tasks performed
9. The proposed solution should be able to provide the entire attack kill chain in accordance to MITRE attack framework. In case of change in MITRE ATTCK framework, the tool has to adopt the revised / changed framework.
10. Integration of IT Security Solution with SOC Capabilities Including AI, ML, and Automation. The SOC Platform should be full integrable with organisation's IT security solution. This integration shall:
 - a) Support Bi-directional Data Exchange: Enable seamless, real-time exchange of threat intelligence, alerts, logs, and incident data between the IT security solution and the SOC systems (e.g., SIEM, SOAR).
 - b) Enable Automated Response Workflows: Integrate with SOC automation tools (e.g., SOAR platforms) to:
 - i Trigger automated incident response actions based on predefined playbooks.
 - ii Support auto-remediation, quarantine, or escalation steps based on severity levels.
 - iii Provide audit trails for automated decisions and actions
 - c) Ensure Interoperability and Extensibility: Support open standards and APIs (e.g., STIX/TAXII, REST APIs) to ensure compatibility with current and future SOC tools and frameworks
 - d) Maintain Security and Compliance: All data exchanged between the IT security solution and SOC must be encrypted in transit and at rest, and comply with relevant regulatory standards (e.g., ISO 27001, NIST, GDPR).

Architecture/Deployment model:

1. SOAR licenses should be strictly based on number of active users/ analysts as defined in the scope of work. There should be no limitation / restriction in SOAR licenses based on the number of events coming to the SOAR or the number of playbooks or actions performed by the SOAR
2. Bidder to ensure adequate storage is factored on cloud/On-premise to store the data, logs (structured & unstructured) on primary cloud/On-Premise (SSD/NvME) storage for period defined in the Volumetrics sheet (Annexure 21).
3. In case of bidder proposing the SOAR (Cloud Based)

- a) It is the responsibility of the bidder to ensure the compliance to technical requirement (Cloud Requirement mentioned in Appendix 2).
- b) Bidder to ensure that deployment at primary sites and secondary sites are done in line with the requirement mentioned in the RFP. The proposed solution should be deployed on a dedicated instance (Dedicated Logical Infrastructure) for PSB. Details of primary site, the secondary site should be provided along with the technical bid.
- c) Log exports (structured/unstructured) from Cloud SOAR pushed into Big Data Lake and on-premise storage solution periodically and on a Real time basis.
- d) Bidder to ensure adequate storage is factored on cloud to store the data, logs (structured & unstructured) on primary cloud (SSD/NvME) and on Object Storage for period defined in the Volumetrics sheet (Annexure 21).
- e) The bank will implement its security solutions—such as agents, dedicated instances, and tools like HIPS, RASP, WAF, DAM, and third-party firewalls—on a dedicated instance specifically provisioned for the bank.
- f) The Virtual Private Cloud (VPC) in the cloud environment must be configured to align with the bank's on-premise security policies and controls, ensuring consistent enforcement of security standards across both infrastructures

Bidder/OEM Responsibility:

1. The solution should be able to integrate with any of the OEM solutions of the following, but not limited to, technologies:
 - a) Endpoint Security
 - b) Network Security
 - c) Email Security
 - d) Cloud Security
 - e) Forensic Tools
 - f) WAF
 - g) Firewalls
 - h) DLP
 - i) NAC
 - j) Email Gateway
 - k) ITSM
 - l) Other as required by bank
2. OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, parser, playbooks etc.

Key Deliverables:

1. Playbooks in response to new threats in the industry immediately, not later than 1 day of discovery of any new threat.
2. Ensure that the reports are extracted from online / warehouse storage etc. Restore the logs/data from backup for forensic investigation and as per bank requirement without any additional cost.

3. The solution should support creation of customized reports in formats like csv, pdf etc. with logo of the Bank

7.3.1.4 UEBA (User and Entity Behavior Analytics)

The Bank requires a solution that provides the ability to continuously monitor and analyze user and entity behaviors across the network. Solution should detect anomalies such as unusual login times, abnormal data access patterns, or suspicious file transfers that deviate from established baselines of normal behavior.

UEBA should provide quick, accurate, efficient and complete replay of attack / kill chain life cycle on the console and reports right from reconnaissance, external penetration, gaining a foothold, deliver payload, appropriating privileges, lateral movement, internal reconnaissance, data collection, maintain presence & exfiltration of data, information, logs, self-destruct, wipe out forensic proof etc.

UEBA should withstand extremely high IOPS at collection, correlation & alerting layers

The solution would be required to monitor behavior patterns, create a detailed audit trail, documenting each action taken by users within the system.

Features & modules:

1. UEBA should perform identity resolutions to find the real-time association between endpoints, IP addresses, host names, endpoint location, and users, and maintain these associations over time.
2. The UEBA must be able to monitor all the users in the organization. UEBA should not have separate data repository and should consume and operate on data lake or SIEM data repository. Use Case: Every single user can be source or a target of threat hence it's very important to cover all the users with UEBA solution.
3. The UEBA must create a heuristic baseline of user activity by analyzing behaviour, so it must perform multidimensional baselining, enabling the modelling of a broad set of user behaviors. Baselines are used to detect anomalous behaviour via machine learning and other statistical analysis techniques.
4. The proposed solution should leverage the data in SIEM platform and not build its own data store and map the fields in the data to UEBA-specific fields.
5. The proposed solution should have anomaly detection models to analyze the data in UBEA and create anomalies or violations based on a variety of factors
6. The proposed solution should be able to create new anomaly detection models or clone existing models from the GUI.
7. The proposed solution should detect threats like Lateral Movement and Data Ex-filtration. These should collect data about anomalies and users or devices to determine the likelihood of a threat.
8. UEBA should withstand extremely high IOPS at collection, correlation & alerting layers.
9. Identify and integrate respective log sources such as Active Directory, Network Traffic etc.
10. It should profile and analyze the activities of users and IT infrastructure objects from their digital footprint standpoint, to identify outliers who are (users) or which are (entities) inadvertently or deliberately performing unexpected activities thereby showing signs of behavior different than their peers in same team, group, business / IT unit or function, region, zone, delegated powers / authority etc.
11. Integration of IT Security Solution with SOC Capabilities Including AI, ML, and Automation. The SOC Platform should be full integrable with organisation's IT security solution. This integration shall:
 - a) Support Bi-directional Data Exchange: Enable seamless, real-time exchange of threat intelligence, alerts, logs, and incident data between the IT security solution and the SOC systems (e.g., SIEM, SOAR).

- b) Enable Automated Response Workflows: Integrate with SOC automation tools (e.g., SOAR platforms) to:
 - i Trigger automated incident response actions based on predefined playbooks.
 - ii Support auto-remediation, quarantine, or escalation steps based on severity levels.
 - iii Provide audit trails for automated decisions and actions
- c) Ensure Interoperability and Extensibility: Support open standards and APIs (e.g., STIX/TAXII, REST APIs) to ensure compatibility with current and future SOC tools and frameworks
- d) Maintain Security and Compliance: All data exchanged between the IT security solution and SOC must be encrypted in transit and at rest, and comply with relevant regulatory standards (e.g., ISO 27001, NIST, GDPR).

Architecture/Deployment model:

1. Architecture should have multi-tier, distributed, high availability (DC and DR) deployment.
2. Bidder to ensure adequate storage is factored on cloud/On-premise to store the data, logs (structured & unstructured) on primary cloud/On-Premise (SSD/NvME) storage for period defined in the Volumetrics sheet (Annexure 21).
3. In case of bidder proposing the UEBA (Cloud Based)
 - a) It is the responsibility of the bidder to ensure the compliance to technical requirement (Cloud Requirement mentioned in Appendix 2).
 - b) Bidder to ensure that deployment at primary sites and secondary sites are done in line with the requirement mentioned in the RFP. The proposed solution should be deployed on a dedicated instance (Dedicated Logical Infrastructure) for PSB. Details of primary site, the secondary site should be provided along with the technical bid.
 - c) Log exports (structured/unstructured) from Cloud UEBA pushed into Big Data Lake and on premise storage solution periodically and on a Real time basis.
 - d) Bidder to ensure adequate storage is factored on cloud to store the data, logs (structured & unstructured) on primary cloud (SSD/NvME) and on Object Storage for period defined in the Volumetrics sheet (Annexure 21).
 - e) The bank will implement its security solutions—such as agents, dedicated instances, and tools like HIPS, RASP, WAF, DAM, and third-party firewalls—on a dedicated instance specifically provisioned for the bank.
 - f) The Virtual Private Cloud (VPC) in the cloud environment must be configured to align with the bank's on-premise security policies and controls, ensuring consistent enforcement of security standards across both infrastructures

Bidder/OEM Responsibility:

1. SOP creation and maintenance
2. Log Baselining
3. Create custom dashboards and reports as per Bank's requirements.
4. Fine-tune models to reduce false positives and provide high fidelity alerts
5. Create alert thresholds based on the risk level of detected anomalies
6. Define normal behavior baseline for user and entities.
7. Use historical data collected in SIEM to train the UEBA models.
8. Create alert thresholds based on the risk level of detected anomalies.

9. Implement automated response actions for high fidelity alerts.
10. Any other as required by bank
11. OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, playbooks etc.

Key Deliverables:

1. SOPs and documents
2. Custom Dashboards
3. Ensure that the reports are extracted from online / warehouse storage etc. Restore the logs/data from backup for forensic investigation and as per bank requirement without any additional cost.
4. Fine-tuned models
5. Baseline for users and entities OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, parser etc.

7.3.1.5 Extended, Detection and Response (XDR)

The Bank requires an Extended Detection and Response (XDR) solution to provide comprehensive security monitoring and response capabilities across its endpoints, servers, network infrastructure, and cloud environments. The solution must deliver threat detection through AI/ML-driven behavioral analysis, correlate security events across multiple channels, and enable both automated and manual response actions. It should ensure protection against advanced threats including zero-day attacks, ransomware, and fileless malware while maintaining data localization compliance.

The XDR platform must seamlessly integrate with the Bank's security infrastructure including Microsoft Office 365, SIEM, SOC-Big Data Lake, SOAR, and other security tools, offering high availability and disaster recovery capabilities to maintain continuous protection of the Bank's digital assets.

The proposed solution should be a comprehensive XDR solution and should provide advanced threat detection and response capabilities across different channels viz. Endpoints, Network and Cloud.

Bank Currently has deployed EDR & Endpoint Forensics from Checkpoint and Endpoint Security from Trellix. NBAD is from Vehere

Features & modules:

1. The proposed XDR solution should automatically detect, isolate, and remediate threats across all endpoints. This includes real-time threat detection, automatic isolation of affected endpoints, and remediation actions such as malware removal, rollback of malicious changes, and restoration of affected files. It should handle various threats, including fileless attacks and ransomware.
2. The proposed XDR solution should offer centralized visibility and control over all managed endpoints through a unified management console. This console should enable administrators to monitor, manage, and respond to security incidents across the entire network from a single interface. Features should include real-time monitoring, incident response capabilities, comprehensive reporting, and customizable dashboards. Documentation of the unified management capabilities should be provided.
3. The proposed XDR solution should implement a layered defense strategy to filter out threats using advanced tactics and techniques.
4. The centralized management console of the proposed XDR must integrate with Security Information and Event Management (SIEM) and Security Orchestration, Automation, and Response (SOAR)

systems. This integration should enable streamlined data sharing, improved incident response, and enhanced overall security management. The solution should offer a customizable dashboard that allows different administrators to personalize their view by selecting specific summaries and metrics they wish to see.

5. The proposed solution should be compliant with data localization guidelines of India for all scoped components including Data Lake, Management Console, Sandbox, Logs and Analytics. No data of the Bank should leave India boundaries for any purpose.
6. The proposed solution and any of its component should be such no data including the telemetry data should be reside in India only.
7. The solution should provide integration with Microsoft Office 365 Email solution of the Bank and ingest logs for correlation and threat detection and extend response action to different channels.
8. The proposed solution should support API-based integration with existing and future IT and security solutions (on-premises/cloud) including but not limited to Active Directory, DLP, PIM, NAC, DAM, SIEM, NTP, Internet Proxy, and Ticketing tools.
9. The solution should provide a centralized management console for unified visibility and control across all protected environments.

Architecture/Deployment model:

1. Architecture should have multi-tier, distributed, high availability (DC and DR) deployment.
2. A centralized XDR platform is required to consolidate alerts, manage detection and response workflows, and provide central policy orchestration across endpoints, network sensors, cloud workloads, and other security infrastructure.
3. In case of bidder proposing the XDR (Cloud Based)
 - a) It is the responsibility of the bidder to ensure compliance to technical requirements (Cloud Requirement mentioned in Appendix 2).
 - b) Bidder to ensure that deployment at primary sites and secondary sites are done in line with the requirement mentioned in the RFP. The proposed solution should be deployed on a dedicated instance (Dedicated Logical Infrastructure) for PSB. Details of primary site, the secondary site should be provided along with the technical bid.
 - c) Log exports (structured/unstructured) from Cloud XDR pushed into Big Data and on-prem storage solution Lake periodically and on a Real time basis.
 - d) Bidder to ensure adequate storage is factored on cloud to store the data, logs (structured & unstructured) on primary cloud storage (SSD/NvME) and on Object Storage on cloud for period defined in the Volumetrics sheet (Annexure 21).
 - e) The bank will implement its security solutions—such as agents, dedicated instances, and tools like HIPS, RASP, WAF, DAM, and third-party firewalls—on a dedicated instance specifically provisioned for the bank.
 - f) The Virtual Private Cloud (VPC) in the cloud environment must be configured to align with the bank's on-premises security policies and controls, ensuring consistent enforcement of security standards across both infrastructures

Bidder/OEM Responsibility:

1. Bidder & OEM must ensure adequate sizing so that resource utilization remains optimal throughout the contract period.

2. OEM shall integrate Bank's IT and Security solutions with the bank's security & IT solution as per Bank's requirements.
3. OEM shall ensure compliance with data localization requirements and maintain all data within India's boundaries.
4. OEM must deploy and configure the XDR solution across all required channels (Endpoints, Servers, Network, and Cloud) with proper correlation rules.
5. OEM shall configure both automated and manual response actions as per Bank's security policies.
6. OEM shall develop and implement custom detection rules specific to the Bank's environment and threat landscape.
7. OEM shall provide knowledge transfer and training to Bank's security team on managing and operating the XDR solution.
8. The proposed solution should support API based integration with the existing as well as future IT and security solutions (on-premises / cloud) of the Bank including but not limited to Active Directory, DLP, PIM, NAC, DAM, SIEM, NTP, Internet Proxy, Ticketing tool. Bidder to ensure integration of Bank's IT and Security solutions with the proposed solution as per Bank's requirement

Key Deliverables:

1. Threat detection and response reports including:
 - a) Advanced threat detection reports across all channels
 - b) Correlation analytics and insights
 - c) Automated response action reports
 - d) Threat hunting outcomes
 - e) Forensic analysis reports
2. SOPs and documents
 - a) Custom Dashboards
 - b) Fine-tuned models
 - c) Baseline for users and entities

7.3.1.6 Decoy/HoneyPOT

A Decoy/HoneyPot solution should act as a decoy system that mimics sensitive financial systems, enticing attackers to engage with fake assets instead of real ones. This allows security teams to monitor attack patterns and behaviour without compromising actual banking infrastructure providing bank a unique opportunity to collect threat intelligence that can be used to reinforce security environment.

Bank Currently has deployed Decoy from Smokescreen

Features & modules:

1. The proposed Deception solution should be able to address the following key areas but not limited:
 - a) Effectively create a replica copy of the Bank's infra with real operation systems
 - b) Hacking incentive of the proposed decoy ecosystem should be as equivalent to present exposed incentive of the Bank

- c) The intended solution must safeguard the Bank against a target attack, and also act as a layer of defence for attacks based on new-vulnerabilities, Anti phishing attacks, data theft and zero-day attacks etc.
 - d) Should provide real time alerts or email
2. Decoys should be customized and tailored to the bank's environment by mimicking real servers, and applications making them blend in completely
3. The proposed Deception solution should be seamlessly integrated with the Bank's Active Directory and with SIEM solutions and should provide monitoring and network visibility as well as early detection of attacks while keeping false positives to almost NIL as well as any other security solutions so as to take intended action to block or take action against the affected assets and any other existing or future solution, as required by the Bank.
4. Integration of IT Security Solution with SOC Capabilities Including AI, ML, and Automation. The SOC Platform should be full integrable with organization's IT security solution. This integration shall:
 - a) Support Bi-directional Data Exchange: Enable seamless, real-time exchange of threat intelligence, alerts, logs, and incident data between the IT security solution and the SOC systems (e.g., SIEM, SOAR).
 - b) Enable Automated Response Workflows: Integrate with SOC automation tools (e.g., SOAR platforms) to:
 - i Trigger automated incident response actions based on predefined playbooks.
 - ii Support auto-remediation, quarantine, or escalation steps based on severity levels.
 - iii Provide audit trails for automated decisions and actions
 - c) Ensure Interoperability and Extensibility: Support open standards and APIs (e.g., STIX/TAXII, REST APIs) to ensure compatibility with current and future SOC tools and frameworks
 - d) Maintain Security and Compliance: All data exchanged between the IT security solution and SOC must be encrypted in transit and at rest, and comply with relevant regulatory standards (e.g., ISO 27001, NIST, GDPR).

Architecture/Deployment model:

1. The Bidder shall be responsible for supply, implementation and maintenance of Deception Solution on the Bank's network (DC, DR, DMZ, endpoints & branches), without affecting the existing environment and traffic.
2. Architecture should have multi-tier, distributed, high availability (DC and DR) deployment.
3. Bidder to ensure adequate storage is factored on cloud/On-premises to store the data, logs (structured & unstructured) on primary cloud/On-Premises (SSD/NvME) storage for period defined in the Volumetrics sheet (Annexure 21).
4. In case of bidder proposing the Decoy/HoneyPot (Cloud Based)
 - g) It is the responsibility of the bidder to ensure compliance to technical requirements (Cloud Requirement mentioned in Appendix 2).
 - h) Bidder to ensure that deployment at primary sites and secondary sites are done in line with the requirement mentioned in the RFP. The proposed solution should be deployed on a dedicated instance (Dedicated Logical Infrastructure) for PSB. Details of primary site, the secondary site should be provided along with the technical bid.

- i) Log exports (structured/unstructured) from Cloud Decoy/HoneyPot pushed into Big Data Lake and on-prem storage solution periodically and on a Real time basis.
- j) Bidder to ensure adequate storage is factored on cloud to store the data, logs (structured & unstructured) on primary cloud storage (SSD/NvME) and on Object Storage on cloud for period defined in the Volumetrics sheet (Annexure 21).
- k) The bank will implement its security solutions—such as agents, dedicated instances, and tools like HIPS, RASP, WAF, DAM, and third-party firewalls—on a dedicated instance specifically provisioned for the bank.
- l) The Virtual Private Cloud (VPC) in the cloud environment must be configured to align with the bank's on-premises security policies and controls, ensuring consistent enforcement of security standards across both infrastructures

Bidder/OEM Responsibility:

1. The bidder should create decoy versions of real servers, desktops, files, users accounts, applications like SWIFT/NEFT/RTGS/Core banking etc. and using them as traps.
2. The decoys should be scientifically placed in multiple subnets, so the hackers will encounter them in the process of trying to find valuable information. When the hackers try to access the decoys, a silent alert is raised and full forensics about the attack is collected.
3. The Bidder is required to supply all the required Hardware and Software (OS, Database & Application) with required licenses (perpetual) and also Provide, cables, connectors etc. required to commission the Deception Solution infrastructure. Bank will only provide the required Physical Infrastructure (power, cooling, rack space etc.).
4. Integrate with the bank's new & existing SOC tools, such as SIEM, Soc Big data lake, TIP and other network & security devices.
5. OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, playbooks etc. The bidder shall note that no source code will be provided and is solely responsible for creating a functional replica of the Bank's infrastructure with real operational systems.

Key Deliverables:

1. The bidder should Provide a Centralized Management Console with customizable dashboard and role-based admin.
2. Ensure that the reports are extracted from online / warehouse storage etc. Restore the logs/data from backup for forensic investigation and as per bank requirement without any additional cost.

7.3.1.7 Threat Intelligence Platform

Bank requires a specialized solution designed to aggregate, analyze, and share cyber threat data and intelligence from multiple sources to help bank detect, understand, and respond to potential security threats. The platform serves as a central hub for collecting, enriching, and distributing information about emerging threats, attack trends, and tactics used by cyber adversaries.

Features & modules:

1. The Threat intelligence platform proposed by the bidder should address the following:

- a) Centralized platform of real-time threat feeds including automation of collection and aggregation of threat intelligence data
 - b) Continuous integration of real-time threat intelligence data from various sources such as public sources, technical sources, dark web & deep web, Underground forums, special access sites, Code Repositories, Paste bin etc. and integration with bank's security stack
 - c) Automate, streamline and simplify the entire process of researching, collecting, aggregating and organizing threat intelligence data, as well as normalizing, de-duping and enriching that data
 - d) Support analysis with real-time trends and developments, historical view of related events, reported roles involved in the events (attackers/threat actors, targets/organizations), reported TTPs (attack vectors, malware, exploits), reported indicators (IP addresses, domains, hashes, URLs etc.) and other contextual details about the event
 - e) Provide reporting on threat intelligence insights across industry, threat groups, recently exploited zero-days etc. to the bank on a fortnightly basis
2. Integration of IT Security Solution with SOC Capabilities Including AI, ML, and Automation. The SOC Platform should be full integrable with organisation's IT security solution. This integration shall:
- a) Support Bi-directional Data Exchange: Enable seamless, real-time exchange of threat intelligence, alerts, logs, and incident data between the IT security solution and the SOC systems (e.g., SIEM, SOAR).
 - b) Enable Automated Response Workflows: Integrate with SOC automation tools (e.g., SOAR platforms) to:
 - i Trigger automated incident response actions based on predefined playbooks.
 - ii Support auto-remediation, quarantine, or escalation steps based on severity levels.
 - iii Provide audit trails for automated decisions and actions
 - c) Ensure Interoperability and Extensibility: Support open standards and APIs (e.g., STIX/TAXII, REST APIs) to ensure compatibility with current and future SOC tools and frameworks
 - d) Maintain Security and Compliance: All data exchanged between the IT security solution and SOC must be encrypted in transit and at rest, and comply with relevant regulatory standards (e.g., ISO 27001, NIST, GDPR).

Architecture/Deployment model:

1. Architecture should have multi-tier, distributed, high availability (DC and DR) deployment.
2. Bidder to ensure adequate storage is factored on cloud/On-premise to store the data, logs (structured & unstructured) on primary cloud/On-Premise (SSD/NvME) storage for period defined in the Volumetrics sheet (Annexure 21).

Bidder/OEM Responsibility:

1. Integrate with bank's new & existing SOC tools, vulnerability management tools such as SIEM, SOAR, Deep Analysis tools, Soc Big data lake, TIP, XDR, Firewalls, UEBA, DNS Proxy and other devices/solutions to integrate the feeds.
2. OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, playbooks etc.

3. The bank will implement its security solutions—such as agents, dedicated instances, and tools like HIPS, RASP, WAF, DAM, and third-party firewalls—on a dedicated instance specifically provisioned for the bank.
4. The Virtual Private Cloud (VPC) in the cloud environment must be configured to align with the bank's on-premises/cloud security policies and controls, ensuring consistent enforcement of security standards across both infrastructures

Key Deliverables:

1. Bidder threat intelligence report must cover (indicative):
 - a) Malware analysis
 - b) Threat actor profiles
 - c) Daily security news analysis
 - d) Trending and forecasting
 - e) Country risk profiles
 - f) Industry risk profiles
 - g) Future scenarios
 - h) Vulnerability analysis
 - i) Vulnerability exploitation tracking
 - j) Alerting on significant threat developments
 - k) IOCs
 - l) Crime ware, ransoms m. Advanced persistent threats
 - m) Financially, ideological, state-sponsored and strategically motivated actors
 - n) Threats to emerging technologies
2. As and when required, in case of severe security Incident or upon request from GOI authorities viz Cert-In, NCSC & NCIIIPC, bidder should provide a custom report (based on IOCs/IOAs/TTPs), so that the same can be consumed by regulatory authorities.
3. Ensure that the reports are extracted from online / warehouse storage etc. Restore the logs/data from backup for forensic investigation and as per bank requirement without any additional cost.

7.3.1.8 *Vulnerability assessment, Lifecycle & management Tool*

VA L&M solution allows bank to proactively protect its systems by detecting weaknesses in their hardware, software, and networks before they can be exploited by attackers. The Solution should enable bank in utilizing both automated and manual methods to detect flaws, such as outdated software versions, misconfigured systems, missing security patches, or weak authentication protocols and perform Risk Prioritization based on defined scoring models.

Bank Currently has deployed VA is from Tenable

Features & modules:

1. The solution deployment should be compliant with Bank's IS, IT/IT security and Cyber policies, internal guidelines, regulatory requirements and country wide regulations and laws from time to time.

2. The solutions should be able to integrate various log types and logging options into SIEM, with Active Directory for user authentication, PIM, ticketing tool for ticketing/workflow/case management.
3. Solution should provide custom as well as out of box reports/dashboards with vulnerability status parameters, trend analysis and vulnerability ageing etc.
4. The Proposed Solution should be in adherence to the guidelines provided in the RBI circulars & guidelines and support regulatory compliance as when received by the Bank.
5. The proposed solution should be able to schedule reports and also provide the flexibility to generate on-demand reports in daily/weekly/monthly/yearly or specific range (by day/time) along with report forwarding feature over email.
6. Integration of IT Security Solution with SOC Capabilities Including AI, ML, and Automation. The SOC Platform should be full integrable with organisation's IT security solution. This integration shall:
 - a) Support Bi-directional Data Exchange: Enable seamless, real-time exchange of threat intelligence, alerts, logs, and incident data between the IT security solution and the SOC systems (e.g., SIEM, SOAR).
 - b) Enable Automated Response Workflows: Integrate with SOC automation tools (e.g., SOAR platforms) to:
 - i Trigger automated incident response actions based on predefined playbooks.
 - ii Support auto-remediation, quarantine, or escalation steps based on severity levels.
 - iii Provide audit trails for automated decisions and actions
 - c) Ensure Interoperability and Extensibility: Support open standards and APIs (e.g., STIX/TAXII, REST APIs) to ensure compatibility with current and future SOC tools and frameworks
 - d) Maintain Security and Compliance: All data exchanged between the IT security solution and SOC must be encrypted in transit and at rest, and comply with relevant regulatory standards (e.g., ISO 27001, NIST, GDPR).

Architecture/Deployment model:

1. The proposed solution should have centralized architecture.
2. Bidder to ensure adequate storage is factored on cloud/On-premise to store the data, logs (structured & unstructured) on primary cloud/On-Premise (SSD/NvME) storage for period defined in the Volumetrics sheet (Annexure 21).

Bidder/OEM Responsibility:

1. The solutions should be able to integrate various log types and logging options into SIEM, S-BDL, with Active Directory for user authentication, PIM, ticketing tool for ticketing/workflow/case management.
2. Integrate the solution with all the IT sources (Bank's existing & new applications, IT Infrastructures, network & Security infrastructures, Endpoints (if required by bank) etc.)
3. The bidder should configure the proposed solution to enable the solution in providing reports with HTML / CSV / PDF / Excel formats.
4. Implementation of VM Solution should be as per International best practices and global security standards like OWASP/ISO 27001/NIST/PCI DSS etc.

5. Dashboard should provide various grouping and drilldown criteria for viewing and managing vulnerabilities. Dashboard should have filtering capability to view vulnerabilities based on various criteria like location, Device type, attack type etc.
6. Dashboard should have Role based as well as Discretionary access control facility to restrict access to vulnerability scans based on user security clearance level.
7. OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, playbooks etc.

Key Deliverables:

1. Vulnerability reports and dashboards
2. Ensure that the reports are extracted from online / warehouse storage etc. Restore the logs/data from backup for forensic investigation and as per bank requirement without any additional cost.

7.3.1.9 Application security testing Tool

The Bank is looking to enforce application security testing from the early stage of development, with that as a goal the Bank has decided to implement SAST solution and DAST for analyzing web applications, Mobile & APIs.

Bank Currently has deployed AST from Microfocus Fortify

Features & modules:

1. The SAST solution should be deployed in a way that the developers will do initial code analysis, which helps to fix the common vulnerabilities and aids developers to make sure code adheres to industry standards.
2. SAST solution should run scans of an application's source, binary, or byte code. As a white box testing tool, it should identify the root cause of vulnerabilities and help remediate the underlying security flaws. It should also help developers with real-time updates on the vulnerability they are introducing as a quick feedback loop, so that they can correct on the go.
3. The solution should have centralized scanning options for security teams to use as security gates & approve based on the vulnerability for the code to be pushed to production. The SAST solution should be able to seamlessly integrate with most of the touch points within software development life cycle which will enable the automation requirement.
4. DAST should analyze web applications, Mobile & APIs through the front-end to find vulnerabilities through automated simulated attacks & evaluates the application from the "outside in" by attacking an application like a malicious user would. As a black-box security testing technique in which the application is being tested without exposing the source code or the application architecture. In this way, it can cast a spotlight on the runtime issues which cannot be easily identified during a static analysis like the authentication and server configuration issues, as well as issues or vulnerabilities which is detected only when a known user logs into the portal.
5. DAST tools should run on the operating code to detect issues within the interfaces, requests, responses, scripting, data injection, sessions, authentication, and much more. It does this by employing fault injection techniques on the app, such as inserting different malicious data to the software, to identify various common security vulnerabilities, such as SQL injection and cross-site scripting.

6. DAST should cast a spotlight in runtime problems that can't be identified by static analysis for example, authentication and server configuration issues, as well as flaws visible only when a known user logs in.
7. Integration of IT Security Solution with SOC Capabilities Including AI, ML, and Automation. The SOC Platform should be full integrable with organisation's IT security solution. This integration shall:
 - a) Support Bi-directional Data Exchange: Enable seamless, real-time exchange of threat intelligence, alerts, logs, and incident data between the IT security solution and the SOC systems (e.g., SIEM, SOAR).
 - b) Enable Automated Response Workflows: Integrate with SOC automation tools (e.g., SOAR platforms) to:
 - i Trigger automated incident response actions based on predefined playbooks.
 - ii Support auto-remediation, quarantine, or escalation steps based on severity levels.
 - iii Provide audit trails for automated decisions and actions
 - c) Ensure Interoperability and Extensibility: Support open standards and APIs (e.g., STIX/TAXII, REST APIs) to ensure compatibility with current and future SOC tools and frameworks
 - d) Maintain Security and Compliance: All data exchanged between the IT security solution and SOC must be encrypted in transit and at rest, and comply with relevant regulatory standards (e.g., ISO 27001, NIST, GDPR).

Architecture/Deployment model:

1. The proposed solution should support multiple deployment architectures and can be scaled for multiple users and concurrent scans and reporting.

Bidder/OEM Responsibility:

1. Creating and applying policies
2. Implement correlation rules based on out-of-box functionality
3. Develop processes that are required to support the use of the tool/ technology: Admin Guide, Policy creation, Policy Fine Tuning, management, classification, reporting.
4. Integrate the solution with all the IT sources (Bank's existing & new applications, IT Infrastructures, network & Security infrastructures, Endpoints (if required by bank) etc.)
5. OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, playbooks etc.

Key Deliverables:

1. Reporting, dashboards, and capabilities to provide adequate artefacts and reports for executive as well as management to meet ops and regulatory compliance requirements.
2. Ensure that the reports are extracted from online / warehouse storage etc. Restore the logs/data from backup for forensic investigation and as per bank requirement without any additional cost.

7.3.1.10 Cloud Security (CSPM) Tool

Bank is embarking on the cloud journey and in order to ensure robust Cyber security across all the environment of the cloud, the bank's objective is to ensure that proposed solution provides single pane of view into all cloud assets, identifying & remediating the risk and misconfigurations across multiple cloud

environments. By continuously aligning cloud configurations with industry benchmarks and internal policies, the tool is required to play a key role in reducing the attack surface and supporting regulatory compliance efforts.

The tool logs storage should be deployed on bank's DC & bank's DR. In this setup, only communication should be established between the on-premises CSPM console and the bank's cloud VPCs via CSPM Agent or Interface on VPCs.

The Bank intends to implement a CSPM that will help sole siloed visibility by automatically identifying compliance for cloud assets and cloud applications, delivering continuous visibility and enforcing adherence to the most comprehensive set of security policies and compliance frameworks. The solution should have following capabilities but not limited to:

Features & modules:

1. Identify the Bank's cloud environment footprint and monitor for the creation of new instances or storage resources.
2. Provide policy visibility and ensure consistent enforcement across all providers in multi-cloud environments.
3. Scan compute instances for misconfigurations and improper settings that could leave them vulnerable to exploitation.
4. Scan storage buckets for misconfigurations that could make data accessible to the public.
5. Audit for adherence to regulatory compliance mandates such as ISO, PCI-DSS, HIPAA and GDPR.
6. Perform risk assessments against frameworks and external standards such as those put forth by the ISO and the National Institute of Standards and Technology (NIST).
7. Verify that operational activities (e.g., key rotations) are being performed as expected.
8. Automate remediation or remediate at the click of a button.
9. The solution should be able to support hybrid (mix of Private / Public / Community) cloud environment.
10. Integration of IT Security Solution with SOC Capabilities Including AI, ML, and Automation. The SOC Platform should be full integrable with organisation's IT security solution. This integration shall:
 - a) Support Bi-directional Data Exchange: Enable seamless, real-time exchange of threat intelligence, alerts, logs, and incident data between the IT security solution and the SOC systems (e.g., SIEM, SOAR).
 - b) Enable Automated Response Workflows: Integrate with SOC automation tools (e.g., SOAR platforms) to:
 - i Trigger automated incident response actions based on predefined playbooks.
 - ii Support auto-remediation, quarantine, or escalation steps based on severity levels.
 - iii Provide audit trails for automated decisions and actions
 - c) Ensure Interoperability and Extensibility: Support open standards and APIs (e.g., STIX/TAXII, REST APIs) to ensure compatibility with current and future SOC tools and frameworks
 - d) Maintain Security and Compliance: All data exchanged between the IT security solution and SOC must be encrypted in transit and at rest, and comply with relevant regulatory standards (e.g., ISO 27001, NIST, GDPR).

Architecture/Deployment model:

1. The proposed solution must be deployed with instances/agent/agentless deployed on Cloud VPCs for monitoring, compliance, and policy enforcement
2. Bidder to ensure adequate storage is factored on cloud/ On-premises to store the data, logs (structured & unstructured) on primary cloud/ On-Premises (SSD/NvME) storage for period defined in the Volumetrics sheet (Annexure 21).
3. In case of bidder proposing the CSPMs (Cloud Based)
 - a) It is the responsibility of the bidder to ensure the compliance to technical requirement (Cloud Requirement mentioned in Appendix 2).
 - b) Bidder to ensure that deployment at primary sites and secondary sites are done in line with the requirement mentioned in the RFP. The proposed solution should be deployed on a dedicated instance (Dedicated Logical Infrastructure) for PSB. Details of primary site, the secondary site should be provided along with the technical bid.
 - c) Log exports (structured/unstructured) from Cloud CSPM pushed into Big Data Lake and On premise storage solution periodically and on a Real time basis.
 - d) The bank will implement its security solutions—such as agents, dedicated instances, and tools like HIPS, RASP, WAF, DAM, and third-party firewalls—on a dedicated instance specifically provisioned for the bank.
 - e) The Virtual Private Cloud (VPC) in the cloud environment must be configured to align with the bank's on-premises security policies and controls, ensuring consistent enforcement of security standards across both infrastructures

Bidder/OEM Responsibility:

1. Creating and applying policies
2. Implement rules based on out-of-box functionality
3. Develop processes that are required to support the use of the tool/ technology: Admin Guide, Policy creation, Policy Fine Tuning, management, classification, reporting.
4. Integrate the solution with all the IT sources (Bank's existing & new applications, IT Infrastructures, network & Security infrastructures, Endpoints (if required by bank) etc.)
5. OEM is required to provide all the OOTB features in the solution to the bank and configure the same for bank's use including all the dashboards, reports, playbooks etc.

Key Deliverables:

1. Reporting, dashboards, and capabilities to provide adequate artefacts and reports for executive as well as management to meet ops and regulatory compliance requirements.
2. Ensure that the reports are extracted from online / warehouse storage etc. Restore the logs/data from backup for forensic investigation and as per bank requirement without any additional cost.

7.3.2 Services

Bidder to ensure adherence to Government of India Guidelines pertaining to localization, data sharing, data privacy etc. and other regulatory & statutory framework s and guidelines published by regulators or shared by bank. Use of data masking or tokenization techniques during analysis when handling PII or financial data.

Bidder is required to ensure internal data access or privacy controls; strict RBAC enforcement is required. Use of Just-in-Time (JIT) access for privileged operations is to be ensured for all the services.

The detailed frequency for performing the required services is provided in Annexure 21: Sizing/Volumetrics of this RFP. This annexure outlines the specific intervals and timelines for each service activity to be undertaken by the selected bidder

The Bidder shall submit reports, duly reviewed and certified by a CERT-In empaneled auditor, throughout the duration of the contract.

7.3.2.1 Breach Attack & Simulation

Bank from the services expect the bidder to deliver comprehensive security testing services that simulate realistic attack scenarios to identify vulnerabilities, improve response readiness, and strengthen overall security posture. The bank requires both automated simulations (BAS) and manual, adversarial testing (Red Teaming) as part of its ongoing cybersecurity initiatives to proactively identify weaknesses and ensure the bank's ability to detect, respond to, and recover from security incidents effectively.

PSB requires an adversary attack simulation exercise that allows us to assess the following:

1. If the bank can detect the attack or not
2. If a bank can contain/ restrict the attack after detection
3. If the bank can protect their business-critical assets from the red teamers or not
4. How the defenders of a bank perform an incident response in the event of such attacks

The bank's purpose is to identify how real-world attackers can exploit major or even seemingly minor loopholes to breach our IT security and ensure that technology, people, and processes are put in right place

1. The Bidder should activate all Attack Modules across all Threat Vectors - Network, URL Filtering, Endpoint, WAF, Email and Data Exfiltration - to simulate real-world attacks and proactively test the Bank's defences in a risk-free environment using pure 'simulation' approach, without causing any harm to the Bank's production environment
2. The Bidder should integrate all relevant technology solution components and integrate the BAS platform with the existing /New SOC Platform of the Bank. Configuration and fine tuning of the platform on continuous basis.
3. The Bidder should assist the Bank in identification of the zones to deploy BAS agents (on-premises) along with required prerequisites for connectivity between the attacker machine and BAS agents, and between attacker machines and Threat library.
4. The Bidder should assist the Bank to create and execute various threat campaigns on Endpoints, Servers, Email, Perimeter devices like Firewall, IDS, IPS, etc. as prescribed by the Bank. This should include campaigns for Ransomware, Emerging Threats, Attacks targeted towards Banking & Financial Institutions, Campaigns from BFSI-focused APT Groups, etc.
5. The Bidder should provide guidelines to determine the critical threat campaigns / attacks that should be simulated in the Bank's environment. Update the Bank about new threat campaigns / attacks that are added to their threat library on a regular basis
6. The Bidder should provide bidder-specific mitigation recommendations for all supported technologies deployed in the Bank. Assist the bank's security operations team in implementation of

bidder-specific mitigation recommendations (signatures) for prevention controls (like NGFW, IPS, WAF) TO improve the Bank's security posture on a regular basis.

7. The Bidder should ensure integration of the BAS platform with the SIEM, SOAR, XDR Solution for detection visibility, understanding detection capabilities post execution of threat campaigns, assist in implementation of mitigation recommendations (missing logs and alerts) for detection controls
8. The Bidder should use the 'Assumed Breach Approach' to perform Automated Red Teaming on the Bank's systems with pre-specified goals to identify the real attack paths (not all hypothetically possible)
9. The Bidder should continuously discover attack paths that lead to the Bank's critical assets, enabling full visibility into the Bank's security posture
10. The Bidder should discover hidden elements throughout the Bank's network that enable environment enumeration, lateral movement and privilege escalation
11. The Bidder should conduct two health-checks every year to check BAS platform as per best practices and/or recommended configuration and provide the health check document. Conduct the implementation of upgrades/ patches/ version changes during the tenure of the contract.
12. The simulation should include attempts to inject payloads to breach the PSB's perimeter security and obtain persistent reverse connections from the PSB's internal network.

7.3.2.2 Red Teaming Services

Banks would use red teaming services to simulate real-world cyberattacks and uncover vulnerabilities in their security posture, systems, and response protocols. By mimicking tactics used by malicious hackers—such as phishing, network intrusions, and social engineering—red teams should test the effectiveness of a bank's defences, incident response capabilities, and employee awareness under realistic conditions. The Red teaming services should help banks identify weaknesses before threat actors can exploit them, ensuring compliance with regulatory standards.

1. Perform active attacks on bank's systems with pre-specified goals and identify the possible attack paths and risks through objective based red teaming attacks using exploits/payloads
2. Launch multi-stage attacks, which includes network attacks and application attacks on the discovered digital attack surface of bank to identify breach and attack paths
3. Continuously discover the attack paths that lead to bank's critical assets, enabling full visibility into bank's security posture
4. A red teaming services should provide a comprehensive assessment report of the Bank's security posture by simulating real-world attacks, which should help Bank's team in understanding the Banks's vulnerability landscape and prioritizing remediation efforts.
5. Conduct Red Teaming Attacks from the perspective of an unauthenticated user aimed at accessing information restricted to legitimate users only and/or gaining privileged access. Once access is gained, an attempt to further compromise other resources will be made.
6. The proposed should have capability to simulate and launch attacks for methods across the complete cyber-attack kill chain including MITRE att&ck complete framework (e.g., infiltration, lateral movement, exfiltration etc.)
7. Overall Red Teaming should map with MITRE ATT&CK Framework at each step, the tactics to send malware for evasion and to perform a successful persistent connection.
8. Provide security control validation where Bank can assess the effectiveness of the existing controls and determine whether they are exposed
9. Continuously challenge, assess, and optimize your security controls across the full cyber kill chain

10. Test bank's security operations, threat detection and incident response readiness capabilities
11. Discover hidden elements throughout the bank's network that enable lateral movement through a single machine (once successfully within a network)- e.g., brute force or pass-the-hash techniques to steal credentials for sensitive servers, moving across network segments in search for valuable data, which could be used to advance attacks
12. Plan and orchestrate automated attacks on the bank's attack surface to discover and test exploitable vulnerabilities using playbooks
13. The Attack playbooks used as part of solution must emulate a specific adversary tactics, techniques and protocols(TTP) and threat actors to test for potential risks in bank's environment
14. Identify, analyze and prioritize digital risks from the perspective of adversaries
15. Ability to create custom active attack playbooks based on Threat Intelligence of Threat Actor and their TTPs
16. Facilitate to schedule/run attacks based on bank's requirement
17. Run social engineering attacks, Phishing attacks, Ransomware attacks, Cloud attacks, Web application DAST attacks, Network attacks, etc. to identify vulnerabilities
18. Perform assessment of security controls related to email security, WAF security and endpoint security for known vulnerabilities, misconfigurations, implementation issues and any other security gaps
19. Ability to test data loss prevention (DLP) implementation, methodology and configuration along with other exfiltration techniques to test outbound flows of data to ensure protection of critical information
20. Active Social Engineering Attacks on Employees to gain information to gain access to inside network bypassing/evading defenses.
21. The Bidder shall submit Quaterly reports, duly reviewed and certified by a CERT-In empanelled auditor, throughout the duration of the contract
22. Cyber war game
23. Vulnerability Research and Verification (automated and manual)
24. Bidder is expected to perform
 - a) Active Directory (Domain Controller) Attacks
 - b) DCSync Attack
 - c) Kerberos Attacks
 - d) Privilege Escalation
 - e) ADCS Attack
 - f) Man-in-the-middle attack (MitM) in the internal network
 - g) Lateral Movement
 - h) Compromise the enterprise accounts by using password brute forcing, account enumerations
 - i) Credentials dumping, Harvesting, Password Spray, Pass the Hash attacks

7.3.2.3 Attack surface management

Bidder as a part of the service is required to provision continuous, real-time monitoring, management, and assessment of a bank's attack surface. The goal is to proactively identify, mitigate, and monitor security risks associated with all potential entry points into an organization's network, systems, applications, and third-party services.

1. Discover the bank's assets exposed to internet, including the assets of all the entities owned by and related to bank such as overseas branches, subsidiaries, third-parties, mergers/acquisitions etc.
2. Collect and aggregate information on exposed applications, services, URLs, ports, network, databases, or system components related to bank by means of passive scans and other non-intrusive data gathering activities and updating of this information frequently to ensure that the latest information is available on the platform.
3. Discover inventory of known and unknown assets of bank, metadata, shadow IT assets and check for possible attack vectors, discover new seeds which may lead to attack surface
4. Provide data/ information on the bank's vulnerabilities related to inherent, obsolete versions, unpatched devices, misconfigurations, less secure configurations or unconfigured setups, internal applications, services, URLs, ports, network components, systems, databases, cloud-based assets and any other bank's infrastructure exposed in public domain and other forums
5. Provide data/information on security flaws/ inherent vulnerabilities reported about the digital products exposed to internet (For example: Internet Banking, Mobile Applications) offered to the bank's customers, as leaked in public domain, or other forums
6. Provide data on sensitive information such as code snippets, source codes of applications, APIs identified in the public domain, or other forums pertaining to the bank
7. Send periodic notifications to the bank on the summary of changes/when significant change is observed in the bank's attack surface
8. Provide a scoring/ rating mechanism to assess the cyber posture of the bank, based on the frequency required by the bank
9. Bidder to submit a dashboard and report of complete analysis in the format required by bank

7.3.2.4 Phishing Simulation

Bank through the sought services expect to test their employees' ability to recognize and respond to phishing attacks.

The bidder should simulate realistic phishing campaigns (emails, messages, etc.) to assess and improve user awareness and responses to potential phishing threats. The goal is to ensure that employees are trained to recognize malicious attempts to steal sensitive data, avoid clicking on harmful links or attachments, and ultimately reduce the risk of a successful phishing attack.

1. The proposed Phishing simulations should test Bank's employees' ability to identify and respond to phishing attacks. These simulations mimic real-world phishing emails, text messages, or even phone calls in a controlled environment.
2. The proposed phishing simulation solution should support features such as Raising Security Awareness, Identifying Susceptible Employees, Improving Overall Security Posture, Testing Security Controls.
3. By conducting phishing simulations regularly, it should significantly improve Bank's ability to defend against phishing attacks, a common and evolving cyber threat.
4. The platform shall facilitate creation of phishing campaigns including QR code phishing which can be customized by bank.
5. The bidder should provide services for conducting simulated phishing, vishing and smishing exercises to improve cyber security awareness of bank staff, bidder employees, employees in branches, and Board of Directors etc.

6. Necessary Infrastructure like SIM Cards, SMS facility for smishing and vishing shall be procured by Bidder. In case domains are to be procured for the purpose of simulated phishing exercise, the same may be procured by the bidder on need basis. However, domain procurement cost, SMS and call costs will be reimbursed to Bidder on submission of Bills.
7. The bidder should provide daily, weekly, monthly status reports or as and when needed by the Bank.
8. The bidder should be responsible for delivering social engineering exercises related to simulated vishing and smishing for the tenure of contract.
9. The bidder should be capable of performing vishing exercises in both automated and manual methods. The automated approach shall support scalability in conducting vishing campaigns through Bidder's infrastructure/gateway.
10. The Phishing Simulation solution should provide actionable reports, such as but not limited to below mentioned reports:
 - a) Campaign Performance Reports – The Phishing Simulation solution should report on the percentage of users who clicked on phishing links, percentage of users who opened phishing emails, should identify Bank's departments with higher susceptibility, average time taken by users to report a phishing email and measure the success of the phishing simulation.
 - b) User Behavior Reports - The Phishing Simulation solution should report individual user performance and identify users who consistently fall for phishing attempts.
 - c) Training Effectiveness Reports - The Phishing Simulation solution should measure the effectiveness of security awareness training, should tracks changes in user behavior after training.

7.3.2.5 Anti-phishing

Bank expect the bidder to provide Anti-Phishing Services which are specialized cybersecurity tools and solutions designed to detect, block, and prevent phishing attacks, which aim to deceive individuals into divulging sensitive information such as passwords, card details, or other personal data. The services should monitor communications (email, websites, social media) for signs of phishing attacks in real time.

1. Wide coverage of web, social media and email sources to detect newly configured phishing attacks, often before they are fully launched.
2. 24x7x365 real monitoring for phishing attacks.
3. Implementation of real time detection mechanisms and alerts.
4. Implementation of watermark or other means/techniques for each website.
5. Track hosting of phishing sites through implementation of watermark or any other Means.
6. Monitoring similar domain name registration.
7. Provide need-based analysis on suspicious e-mail messages.
8. Monitoring spam traps to detect phishing mails.
9. Should have mechanism to call, Mail or send SMS to Bank based on severity of incident.
10. Detect and remove unauthorized applications imitating Banks official app from third-party app stores. Help Bank to reduce the risk of customers inadvertently downloading imposter apps.
11. Monitor any fraudulent mobile applications targeting Bank's customers to capture their credentials for fraudulent transactions.
12. Remove fraudulent applications(web/mobile) targeting Bank's customers to capture their credential hosted on popular app stores provided by companies such as Google, Apple, Microsoft etc.
13. Inject fake credentials into the phishing portals and fraudulent apps and provide details to the Bank for monitoring and blocking at Bank's end.

7.3.2.6 Dark web Monitoring

Dark web monitoring service should track and scan the dark-web, deep web, real time chat channels (like telegram), data dump repositories etc. for any mentions or leaks of bank's sensitive data, such as login credentials, employee information, customer data, intellectual property, or financial records.

1. The bidder has to provide threat monitoring solution that penetrates the restricted cybercrime zone known as the Dark Web looking for compromised sensitive data to proactively mitigate impact after breaches.
2. Monitor Cyber Crime Forums on clear web as well as dark web/deep web.
3. Monitor Networks known to be sources of attacks and /or points of collection of compromised data.
4. Maintain or have direct access to data from honey pots or network or sensors to collect data on threat.
5. The bidder needs to perform Dark Net/Deep Web forum monitoring for bank registered brand. The bidder should Monitor underground forums, IRC chat rooms, the open web (OSINT) and other communication channels like Telegram etc where cybercriminals congregate to sell/buy services and tools and exchange knowledge for bank's brand
6. The bidder to monitor sensitive data such as but not limited to Personal Identifiable Information (PII) such as Customer/Employee data, Compromised banking credential/account monitoring , Credit card / Debit card BIN range monitoring of the bank ,leaked source code, technical information/data used to target corporate systems, Vulnerability / exploit monitoring and correlation with respect to the bank infrastructure, Hactivist tracking and intelligence correlation with respect to the bank.
7. The solution must have capability in tracking Customer vertical Threat actor groups as well as various ransomware operations targeting BFSI sector.
8. The solution must provide data/information/intelligence related to threat actor, attack campaign, analysis report, tactics, techniques and protocols (TTPs) and profile the Threat Actors.
9. The service must provide Intelligence in near real- time as new information or context is gathered from various sources.
10. Intelligence provided must have reference to the source of information including Dark web and Deep web and Paste bin sites, either through a direct link to the source or a cached copy without Bank actually going onto Dark web to look for evidence.
11. The Solution/Service must monitor of hacker's activities related to Bank in Darkweb much before it becomes public.
12. The solution must provide the monitoring of the following:
 - a) Exposed Top Managements credentials
 - b) Executive mentions / Discussion on Top Management on Dark Web
13. The solution / service should incorporate a range of multi- layered monitoring services and analysis techniques and correlates data across a range of resources including:
 - a) Tor, onion and alternative networks.
 - b) Dark Net blogs, forums, chat rooms.
 - c) Logs and Cookies -IRC conversations.
 - d) Black market and criminal auction sites
 - e) Ransomware leak
 - f) Other communication channels where cyber-criminals congregate to sell/ buy services and tools and exchange knowledge for Banks brand.

7.3.2.7 Threat Intelligence Feed

The Threat Intelligence Feed is required by banks to help stay ahead of cyber threats by keeping an eye on what hackers are doing and looking for signs of trouble before it causes damage. Threat Intelligence Feeds is required to collect up-to-date information from around the internet—like known hacker techniques, malware, and risky websites—and share that with security teams so they know what to watch out for.

1. Intelligence must be gathered from various sources, ranging from public sources, technical sources, dark & deep web, Underground forums, special access sites, Code Repositories, Paste bin and human analyst.
2. Collection of intelligence from the various sources should be automated, using technologies such as machine learning, temporal analysis and Deep Language Processing, which allows mass collection of intelligence with low false positives, in real time.
3. The threat intelligence solution used by the bidder must allow users to request data review or validation of threat intelligence.
4. The threat intelligence solution used by the bidder must use machine learning and natural language processing to harvest and structures text content from sources across different languages and classify them using language-independent ontologies and events, enabling analysts to perform powerful and intuitive searches that go beyond bare keywords and simple correlation rules.
5. The feed should provide but not limited to:
 - a) Risk lists of vulnerabilities with a configurable update frequency within 24 hours
 - b) Risk lists of Malicious IP, Malicious Domain, URL and Hash with an update frequency in very short TAT.
 - c) Contextual and actionable intelligence with evidence to facilitate bank's team to take necessary action
 - d) Threat actor grouping along with TTP attribution
 - e) The proposed solution shall provide the following types of feeds:
 - i Malicious IP addresses having high IP Reputation
 - ii Application layer scanning tools
 - iii Network port scanners
 - iv Vulnerability probers
 - v Malware propagation sources
 - vi Advanced URL Reputation
 - f) Threat Intelligence feed must provide basic attributes as part of data feeds based on availability like
 - i IP
 - ii Domain,
 - iii Hostility
 - iv Reputation
 - v Confidence
 - vi Behavior
 - vii Listing over a 90-day window
 - viii Geo-location Attributes
 - ix Industry Attributes

- x IP/Domain Ownership Attributes
 - xi IP/Domain Registration Attributes
 - xii Attack Behavior Details
 - xiii Malware Behavior Details
 - xiv Phishing Behavior Details
 - xv Fraud Behavior Details
 - xvi Bot Behaviour Details
 - xvii CnC Behavior Details
6. Threat feed should be refreshed immediately on any new threat identification or any new attack observed around globe
 7. TI feeds should be sourced from actual attacks including inspection of decrypted TLS network traffic (as opposed to synthetic environments or honeypots) happening on Threat Intelligence Feed Provider's sensor network.
 8. Threat Intelligence Feed should contain data on Command-and-Control servers and DNS Exfiltration
 9. The Bank shall have access to Bidders/OEM portal for Threat Intelligence.
 10. The threat intelligence should preferably be able to provide insights into the attackers, campaigns, the targets being attacked and provide guidance on how to protect the bank from attacks.

7.3.2.8 Threat hunting services

To proactively search through Bank's network to detect and isolate advanced threats that evade Bank's existing security solutions

1. Bidder should ensure to collect required logs from key log sources in co-ordination with the bank and should hunt across multiple data sources (e.g., logs, network flows, endpoint data).
2. Create use-cases correlation rules specific to client's environment and event sources
3. Analyse logs for indicators of compromise such as Command and Control (CAC) Channels, malicious IPs & websites, Geo map analysis for presence of malicious programs.
4. Analysis of logs to identify anomalous behavior/suspicious events
5. Review and confirm observations with the Bank's security team
6. Eliminate false positives
7. Review effectiveness of SOC to detect similar events
8. Report containing compromised hosts, malware infections, presence of bots, CAC communications and other indicators of suspicious activities
9. The Bidder shall submit Quaterly reports, duly reviewed and certified by a CERT-In empanelled auditor, throughout the duration of the contract
10. Provide recommendations for corrective action plan
11. Bidder should deploy additional tools, if required, for conducting threat hunting. The tools deployed shall be used for the period of engagement.
12. Threat Hunting shall also address the following:
 - a) Detect anomalous attacks, especially low-and-slow attacks that may be happening
 - b) Identify if the attack was detected by SOC
 - c) Action being taken if the SOC has not detected the attack, then identify if an existing correlation rule requires tuning or if a new correlation rule is required or if a new solution is required

- d) Continuous and on-demand threat hunting across endpoints, networks, and cloud environments.

13. Use of threat intelligence feeds and behavioral baseline to identify anomalies.

- a) Investigation of Indicators of Compromise (IOCs) and Tactics, Techniques, and Procedures (TTPs) based on MITRE ATT&CK framework.
- b) Collaboration with internal SOC teams to validate findings and recommend remediation.
- c) Reporting of findings with clear categorization of threats (e.g., confirmed, suspicious, benign).
- d) Provide alerts on anomalous attacks in the network and recommendations for detecting and preventing such attacks in the future
- e) Support for scripting and automation (Python, PowerShell, Sigma rules, YARA)
- f) Ability to create and schedule recurring hunts with logic-based conditions
- g) Support for custom playbook creation
- h) Native integration or support for advanced hunting.
- i) Full audit trail of all threat hunting activities, findings, and data access.

7.3.2.9 Brand Protection and Monitoring

Brand protection and monitoring service to perform proactive cybersecurity and reputational risk management that detects and mitigates misuse, impersonation, or attacks targeting an organization's brand, digital assets, and key leadership (KMP) across online and underground spaces — including the surface web, deep web, and dark web.

1. 24x7 anti-phishing services to scan critical websites and Mobile Apps identified by Bank for the tenure of the Contract for Anti-Phishing, Anti-Malware, Anti- Pharming, Anti- Defacement, Anti-Rogue, Anti-Trojan, Dark Web Scanning and any other threat or exploitation of vulnerabilities for unlimited incidents and takedown.
2. Monitoring social network profile related to PSB or Key Management personnel account example twitter
3. Continuous monitoring of Typosquats domains for any registration of MX records.
4. Fake Apps on AppStore like Google Play, Apple Store etc. (if any)
5. Monitoring potential logo abuse for organisation logo (if any)
6. Monitor for Passive DNS records for typosquat domains. (if any)
7. Any newly launched websites and Mobile Application by the Bank in future to be scanned.
8. Search engines (like Google, yahoo, bing etc.) listing frauds where the customer care number & branch address of banks is changed/ modified should be continuously tracked and the same should be brought down immediately including True caller and JustDial.
9. The service provider is required to perform takedown services (unlimited)subject to identified threat and subsequently bank's approval.
10. The bidder should provide a customized dashboard as per bank's requirement.
11. A composite dashboard showing the identified threats and their status, consolidated numbers of threats grouped based on their characteristics, type etc., along with customizable reports is to be provided by the bidder.
12. The bidder should provide access to Dashboard view of the risks and threats identified through the Anti-Phishing and threat intelligence services

13. The service provider should monitor of all major mobile application marketplaces for counterfeit, copycat apps, or apps infringing trademarks, linking to pirated content, attempting phishing attacks or distributing malware
14. Prompt submission of enforcement notices and for the removal of rogue or infringing applications
15. Bidder must have capability for monitoring of look-alike domain name registrations and alerting the Bank in case of detection.
16. 24*7*365 proactive monitoring of World Wide Web etc. for Phishing, Brand Abuse and any other threat or exploitation of vulnerabilities which lead to compromising of credentials of the customers unknowingly directed against the customers of the Bank.
17. The bidder should provide monthly analysis and fraud intelligence reports (both high level - summarized and low level - detailed) to bank.
18. Detection and advisories of the attacks anywhere in the world within the minimum possible time. For the purpose of detection, service provider may use any technique or combination of techniques.
19. Analysis of social networks such as Facebook, Twitter, LinkedIn etc. and domain registrations to find fake social profiles, malicious mentions and similar domains that impersonate Bank and compromise customer information.
20. Proactive Monitoring of major Mobile App stores and blocking/Shutting down of Malicious App/Trojan used against the bank.
21. Reporting to Bank in line with regulatory requirements about all the attacks and providing detailed information through email & online dashboard
22. Take up and coordinate the cases with CERTs and / or other legal agencies of any country in consultation with Bank.
23. Daily/Weekly/Monthly/Annual and other ad hoc reports to be provided as per the requirement and format provided by the bank
24. Monthly and other ad hoc reports to be provided as per the requirement and format provided by the bank
25. The service provider should provide access to Dashboard for bank which will be utilized for activities like logging of incidents, ascertaining status of current/closed incident, generating reports of the reported incidents etc. as per requirement.

7.4 Migration - Activities are to be performed by Respective solution OEM (supported by bidder)

Respective OEM along with the bidder is required to inter-work, liaison with existing vendor for having a smooth migration from existing Solution to the bidder proposed application/infrastructure.

The Respective OEM along with the bidder has to take handover of Data Dictionary, Patches & Releases (If any), Application Software, all content used in the Development of the application, along with Technical Documents, user manual, functional manual, certifications, security certificate and all reports during error correction and installation guide from the existing bank's vendor(s).

Migration of all existing solutions (Existing SOC and security solutions to proposed NextGEN SOC and other security solutions)

Bank currently has a SOC setup in its Data Centre premises at DC & DR.

Current SOC setup has integrated with all critical servers, firewalls, security appliances and network devices etc. The Respective OEM along with the bidder is expected to migrate the current logs of the existing solution to the proposed SIEM tool. The proposed SIEM tool should be configured in such a way by the Respective OEM along with the bidder that the previous logs can be readily accessed. This step should not involve any manual intervention.

The above requirements and approach need to be followed for all NextGEN SOC solutions and other security solutions wherever applicable as proposed by the Bidder.

The Respective OEM along with the bidder will explain how and when it will implement the migration activities, describe how it will perform the migration of solution & Services from banks current environment. The Respective OEM along with the bidder is required to submit the project plan (“Detailed Project Plan”) indicating the tasks, timeframes, resources, and responsibilities associated with the Migration activities. Respective OEM along with the bidder has to develop a detailed Migration plan covering at least the following key areas:

1. Migration Schedules, Tasks and Activities
 - a) Migration activities
2. Resource Requirements
 - a) Software Resources
 - b) Hardware Resources
3. Facilities Personnel
4. Other Resources
5. Relationships to Bank’s other Teams / Projects
6. Management Controls
7. Reporting Procedures
8. Risks and Contingencies- Key Risks, issues, dependencies and mitigation plans.
9. Transition Team Information
10. Transition Impact Statement
11. Review Process
12. Configuration Control
13. Plan Approval
14. Describe tools, methodologies and capabilities of the teams deployed for transition.

Respective OEM along with the bidder is required to ensure that their framework for migration of proposed solution, services, data, logs etc. from Banks IT team/existing Service Provider at a minimum should include the following phases and allied activities:

Service Requirements	Description
Initiation	Kick off the Migration based on the agreed transition plan
Planning	This phase takes care of all the planning activities required for successful Migration of solution & services from banks existing vendor to the bidder
Execution	Execute the Migration of solutions & services while ensuring near zero risk and no disruption to business

Service Requirements	Description
Closure	Create all the documents and submit them to the banks for review and sign off and start off including the MIS & SLA reporting and maintenance of the in-scope applications & related infrastructure.

The Respective OEM along with the bidder shall be responsible for ensuring compliance with all implementation timelines.

In the event of any delay in the implementation of the proposed solution, irrespective of the cause, the Bidder shall be obligated to assume responsibility for the takeover and transition of all existing solutions and services currently implemented and operational within the Bank that fall within the scope of Bidder. The transition shall be executed from the Bank's existing vendor in a seamless and timely manner.

The Bidder shall deploy appropriate onsite personnel for the maintenance and management of the existing solutions. The number and qualifications of such personnel shall be commensurate with those currently deployed by the existing vendor, subject to approval by the Bank.

The Bidder shall be solely responsible for maintaining and managing the existing solutions and services until the successful go-live of the proposed solution. During this period, the Bidder shall ensure full compliance with the Service Level Agreements presently in force with the existing vendor.

The Bank shall not be liable to pay any costs, fees, or charges towards Annual Technical Support (ATS) or Annual Maintenance Contract (AMC) pertaining to the existing solutions and services. All such costs shall be borne solely by the Bidder without recourse to the Bank.

Deployed manpower for maintenance & management of existing solution by the bidder shall be paid on actuals (Deployed & accepted by the bank) as per the rate (L1, L2, L3 & Project manager) quoted by the bidder in the Bill of Material in Year 1. The Bidder shall ensure the deployment of the aforesaid resources immediately upon any breach of the implementation timeline applicable to the respective solution.

7.5 Non-functional requirements

The important factors with respect to architectural requirements which bidder shall consider for implementation of the project are elaborated below:

1. The solution should be implemented as per best industry practices. It should be customized to meet bank's requirements.
2. Use of proven products and technologies - The proposed solution should necessarily consist of proven products and technologies for the required functionalities with any customization if required to meet the business objectives.
3. Scalability - All components of the solution must support scalability to provide continuous growth to meet the requirements and demands of BANK. The Solution should scale in a linear fashion and behave consistently with growth in data, number of concurrent users etc.

4. Interoperability - The solution should be interoperable, to support information flow and integration. It should support open architecture solutions such as XML, LDAP and SOA etc. where information/data can be ported to any system, whenever desired.
5. Availability - All components of the solution must provide adequate redundancy to ensure high availability. The solution shall have built in redundancy in terms of both the hardware and connectivity so that service is not impacted and is available 24x7.
6. Reliability – The solution needs to be reliable to maintain data integrity and support business continuity.
7. Security: Proposed solution should provide role-based security, encryption of data-at-rest, data in use, data-in-transit, and data on backup media.
8. The solution should be the latest version of proposed software with a clear product roadmap and should be in line with the current technology trends and business/domain trends. Bidder to note that proposed version of the solution should be latest stable & supported version from the OEMs and support from the OEM should be available for the entire contract duration.
9. Respective OEM along with the bidder shall comply with IS Policies, IT/IT security Policies, Data Governance policies and standards of BANK including data retention standard at all times.

7.6 Security requirements - Activities are to be performed by Respective solution OEM (supported by bidder)

The Respective OEM along with the bidder is required to comply with BANK IT, IS, Data policies etc. in key concern areas relevant to the RFP, details of which will be shared with the selected Bidder. Some of the key areas are as under:

1. Responsibilities for data protection, privacy, availability, and confidentiality.
2. Responsibilities for application security and availability.
3. Responsibilities on system and software access control and administration.
4. Custodial responsibilities for data, software, and other assets of BANK being managed by or assigned to the Bidder.
5. Physical Security of the facilities and access provided to the bidder professionals and other staff member.
6. Incident response and reporting procedures.
7. Password Policy of BANK.
8. Data Encryption/Protection requirements of BANK.
9. Bidder to ensure Data security for data in motion and at rest.
10. The Bidder shall provide extensive security features at the system and database levels to ensure security and integrity of the Data and the Application Modules.
11. Respective OEM along with the bidder to propose requisite tool to ensure encryption (Data at rest, data in transit/motion) and secure transmission of data. Bidder as a part of the technical proposal clearly indicate the security tools and solution proposed including the data encryption tools.
12. Respective OEM along with the bidder to ensure, configure and implement required tools/application to encrypt data at rest and encrypt data in transit.
13. Respective OEM & Bidder to ensure compliance to regulatory and statutory guidelines pertaining to information security, Data requirement and other applicable guidelines
14. All data—including but not limited to data used for storage, processing, license validation, telemetry, and logging—must reside strictly within the geographical boundaries of the Indian subcontinent. Under no circumstances shall any data or system component communicate with, transmit to, or be

accessed from locations outside India. This includes preventing any form of direct or indirect connectivity, API calls, background services, or telemetry exchanges or any exchanges with external servers or regions beyond Indian borders.

15. To provide Forensic Investigation related information as and when required by BANK and share the required information/evidence with BANK
16. The Respective OEM is required to submit detailed security features supported by the system along with details and architecture of the security components.
17. The OEM shall share detailed information security incident report(s) with the detail of corrective actions taken if such a situation arises.
18. The OEM along with the bidder should ensure that the Personally Identifiable Information (PII) is encrypted / masked, and all such PII should be masked accordingly in-line with access control mechanisms (for bidder teams including Support Engineers L1, L2, L3) as specified by BANK.
19. Security Configuration, Monitoring and Audit
 - a) The baseline security configuration of Operating System, Database, Web server and all other applications to be done by the Respective OEM along with the bidder, according to the industry best practices and same shall be shared with BANK for their review.
 - b) Compliance with security best practices may be monitored by periodic security audits performed by or on behalf of BANK. The periodicity of these audits will be decided at the discretion of BANK. Periodicity for Regulatory Audits would be required as per the rules and guidelines laid down by the regulator or as required by the regulator. These audit plans include, but are not limited to, a review of access and authorization procedures, physical security controls, input/output controls, DB controls, backup and recovery procedures, network security controls and program change controls.
 - c) To the extent that BANK deems it necessary to carry out a program of inspection and audit to safeguard against threats and hazards to the confidentiality, integrity, and availability of data, the Bidder shall afford BANK's representatives' access to the Bidder's facilities, installations, technical resources, operations, documentation, records, databases, and personnel.

7.7 IT Infrastructure requirements

1. Bidders must design, size, supply, commission, maintain and manage suitable and required hardware infrastructure for the proposed solutions in the RFP response at the location specified in the RFP (DC and DR). Bidder should size hardware based on the volumes mentioned in Annexure 21: Volumetrics of this RFP at relevant locations- DC, DRC and branches.
2. If the proposed solution is cloud-based, the bidder must accurately right-size the cloud infrastructure to meet all performance, capacity, and SLA requirements outlined in the RFP. The design should ensure availability within the primary cloud site, incorporating failovers, backups, and health monitoring, while also including a disaster recovery plan with a secondary site that meets the defined requirement as stated in the RFP. The proposal should include detailed architecture diagrams and a sizing justification.
3. Bidder should arrive at the sizing independently along with the respective OEMs. In case, the sizing quoted by the Bidder fails to meet the necessary services, SLA and other terms of the RFP, bank will not bear any cost for upgrades or replacements. Also, during the contract period, growth of the bank should be considered and thus, the appliances, solution, IT Infrastructure proposed should have enough CPUs, memory, storage, NIC, Ports, etc. available to accommodate the predicted sizing, SLAs and other requirements of the bank as required. The appliance/devices/cloud environment

proposed must have adequate vertical headroom. Any additional cost required for horizontal scaling would be borne by the Bidder in case of breach/ SLA bottleneck.

4. Bidder is required to propose a system which includes the OS, Database, compute nodes, storage system, network system, Backup Infrastructure & Solutions etc.
5. Bidder is required to provide staggered hardware, associated software and applications depending on the volumetric defined in the RFP. The subsequent AMC/ATS of the components will begin as per the phased delivery.
6. Bidder has to propose a dedicated non-production environment which can logically separate / Virtualized for Test, Development and Training. In case of on-premises, The bidder should note that the production and non-production environment should be physically separate to meet the requirement of the PSB.
7. Bidder is required to propose Infrastructure and applications for the following environments:
 - a) Production (DC and DRC)
 - b) Non-production (DC)
8. The non-production environments should have the same setup as deployed in production environments meeting all RFP requirements.
9. All hardware (Production, Non-production, and related hardware components) and system software components required for the project, must be included in the bill of Material of the bidder. In case the bidder fails to do so, and the project demands additional components at a later stage, then the bidder will have to provide additional components at no additional cost to the bank. DB audit trails should be enabled across all environments and bidder is required to size the hardware accordingly.
10. Necessary services over and above this, such as implementation, management, SLA etc. will be the sole Responsibility of Bidder. The PSB expects Bidders to optimally size and factor the requirements in compliance with the RFP requirements. However, if at the time of implementation there is a shortfall/non-compliance of any component/hardware/software required for the functioning of Bidder's proposed solutions with respect to the proposed hardware/software, Bidder will be required to provide additional hardware/software at no additional cost to the PSB.
11. Bidder shall install and commission the required IT hardware assets and software components into the racks to build the required setup.
12. Bidder shall be responsible for providing all the logs and required telemetry data for the setup and ensuring its integration with the centralized SOC of PSB.
13. Bidder shall position a dedicated technical onsite team consisting of L1, L2 and L3 resources to implement, commission and manage the proposed set-up in managed services model in accordance with the necessary security policies and guidelines issued by GOI/MoD/MietY/Other regulatory & statutory body from time to time.
14. The bidder shall ensure that the SoPs, procedure, policies and guidelines etc. for the proposed infrastructure & solution must be fully compliant with the latest certification requirements of ISO 20000, ISO 27001, ISO 22301, ISO 27701, ISO 27017 etc. During the contract, if PSB/PSB appointed agencies identifies any shortcoming/ lack of compliance, the bidder shall be responsible to ensure compliance.
15. The bidder shall provision all the required hardware, software, licenses and other components required for the setting up of this management cluster and also ensure the availability of solutions as per the defined SLAs.
16. Entire solution (hardware & software) should be IPv6 implementation ready from day one, considering IPv6 security practices.

17. Bidder to propose and factor the quantities required for any overhead for running the overall solution such as the orchestration, virtualization solution, containerization, or any other component as required.
18. Bidder can consider Logical separation/ Virtualization for production and non-production environment at compute and storage level for respective Environments. The bidder should note that the production and non-production environment should be physically separate with respect to Compute. Bidder is required to consider and propose SAN Switch, Backup Solution (Backup Software, Backup Server, long term storage, D2D) which can be used both for production and non-production environment Logical separation / Virtualization / zoning.
19. Production Environment:
 - a) The virtualization should be implemented in such a way so that there is no single point of failure, in case of one instance / node is deployed in server 1 then the second instance / node of the same environment of the solution should not be deployed in the same physical server.
 - b) Example: Assuming the proposed solution requires two web nodes say Web01 and Web02 and have three Production servers SRVPRD01, SRVPRD02 and SRVPRD03 with virtualization implemented; if Web01 node is deployed in SRVPRD01, then Web02 node is not allowed to be configured in SRVPRD01, it is to be configured either in SRVPRD02 or SRVPRD03.
 - c) No two application instances will be deployed within the same rack.
 - d) The Web Application can be virtualized to provide flexibility and scalability; however, it is important to note that the Web and Application tiers will reside in separate VLANs to enforce network segmentation and security. All east-west traffic between these VLANs will pass through a firewall to control and monitor inter-tier communication, ensuring strict access policies and reducing the attack surface. The architecture should be designed accordingly to support this layered security model.
 - e) The Database server will be deployed on a completely separate physical or virtual infrastructure, isolated from both the Web and Application layers, to further enhance security, performance, and fault isolation across the entire system.
20. Non-Production Environment:
 - a) The non-production environment must be physically separated from the production environment.
 - b) The non-production Environment should be 15% of the DC- Primary in terms of Compute and Storage
21. Bidder shall provide legally valid Software/ hardware/ firmware Solution. The detailed information on license count and type of license shall also be provided to the Bank.
22. Bidder shall provide legally valid Software/ hardware/ firmware Solution. The detailed information on license count and type of license shall also be provided to the Bank.
23. The bidder is responsible to provide the correct sizing of compute, network, and storage, IOPS including server etc. in collaboration with the proposed OEM whose solution/technologies are proposed for Nextgen SOC for successful deployment. Bidder and OEM should also account for scalability and future growth of the Bank to arrive at sizing for the Contract period.
24. In the event of failure, the system should automatically initiate failover within seconds, ensuring uninterrupted functionality without requiring manual intervention.
25. All hardware and software components should be architected for seamless scalability at DC & DR, ensuring long-term capacity.

26. Each node/environment must be **individually provisioned** for **full peak load**

7.7.1 Compute Infrastructure

1. Bidders must design, size, supply, implement, maintain and manage suitable compute infrastructure for all the in-scope applications/solutions proposed in the RFP response.
2. The hardware sized should be redundant, both horizontally and vertically scalable, fault tolerant and designed for high availability.
3. Bidder has to provide the similar category (i.e., mainly same class - similar processor and OS platform) of servers for Test, Development and Training Environment as that of the proposed production.
4. Vertical and horizontal scalability should be two important requirements for the servers as well. Bidder should arrive at the sizing independently keeping growth roadmap in consideration.
5. Ensure servers include sufficient CPU cores, RAM, and network interface cards (NICs) to handle expected transaction volumes, data processing needs, parallel operation of Backup & Restoration (with Ransomware Protection) and Replication.
6. Proposed hardware should have separate FC/LAN Cards enabling separate subnet creation for backup process, if required.
7. The virtualization architecture must ensure no single point of failure. In case of one instance / node is deployed on server 1 then the second instance / node of the same environment of the solution should not be deployed in the same physical server.
8. The production and non-production environment should be physically separated to meet the requirement of the bank.
9. Production Environment:
 - a) Web and App can be virtualized/logically separated
 - b) Production - Database environment should be deployed on physically separate machines on different network subnets.
 - c) There will be separate virtual machines for Web Server, Application Server, and Database Server etc. All are in different logical zones separated through firewall to communicate with each other. Accordingly, the connectivity should be established to make them operational. In no case will communication be permitted without firewall and / or IPS. Bidder must ensure the communication in the desired way and all the required hardware, software and network equipment(s) etc., if required will be provided by bidder only.
10. Non-production:
 - a) Bidder must propose a dedicated non-production environment which is logically separate / Virtualized for Test, Development, Training and other non-production environment etc.
 - b) These non-production environments should have the same software and hardware setup as deployed in production environments meeting all RFP requirements.
11. Necessary Hardware, Software and Services over and above this, such as implementation, SLA etc., will be the sole Responsibility of the Managed Service Provider/OEM. Managed Service Provider/OEMs to optimally size and factor the requirements in compliance with the RFP requirements. However, if at the time of implementation there is a shortfall/non-compliance of any component/hardware/software required for the functioning of the Managed Service Provider/OEM's proposed solutions with respect to the proposed hardware/software, Bidder will be required to provide additional hardware at no additional cost to the Bank.
12. Entire solution (hardware & software) should be IPv6 implementation ready from day one.

13. The bidder is required to factor in the necessary compute resources, including GPUs, for analytics, AI/ML modeling, etc., and include these details as part of the Bill of Quantities (BOQ).

7.7.2 Storage Infrastructure – Primary & Object

1. Bidder will be responsible to design, size, supply implement and manage the Storage Solution in compliance with the RFP requirements at DC and DR.
2. Supply, installation and implementation of storage hardware (Primary and Object Storage), including SAN systems, with adequate capacity and IOPS (Input/Output Operations Per Second) as per requirements.
3. Bidder will be responsible for the comprehensive end to end design solution of the Storage across the sites which should include Minimal Data Loss, Replication and any other requirements stated in the RFP that relate to the storage.
4. Any component/software/service required by Bidder that does not fall under the existing Storage requirements must be factored by Bidder.

7.7.3 Backup Infrastructure

1. Bidder is required to size, design, supply, implement and manage the Backup Software along with necessary hardware (including backup storage) as part of the assignment.
2. Bidder to factor the required solution and infrastructure to ensure taking and securing backup as per the PSB policy (which will be updated from time to time). The sizing of the Backup solution has to be determined by Bidder in accordance with the storage sizing.
3. The bidder should configure, schedule and manage backups of all the data including but not limited to files, folders, images, system state, databases and enterprise applications as per the policy defined by PSB.
4. The scope of work also includes backup replication to DR Site.
5. Bidder must provide Backup solutions (on-prem solution with cloud ready capabilities) including required hardware, storage, software, and licenses for performing automated backups of configurations and data for NextGen SOC solutions. The bidder should also ensure that sufficient storage is factored in during the contract period.
6. Backup & restoration solutions should be made by the team deployed by bidder aligning with the requirement mentioned in the Annexure 21: Sizing/Volumetric
7. The bidder should be able to make the required modification in backup procedures as per PSB at no additional cost to PSB.
8. Additionally, in case any of the security application/tools is proposed on cloud, bidder is required to ensure the backup of proposed security solution on Cloud and provide the same to bank as and when required by bank.

Networking and Security Equipment:

1. Ensure network equipment is compatible with existing infrastructure and configured to optimize security, speed, and reliability.
2. Specify quality of service (QoS) settings, VLANs, and any necessary configuration protocols to ensure seamless data flow and security.

7.7.4 Software

Bidder should propose Enterprise/OEM Supported based licenses and must issued in the name of PSB. Only supported and stable version of solution can be considered for the proposed systems. The proposed solution should be the latest and stable version.

The bank will be entitled to use the new product features, upgrades, device models, new versions etc. without any additional cost to the bank.

Enhancement/ upgrades/ updates/fixes/patches/functionalities/subscriptions for hardware/ software/ Operating System / Middleware etc. should be implemented, post approval from bank, in the bank environment as and when released by Service Provider/ OEM or as per requirements of the Bank

7.8 Other requirements

Bidder to note that all the requirements pertaining to Requirement analysis, System design, Development & Installation, Documentation, Deployment and Go-live are to be performed by the **respective solution OEM**.

Respective solution OEM along with the bidder should design High-Level Enterprise Security Architecture that integrates the proposed solution with existing security solutions for both on-premises and cloud environments (Public & private). This architecture should encompass all security components such as perimeter defense, network segmentation, identity and access management, data protection, and threat detection. The design must ensure seamless interoperability between on-premises infrastructure and cloud environments, adhering to industry's best practices and regulatory compliance standards.

Bidder is also required to factor the highest-level support from the solution OEM during the O&M, ATS & AMC phase, respective solution OEM is to be involved every year during the O&M phase for performing the configuration, rules and parametrization review along with the solution architecture review at all the environment of PSB.

Any requirements from the Bank for customization, enhancement and other device/solution administration-related activity required in the supplied solutions to deliver seamless, fully functional integration, custom and native parsers, connectors, incidents management and related workflows, native and custom playbooks, alerts fine-tuning, notifications, dashboards, reporting, customization of default templates, additional remediation efforts etc. shall be undertaken by the Bidder at no cost to the Bank during the Contract period, even in case of extension of timelines for the commission of NextGen SOC due to any reason and such extension would be at the sole discretion of the Bank

The OEM must provide, maintain and update SBOM & CBOM as per CERT-IN guidelines including all the dependencies up to the last level.

The report is to be submitted to PSB SPOC directly by the OEM representative.

7.8.1 Requirement Analysis - Activities are to be performed by Respective Solution OEM (supported by bidder)

1. The Respective Solution OEM along with the bidder must do in-depth study of all requirements and design and implement a solution taking them into account. The solution should be adaptive and responsive to requirements which may arise in future. The bidder's proposed solution must comply with the functional and technical requirements mentioned in RFP. But the bidder should not limit the requirements to this functional requirement list. As a part of the requirement gathering the OEM will conduct discovery and ideation sessions with BANK users and its appointed consultants to understand the requirements of the solution and the bank's existing infrastructure.
2. Respective solution OEM along with the bidder has to review the existing setup deployed in the Bank and provide best of design by factoring proposed supplied components and existing systems/components/devices which are in use.
3. Respective solution OEM along with the bidder is responsible for formulating and recommending enterprise-wide security architecture of the Bank and security architecture for various applications deployed in the bank.
4. Respective solution OEM along with the bidder to study existing environment at bank, identify data sources required for integration, compliance, threat detection etc. and propose the solution architecture to the bank. The OEM needs to create a detailed reference architecture of the solution in consultation with PSB team.
5. Few of the key activities includes but is not limited to the following:
 - a) Requirements elicitation with BANK 's team based on discussions, structured questionnaire, etc.
 - b) Leverage OOTB Features/rules/parser/policies/control etc.
 - c) Arriving at detailed requirements specification for the solution functionalities and exact data points
6. Respective solution OEM along with the bidder must coordinate with BANK 's vendor(s) of different applications & infrastructure to understand the data structure and field level mapping to extract the data/logs/installation of agents wherever required. BANK will only facilitate coordination.
7. Systems Specifications Requirement Study: The Respective solution OEM along with the bidder will conduct a detailed requirement study to develop a Functional Requirement Specification Manual (FRSM) which would cover all the functions which would be offered to BANK. The functional requirements will also include all the functional requirements mentioned in Appendix 1A. Additionally, FRSM will also include functionalities which will be required by BANK in future. The FRSM will be handed to BANK for review and additions. All the additional suggestions given by BANK will be added to FRSM by the Respective solution OEM along with the bidder.
8. Respective solution OEM along with the bidder will provide all functionalities mentioned in the Functional Requirement Specification Manual. Respective solution OEM along with the bidder will implement the proposed solution with all software, hardware, and infrastructure to meet functional requirements of FRSM.

7.8.2 System Design - Activities are to be performed by Respective solution OEM (supported by bidder)

1. The Respective solution OEM along with the bidder is expected to take up the role and drive overall solution development, customization, parameterization, and implementation of the proposed solution. The Respective solution OEM along with the bidder shall manage end-to-end service integrations and associated vendors.
2. Every technology deployed in the NextGEN SOC should collaborate with every other technology in NextGEN SOC on the real-time basis without manual intervention to leverage strengths of each other for studied analytics, correlation, reporting incidents and maintain overall false positive alerts within the threshold
3. The solution should enable to setup, configure, and customize the base solution for meeting the BANK's requirements
4. Respective solution OEM along with the bidder shall design the proposed system based on defined requirements, data flows and methodologies.
5. Respective solution OEM along with the bidder will be required to create:
 - a) High level system specification with overall architecture covering Technical Architecture including data flow architecture through the proposed systems.
 - b) Low level system specification with interface level details and elaboration of the High-Level Design (HLD).
 - c) The technical architecture should give complete details of the processes, interfaces, deployment, business including the flow of data from various sources to decision makers and the cleansing & transformation of data which happens in the process.
 - d) The Respective solution OEM along with the bidder shall create relevant documentations and seek sign off from BANK.
6. Respective solution OEM along with the bidder is required to study/ analyse, design a secured and dynamic architecture for the proposed solution.
7. Respective solution OEM along with the bidder shall be responsible for the overall Solution Delivery, Development, Installation and Configuration, and Vendor Management
8. The Respective solution OEM along with the bidder shall develop the system in scope, basis the design considerations along with exception handling, logging, archiving, monitoring, Definition of business rules to be implemented, writing deployment scripts, interface development, implementation of data exchanges, etc. Implementation of the Solution also includes all the Integrations as defined in scope and the unit testing of modules.
9. The Respective solution OEM along with the bidder shall design, size, implement, maintain & support the proposed solution.
10. The Respective solution OEM along with the bidder shall perform the role and take full responsibility for the end-to-end solution delivery. The Respective solution OEM along with the bidder shall design & deliver integrations between systems internal to BANK and external systems. The Respective solution OEM along with the bidder shall ensure flexibility to enrol third party / fintech companies / other bidders for data capturing / data validation / any other purpose and ensure the proposed solution integrates with BANK 's systems on a plug and play model.

7.8.3 Development and Installation - Activities are to be performed by Respective solution OEM (supported by bidder)

1. Respective solution OEM along with the bidder to note that all development, installation, testing, Go-live activities have to be performed from bank's premise, no VPN/remote access shall be provided.
2. Respective solution OEM along with the bidder to note that Respective solution OEM along with the bidder is required to integrate the proposed solution & IT Infrastructure with ITSM & SLA Monitoring solution provided by bank.
3. Respective solution OEM along with the bidder should mandatorily ensure to collaborate with all necessary third parties & other OEMs. Any customization, enhancement and other device/solution administration related activity required in solution to deliver seamless, fully functional integration, custom and native parsers, connectors, incidents management and related workflows, native and custom playbooks, alerts fine tuning, notifications, dashboards, reporting, customization of default templates, additional remediation efforts etc. without any extra charges to the Bank during the Contract period.
4. The Respective solution OEM along with the bidder should follow a suitable SDLC methodology waterfall/iterative/Agile/proprietary methodology, etc. as part of Bidder's response.
5. The new Security solutions proposed to be deployed under scope of this RFP, should be complete in all respects. There should not be any deployment dependency on any other third-party solution/licenses/ tools for implementation of proposed solution which is not factored from day 1. In case any such requirement of additional third-party solution/ licenses/ tools is there for implementation of proposed solution, the same should be clearly factored in the costing/ commercial details by the bidder under this RFP and the successful bidder must provide these third-party solutions/ licenses/ tools.
6. Deliver and implement the solutions & services to the Bank in compliance with International Standards such as ISO, PCI-DSS, etc. and advisories issued from regulatory authorities and statutory directions.
7. Any customization, removal of false positives, enhancement and other device/solution administration related activity required in solution to deliver seamless, fully functional integration, custom and native parsers, connectors, incidents management and related workflows, native and custom playbooks, alerts fine tuning, notifications, dashboards, reporting, customization of default templates, additional remediation efforts etc. without any extra charges to the Bank during the entire Contract period.
8. The methodology should address development, customization, Managed services, Facilities management services, and hardware/software installation/configuration services.
9. The implementation shall be compliant to the Government of India/regulatory/statutory guidelines on storage of PII, Aadhaar information's, DPDP etc. The information should be encrypted and masked at the required screen and functionality.
10. Each of the steps should detail the input, process, and output in each step.
11. The details of the usage of tools/templates must be given.
12. Deliverables and sign off process for each of the deliverables at various stages should be provided.
13. The Respective solution OEM along with the bidder should ensure all process templates as per their CMMI/Quality certification is adhered to and provide to capture and prevent risks and issues.
14. The implementation of the software includes:
 - a) Functional requirements specifications/SRS/Detailed requirement gathering study

- b) SIT, UAT and other testing.
 - c) Live cut-over
 - d) Customization
 - e) Configuration
 - f) Installation
 - g) Implementation
 - h) Integration & interfaces
15. Activities and functions to be undertaken for installation and implementation of the software should be as per the RFP.
16. The bidder shall ensure that their personnel are actively involved during the development and implementation phases to facilitate skill enhancement and knowledge transfer from the OEM development team.
17. The sizing and provision of the required IT Infrastructure must be as per the requirement mentioned in the RFP document.
18. If the sizing is found inadequate and causes any performance issues, then the Bidder must provision additional IT Infrastructure & solutions/services as necessary at no additional cost to BANK.
19. The Bank is in the process of transforming its IT & Nextgen SOC security infrastructure. The Respective solution OEM along with the bidder must take into account the reintegration of the proposed security solution with both the existing security infrastructure and any new security solutions acquired through this RFP or other RFPs.

7.8.4 Documentation - Activities are to be performed by Respective solution OEM (supported by bidder)

Following is the indicative list of documentation that the Respective solution OEM along with the bidder should prepare, take BANK sign-off and submit it as a deliverable:

1. Detailed project plan
2. The following documents should be delivered by the Respective solution OEM along with the bidder to the Bank for every component/software including third party component/software before solution becomes operational of the solution (as applicable) :
 - a) User manuals
 - b) Installation manuals
 - c) Operation manuals
 - d) Technical manuals
 - e) Software and Hardware requirement specification
 - f) Secured configuration documents and Hardening document for all Security systems/ solutions.
 - g) System/database administrative documents Debugging/diagnostics documents Test procedures etc.
 - h) High Level architecture document and Low-level architecture document.
 - i) Deployment plan document.
 - j) Change management methodology document.
 - k) Problem management methodology document.
 - l) User management guide.
 - m) Release notes.

- n) Impact matrix.
3. Secured Configuration document (SCD)/ baseline Hardening document for systems/ solutions under scope need to be reviewed on quarterly basis and modified, if needed. The same should be maintained with version controls

7.8.5 Deployment and Go-Live - Activities are to be performed by Respective Solution OEM (supported by bidder)

1. The Respective solution OEM along with the bidder shall deploy the solution in production environment, provide hyper-care support and maintenance. The Respective solution OEM along with the bidder shall observe the user working patterns, provide support, training, and technical help, fix issues/bugs being discovered in this phase and guide the users for best practices
2. Creation of deployment plan and planning go-live
3. Implementation, installation and fine tuning
4. Migration and go-live
5. Testing and fixes
6. User training
7. Issue/bug fixing
8. Red Teaming (or Purple Teaming) will be conducted by the bank or bank's appointed partner's after UAT, but prior to Go-Live or as part of security hardening and validation phase which shall include:
 - a) Security Validation- VAPT & IS AUDIT
 - b) Incident & identification of gaps/blind spots along with the criticalities
 - c) Readiness assessments
 - d) Recommendations for improvement
9. Performance testing (Bidder along with the respective OEMs) at the start of UAT- To ensure the system can handle expected (and peak) loads while maintaining acceptable response times, resource utilization, and overall stability under stress or high concurrency are required to perform the performance testing using the proposed performance testing tools and perform the following activities:
 - a) Test system behavior under normal and peak user loads
 - b) System behaves under extreme or breaking load
 - c) As a part of the testing following pointers are to be measured, but not limited,
 - i Response Time (avg, min, max)
 - ii Throughput (MB/sec)
 - iii CPU / Memory / Disk I/O / Network usage
 - iv Error Rate
 - v System Recovery Time (after overload)
 - d) Performance testing cycle activities to be performed by Bidder & respective solution OEMs

Phase	Activities
Planning	Define test objectives, workloads, SLAs, use cases
Test Design	Model real-world scenarios (e.g., login, API queries, log ingestion)
Environment Setup	Isolate or clone production-like test environment

Phase	Activities
Test Execution	Run with baseline load, scale gradually
Monitoring & Analysis	Collect metrics via monitoring tools, OS-level, and application logs
Tuning & Re-testing	Identify bottlenecks, apply optimizations, re-test as needed

7.8.6 Testing- Activities are to be performed by Respective solution OEM (supported by bidder)

1. BANK proposes to conduct “User Acceptance Testing” (UAT) for the Solution for the purpose of ensuring that all the functionalities requested for by BANK are available and are functioning accurately. The UAT would be carried out for the entire suite comprising of the proposed solution and other sub-solutions proposed by the Bidder.
2. The Respective solution OEM along with the bidder shall convey to BANK that all the implementation, customizations, that are required to “Go Live” are completed and the solution is ready for testing.
3. The test environment to be always made available to BANK, for the purpose of testing. The Bidder is expected to provide for the requisite test and development infrastructure including hardware, software, operating system, and database for all applications being offered by the bidder. BANK expects the bidder to set up the required solutions and provide connectivity to test servers to BANK for the purpose of testing. BANK shall not pay any additional amounts to the Bidder for the purpose of creating the test environment. The bidder must ensure that all requirements for the test environment like storage, compute environment, etc. for the applications are taken into account. BANK plans to use the testing environment throughout the period of the contract.
4. Any deviations/discrepancies/errors observed during the testing phase will be formally reported to the Bidder and the Bidder will have to resolve them immediately or within the UAT timelines and guidelines formulated between the Bidder and BANK. The resolution timelines will be completely aligned to the project timeline of this RFP.
5. The Respective solution OEM along with the bidder will be responsible for maintaining appropriate program change control and version control for all the modifications/ enhancements carried out during the implementation/testing phase.
6. The Respective solution OEM along with the bidder will be responsible for providing and updating system & user documentation as per the modifications.
7. The Respective solution OEM along with the bidder is required to bridge the security gaps after taking appropriate approvals and concurrence from BANK.
8. The Respective solution OEM along with the bidder review the following at the frequency specified by BANK:
 - a) Policies and procedures
 - i Review policy / procedures related to the technology function and environment.
 - b) IT General Controls review
 - c) Logical Access
 - i Review of user management procedures at application, operating system and database levels

- ii Review of privileged access rights granted to application and system administrators
 - iii Review of account and password policy controls
- d) Physical and environmental Access Controls
 - i Review of the procedures implemented at DC/ server rooms
 - ii Assess the critical assets for environmental management system
- e) Change management process and system documentation
 - i Review the program change management with respect to policy and procedures.
 - ii Review the procedures for requesting, development, testing and implementing changes.
 - iii Review the process for monitoring program modifications.
 - iv Review segregation of duties.
- f) Third party Management
 - i Review the process for monitoring and reporting on the achievement of service level performance criteria.
 - ii Review service level agreements for the maintenance and upkeep of the systems.
- g) Backup and recovery process
 - i Review backup related policies and procedures and compliance thereof.
 - ii Incident Management
- h) Review incident management related policies and procedures and compliance thereof.
 - i Business continuity management
 - ii Review the business continuity management related policies and procedures and compliance thereof.
- i) Security Review
 - i Security and controls review of operating systems, database and applications.
 - ii Policies and security review of firewall, servers, routers and desktops

7.8.6.1 Quality Assurance

The Respective solution OEM along with the bidder shall be responsible for testing the system and ensuring that the performance, stability, continuity, reliability, etc. remains intact. The Respective solution OEM along with the bidder shall prepare test cases and perform thorough testing. The test cases, testing automation scripts, root cause analysis, bug fixes, workarounds/ troubleshooting measures for non-fixable issues and other testing activities related to different types of testing (functional, system performance, load/stress, volume, UI, exception handling, compatibility, etc.) should be documented, signed off and shared with BANK. The Respective solution OEM along with the bidder shall also define and document the entry and exit criteria for SIT and UAT. It is the sole responsibility of the Respective solution OEM along with the bidder to fix all the discovered issues during the testing performed. The indicative list of activities includes but is not limited to the following:

1. Test Preparation

- a) Design Testing strategy for UT, SIT, load testing and as required by BANK
- b) Setting up of test environment which consists of IT infrastructure, software, and applications.

- c) Preparation of test data for all combinations to be tested
- d) Identification of test cases/scripts for which an automated script can be created, if applicable
- e) Dry run test cases/scripts to verify that test cases are executing properly
- f) Finalize test plans / scripts / data

2. Test Execution

- a) Retest of failed test cases / scripts or modified scripts for testing the defect / deviation correction, if applicable
- b) Recording, tracking, and reporting all defects/deviations, as well as resolving script and test defects.
- c) Test results to be provided in an agreed-upon format that meets the standards and criteria specified by BANK
- d) Final executed test scripts to be provided in a format that meets the standards specified by BANK
- e) Review and/or approval of the test results based on criteria defined in BANK standards for executed test scripts
- f) Review and/or approval of the test results based on criteria defined in BANK standards for executed test scripts
- g) Test summary report, including scanned copies of executed test scripts, consisting of screen prints and reports, in a format acceptable to BANK
- h) Recommendations for the system, i.e., observations of system usability, suggested enhancements, and performance improvement

3. Unit Testing

- a) Unit testing of all the development, customizations, and configurations
- b) Functional tests, Benchmark Comparisons, Operational tests, Load, Volume, Stress tests, GUI test, Compatibility tests, Exception Handling tests, Data Migration testing, Maintenance tests, Sanity tests, Installation test, Exploratory/Ad hoc tests and other applicable tests
- c) Unit testing logs after the final modification to be submitted to BANK
- d) Individual test cases developed after the final modifications have to be shared with BANK for necessary approvals & sign-off
- e) Documentations for workarounds and troubleshooting measures taken in case of non-fixable bug or issues
- f) User usability testing – Usability testing allows Respective solution OEM along with the bidder to conduct user research with participants in their natural environment to test interaction and identity issue with navigation and layout.
- g) Upon successful unit testing, the Respective solution OEM along with the bidder will proceed to SIT of the designed front end website.

7.8.6.2 System Integration testing

The Respective solution OEM along with the bidder should integrate the software with the Third-party agencies (Regulatory & statutory agencies, Fintech/Reg Techs/Feed Providers, & partner Integrations) as per requirement of BANK and carry out thorough system integration testing. The bidder should also conduct the functional testing to verify that each function of the software application operates in conformance with the requirement specification. System integration testing will be followed by user acceptance testing for all applications.

1. The Respective solution OEM along with the bidder shall test and ensure the performance, stability, reliability, request/response time, compatibility, etc. of all the interfaces between all the applications leveraged for the eco-system.
2. The Respective solution OEM along with the bidder shall fix all the discovered issues during the system testing and UAT phase related to the interfaces. The Respective solution OEM along with the bidder shall perform end-to-end system testing to ensure all the connected applications are appropriately operating.
3. The Respective solution OEM along with the bidder should integrate the software with the existing and proposed systems of BANK and 3rd party systems
4. The system integration testing includes Interface/integration tests, Functional tests, Operational tests, Load, Volume, Stress tests, GUI test, Data Migration, Compatibility tests, Exception Handling tests, Maintenance tests, Sanity tests, Installation test, Exploratory/ADHOC tests, etc.
5. All integrations of proposed solution should be thoroughly tested.
6. The Respective solution OEM along with the bidder is required to develop test cases, test scripts, provide test plans related to testing of all the interfaces between applications ecosystem.
7. Set up and document all test data as described in the test scripts.
8. Document steps for which integration of each component shall occur in the project's test plan.
9. Perform integration testing iteratively with increasingly larger and more complex combinations of components.
10. Verify the end-to-end process to work to confirm that fully integrated features behave according to specification.
11. Perform negative testing.
12. Document all test results, as well as any deviations that have been discovered.
13. System integration testing will be followed by user acceptance testing (UAT), plan for which must be submitted by the Respective solution OEM along with the bidder to BANK.
14. The Respective solution OEM along with the bidder shall perform Unit testing & System integration testing and submit their reports, findings, issues, etc. to BANK.

7.8.6.3 User Acceptance Testing (UAT)

1. The UAT includes functional tests, operational tests etc.
2. The Respective solution OEM along with the bidder shall provide necessary information, tools and scripts to BANK users and their appointed consultants/vendors.
3. The Respective solution OEM along with the bidder will provide necessary on-site training for the purpose of enabling BANK and its appointed bidders.
4. The Respective solution OEM along with the bidder should carry out the load testing once the solution is deployed and submit the results to BANK.
5. If the testing results do not comply with BANK requirements, the Respective solution OEM along with the bidder shall provide and perform the necessary rectifications. The test scenarios should be created, reviewed and verified by Respective solution OEM along with the bidder and OEM and submitted to BANK for review.
6. Load testing shall be done in two round, Round 1 of load testing is to performed on the base solution before the start of UAT and round 2 should be performed on the UAT signoff solution (including the customization performed specifically for BANK). Any performance bottleneck has to be resolved.
7. The Respective solution OEM along with the bidder will set-up regression/automated test software and other tools which shall be used for BANK and the Respective solution OEM along with the bidder to implement-and operate the same.

8. The Respective solution OEM along with the bidder will prepare test cases, testing methodology and testing strategy for all the tests to be performed and submit to BANK for sign-off
9. The Respective solution OEM along with the bidder will create test data required by BANK to perform User Acceptance Testing (UAT)
10. Test plans, test cases, and test scripts for user acceptance testing to be provided by Respective solution OEM along with the bidder
11. Documentation of all test results, including any deviations that have been discovered in UAT by the Respective solution OEM along with the bidder
12. During the UAT testing, BANK will notify the Respective solution OEM along with the bidder at regular intervals the bugs/findings in writing
13. Respective solution OEM along with the bidder must fix these bugs, carry out necessary rectifications and deliver patches/version towards changes effected
14. BANK shall accept the application software only after the critical or major Bugs are fixed, which are then ready for production Implementation.
15. BANK may conduct reviews/audit, at its discretion, of the proposed solution and IT infrastructure during the contract period
16. The Respective solution OEM along with the bidder during the UAT stage shall submit the requirement traceability matrix and mapping of FRSM with the implemented solution

7.8.6.4 Data testing

Based on the stipulations of the RFP, the Respective solution OEM along with the bidder will be required to arrive at Test Methodology in consultation with BANK, based on a standard which is suitable for BANK.

Respective solution OEM along with the bidder will be responsible for performing the following activities for testing & Audits:

1. Development of suitable testing methodology/ testing strategy document
2. Development of test cases in consultation with BANK. The Respective solution OEM along with the bidder has to provide already prepared test cases to BANK (negative & Positive) which BANK may approve/ modify before execution.
3. Development of testing Schedule calendars.
4. Development of entry and exit criteria for testing.
5. Development of detailed test cases in UAT environment.
6. Train BANK's team in test cases development and testing methodology.
7. Test application software for functionality, operational convenience, security and controls. This will also include positive and negative cases for each type.
8. Execution of all the test cases.
9. Record test results against the test cases tested.
10. The testing should also ensure conformity to:
 - a) All customized menus, rules, configuration & parser and reports are working as per the SRS and BRD document provided by the Respective solution OEM along with the bidder.
 - b) All customized Interfaces are working as per the SRS and BRD document provided by the Respective solution OEM along with the bidder.
 - c) All functionalities are working properly as per the SRS and BRD document provided by the Respective solution OEM along with the bidder.
 - d) Gaps identified.

- e) Interface testing with all types of transactions pertaining to that interface.
11. Point out gaps, errors, bugs during testing.
 12. Document the gaps, errors and bugs observed during testing.
 13. Maintain a track of errors, bugs and customization requests and their resolutions.
 14. Explain bugs, errors and gaps to BANK and application vendors.
 15. Follow up for fix or patch.
 16. Re-test the gaps, errors and bugs after rectification.
 17. Submit all documents on methodology, strategy, test cases, test documentation, customization requests, solution etc. to BANK.
 18. Conduct unit testing, integration testing of the entire functionality of the solution.
 19. All testing will be carried out with resources provided by the Respective solution OEM along with the bidder in coordination with BANK.
 20. Respective solution OEM along with the bidder must fix the bugs, carry out necessary rectifications and deliver patches/version towards changes which would be reported by external agency and BANK.
 21. BANK shall accept the solution only after critical or major Bugs are fixed and are ready for production Implementation.
 22. Data Migration
Data integrity checks: Pre-migration and post-migration data sets should be compared for data integrity issues.
Data integrity checks should check the following data parameters:
 - a) Raw data integrity
 - b) Business rules
 - c) Log Tables
 - d) Configuration/ Parameterization table

To ensure that the data in the newly migrated environment qualifies the integrity and reliability tests and in case any errors or mistakes are identified, suitable counter measures are taken by Migration team for mitigating their impact.

 - a) Identify the critical fields to be validated from the field in source system based on the experience of other migrations.
 - b) Business rules verification.
 - c) 100% of the Configuration/parameterization table should be verified.
 - d) Respective solution OEM along with the bidder is expected to verify log tables and highlight various error logs if any, post migration.
 - e) To provide an assurance that 100% data for critical fields has been properly identified and accurately and completely migrated to relevant data fields in the target system by understanding and validating the migration controls, performing independent verification of Data migrations
 - f) Review back-up procedure so as to ensure availability of data under conversion, the data is backed up before migration for future reference or any emergency that may arise out of data migration process.
 - g) Comparison of pre-migration and post-migration data for checking integrity issues.

Deliverables of data migration by Respective solution OEM along with the bidder

1. Data migration audit strategy.

2. Migration process review report
3. Field wise Exceptions reports (pre & post)
4. Data migration testing along with the scripts, testing status, risk categorization, impact etc.
5. Final compliance report, post migration.

7.8.7 Training- Activities are to be performed by Respective solution OEM (supported by bidder)

Training & product certifications programs need to be arranged for PSB SOC team without any additional cost. Upon completion of the training, the OEM shall issue certificates to all trainees.

All the technical product training should be provided by respective OEM. The bidder should submit a plan to the bank highlighting the baseline and levels of training and certifications required before deploying a person on the NextGEN SOC.

Training needs to be organized covering the following: new product features, workflows, changes made to the baseline set up of PSB NextGEN SOC, automation, best practices, advance security threats, market trends etc.

- Beginner training of Each Product proposed by OEM – Each Training session online/offline should be provided at least 40 Hours – Number of Training session should be 3 for 15 staff (Relevant Study Material, Online Material/LAB access for contract period)
- Advanced training by each Product proposed by OEM – Each Training session online/offline should be provided at least 60 Hours – Number of Training session should be 3 for 15 staff (Relevant Study Material, Online Material/LAB access for contract period)

7.9 ATS and AMC

Bidder should provide comprehensive **on-site** AMC for the remaining contract duration. The AMC for the hardware shall start with the installation & acceptance of the hardware by the bank.

Bidder should provide software licenses with comprehensive **on-site** ATS for the remaining contract duration. The ATS for the software shall start with UAT Signoff by the bank for the respective solution.

Rates provided by the bidder for the respective software, hardware and services shall be used on a pro-rata basis for any additional software, hardware and/or services utilized by the bank during the contract period.

ATS/AMC support must comply with the Technical Standards, Security Requirements, Operating Procedures and Recovery Procedures

If the bank buys any other supplemental hardware as agreed by the hardware OEM from a third party and installs it within these machines under intimation to the Bidder, then the OEM Support (ATS/AMC) should not become void. However, the ATS/AMC (Support from OEM) will not apply to such supplemental hardware items installed.

NOTE:

ATS-- Bidder to note that Total ATS/subscription cost for the respective solution should not be less than 75% of the Net License Cost of the respective solution

AMC -- Bidder to note that Total on-premises Hardware AMC Cost for the respective products should not be less than 25% of the Total on-premises Hardware Cost for respective items.

7.10 Resource Requirement

Key resources:

This is the minimum manpower requirement per shift. Bidder shall factor the total resource required to meet the below requirement.

Key Resources are PM – Implementation, Respective OEM Leads, PM-Operations, Any other proposed by bidder.

Implementation Phase:

S.No.	Resource Type	Deployment	Count of Resources	Shifts (Minimum)	Experience/skillset
1	Project Manager – Implementation*	Onsite Full time	1	As per PSB timings and calendar.	<ul style="list-style-type: none"> • B.E. /B. Tech /MCA/Any graduate • At least one certification in Project management like PMP, Prince 2, etc. • Minimum of 8 years of overall experience. • Strong knowledge of Project management/ Implementation management of Security solutions. • The proposed resource should have experience of managing at least 2 NextGEN Cyber Security Solution Implementation in at least 1 PSU/PSE/Govt Department/ BFSI organizations/Regulatory Bodies of India.
2	Respective Solution OEM Resources	Onsite Full time	<Bidder/OEM to right size>	As per PSB timings and calendar.	At the beginning of the Implementation Phase before the start of requirement gathering phase, the OEM must submit details of the Onsite Resources (Resource deployment plan) assigned to each activity/milestone for the bank's approval. Any subsequent modifications or replacements aligned to each of the milestones will require the bank's approval.
3.	Bidder resources identified and tagged to each application/solution/services implementation	Onsite Full time	<Bidder/OEM to right size>	As per PSB timings and calendar.	At the beginning of the Implementation Phase before the start of requirement gathering phase, the bidder must submit details of the Onsite Resources (Resource deployment plan) assigned to each solution activity/milestones for the bank's approval.

S.No.	Resource Type	Deployment	Count of Resources	Shifts (Minimum)	Experience/skillset
					Any subsequent modifications or replacements aligned to each of the milestones will require the bank's approval.

Operation & Maintenance Phase

S.No.	Resource Type	Deployment	Count of Resources	Shifts	Experience/skillset
1	L1 Resources	Onsite Full time	Please refer below table	24 x7 Shift	<ul style="list-style-type: none"> B.E. /B. Tech /MCA/Any graduate At least one certification from recognized Cyber security OEMs or a recognized security certification such as CISA, CEH Minimum of 2 years of overall experience. Strong knowledge of NextGEN Security solutions, like SIEM, SOAR, UEBA, XDR, TIP, and related technologies. The proposed resource should have experience of managing at least 1 NextGEN SOC solution in at least 1 PSU/ PSE/ Govt Department/ BFSI organizations/ Regulatory Bodies of India <p>Proposed L1 personnel for SIEM must hold a valid certification in a recognized SIEM solution</p>
2	L2 Resources	Onsite Full time	Please refer below table	24 x7 Shift	<ul style="list-style-type: none"> B.E. /B. Tech /MCA/Any graduate At least one recognized security certification such as CISA, CISM, CISSP. Minimum of 5 years of overall experience. Strong knowledge of NextGEN Security solutions, like SIEM, SOAR, UEBA, XDR, TIP, and related technologies. The proposed resource should have experience of managing at least 1 NextGEN Security solution in at least 2 PSU/ PSE/ Govt. Department/ BFSI organizations/ Regulatory Bodies of India

S.No.	Resource Type	Deployment	Count of Resources	Shifts	Experience/skillset
					<ul style="list-style-type: none"> Proposed L2 personnel must hold a valid certification in a solution for which the role for they have been proposed (In case the proposed L2 is not certified on the proposed OEM product, then bidder resource is required to obtain the L2 Level certification (respective proposed solution) within 3 months of being proposed/deployed on site.
x	L3 Resources	Onsite Full time	Bidder to right size	Bidder to right size	<ul style="list-style-type: none"> B.E. /B. Tech /MCA/Any graduate At least one certification in SIEM solutions and a recognized security certification such as CISA, CISM, CISSP. Minimum of 7 years of overall experience. Strong knowledge of NextGEN Security solutions, likse SIEM, SOAR, UEBA,XDR, TIP, and related technologies. The proposed resource should have experience of managing at least 1 NextGEN SOC solution in at least 3 PSU/ PSE/ Govt. Department/ BFSI organizations/Regulatory Bodies of India Proposed L3 personnel must hold a valid certification in a solution for which the role for they have been proposed (In case the proposed L3 is not certified on the proposed OEM product, then bidder resource is required to obtain the L3 Level certification (respective proposed solution) within 3 months of being proposed/deployed on site.
4	Project manager – Operations/ L3	Onsite Full time	1	General Shift	<ul style="list-style-type: none"> B.E. /B. Tech /MCA/Any graduate At least one certification in Project management like PMP, Prince 2, etc. Minimum of 8 years of overall experience.

S.No.	Resource Type	Deployment	Count of Resources	Shifts	Experience/skillset
					<ul style="list-style-type: none"> Strong knowledge of Project management/operations management of Security solutions. <p>The proposed resource should have experience of managing at least 2 Cyber solution Implementation/operations in at least 1 PSU/PSE/ Govt Department/ BFSI organizations/ Regulatory Bodies of India.</p>

The bidder is required to provide onsite human resource for L1 , L2 & L3 resources and respective OEMs are required to provide L3 resource each from the date of NEXGEN SOC solutions installation. The Bank may require to increase onsite personnel resources of the bidder and / or OEMs from time to time. The same need to be provided within one month from the date of such communication. The onsite resources must be provided adequate guidance, assistance and support by competent offsite subject matter experts (SME) of the bidder & OEMs

S. No.	Solution & Services	L1 (Minimum resource count)	L2 (Minimum resource count)	L3 (Minimum resource count)
SOLUTIONS				
1	SIEM	6	3	1 SIEM OEM Resource and for bidder to right size
2	SOC Big Data Lake			
3	SOAR			
4	UEBA			
5	XDR	3	2	Bidder to right size
6	Decoy/HoneyPot	-	1	Bidder to right size
7	Threat Intelligence Platform	-	1	Bidder to right size
8	Vulnerability Assessment, Lifecycle & Management	1	1	Bidder to right size
9	Application Security Testing Tool			
10	Cloud Security Tool	1	1	Bidder to right size
SERVICES				
1	Breach Attack & Simulation	1	2	Bidder to right size
2	Threat Hunting Services			

S. No.	Solution & Services	L1 (Minimum resource count)	L2 (Minimum resource count)	L3 (Minimum resource count)
3	Red Teaming Services	-	(During each simulation exercise along with OEMs)	Bidder to right size
4	Phishing Simulation			
5	Anti-Phishing			
6	Dark Web Monitoring			
7	Threat Intelligence Feed			
8	Attack Surface management			
9	Brand Protection and Monitoring			

Each shift team should have one team lead/shift in-charge & L2.

Resource would be required to positioned in SOC Monitoring Office, IT Security office, DC, DR or any office as per the bank's requirement.

Note-

1. The NextGEN SOC will be 24x7x365 environment and personal resources should be able to work in shifts and flexible working hours to support the operations.
2. The quantity of resources listed in the table above represents the minimum required for on-site deployment. Bidders must ensure that their on-site and off-site deployments are appropriately scaled while adhering to these minimum requirements.
3. The deployment of L1, L2, and L3 on-premises must be right-sized across shift by bidder ensuring 24x7 support. Bidder is required to optimize resource allocation to ensure that each shift maintains a minimum quantity of resources as indicated in the table above.
4. The Resources are named resources which shall be deployed on the project and change of resources is not permissible unless explicitly required and shall be as per SLAs and post approval from BANK.
5. In case of replacement, the following transitioning and knowledge transfer period is to be adhered: Project Manager: 60 days, other key personnel: 45 days and other personnel: 30 days. **Bidder needs to inform Bank in advance before initiating the transition or KT period.**
6. Bidder must deploy competent resources for the team to perform necessary implementation, maintenance and support as per the requirements of BANK. Bidder must deploy adequate resources to ensure that the systems are implemented within timelines, are up & running and customer services are not impacted. To ensure that the SLAs are met, the Bidder if required will need to deploy additional resources during the contract period without any additional cost to BANK.
7. Bank reserves the right to interview all the personnel resources to be deployed on the project and reject if not found suitable for the project.
8. At a later stage also if any of the personnel resources are found unsuitable to perform duties or any of the personnel resources violates any of the Bank guidelines, Bank may seek removal of all such personnel resources.

9. Bank expects to build a strong team and there should be no single point of dependency on any one individual. Bank's services should always remain immune to any such dependencies.
10. Bidder is required to obtain permission from the Bank in writing before removing any of the personnel resources from the project.
11. During the Rollout and Critical stages of the project, bidder should ensure the availability of their senior management to ensure smooth coordination and alignment of team/resources.
12. Project Manager / lead and Team Leads would be the single point of contact for the Bank.
13. The onsite resources must work as per Bank's working days and hours or as decided by the Bank for smooth functioning of NextGEN SOC.
14. The bidder shall be responsible for conducting police verification and background checks for all resources prior to onboarding. If required by the regulator, the bank may request the necessary supporting documentation, which the bidder shall be obliged to submit.
15. The responsibilities of PM are outlined below:
 - a. Lead implementation effort.
 - b. Primarily accountable for successful implementation of the project across bank.
 - c. Act to remove critical project bottlenecks.
 - d. Identification of working team members, and team leads.
 - e. Single point of contact for Bank's senior management.
 - f. Ensure implementation timelines are met to achieve desired result.
 - g. Monitor Change management activities during implementation.
 - h. Identify and implement best practices across the Bank.
 - i. Co-ordinate with OEM/OEMs for successful implementation of solutions.
 - j. Periodic reporting to bank on the implementation status, issues/ challenges faced and how these are handled.

7.11 Facilities Management

Bidder should provide qualified and experienced resources to work during the contract period for (but not limited to):

1. Data administration
2. System Administration
3. IT Infrastructure administration
4. Extraction and development of reports
5. Support technical and functional queries.
6. A technical team, to solve logged issues within SLA period

This facilities management (FM) would have to play a critical role in on-going support. All Operation & maintenance resources will be screened by BANK authorities positioned on the project. Replacement of a resource under unavoidable circumstances needs to be intimated to BANK in advance and the replaced resource should be equally or more qualified and experienced with due handover & Knowledge Transfer.

The Bidder is required to provide support and applicable patches as and when released during the contract period. Any observation raised by Regulators/BANK/Other Agencies from time to time should be rectified and fixed by the bidder at no additional cost to BANK post approval from BANK for deploying the same Support & Maintenance.

7.11.1 Continual Improvement

1. Improve the policies configured on an ongoing basis to reduce the occurrence of false positives.
2. Periodic health checks should be carried out on-site, by the OEM every year to ensure the quality of implementation and operations.
3. Bidder shall curtail the closure time for incidents and events and ensure the periodic check-up reviews for the same.
4. Key personnel, including the Project Manager – Operations, Lead – Security Solutions, and Lead – Security Services, Lead L2 and other key personnel proposed by bidder, who are to be deployed during the Facility Management (FM) phase, these individuals should also be actively involved during the UAT and Go-Live phases to ensure continuity and effective execution during FM Phase.
5. Bidder has to develop and maintain Standard Operating Procedures (SOP) for the day-to-day operations of all the solutions to be managed by the Bidder. The SOPs should cover at least vulnerability/ threat management, alert/incident management, MIS reports & dashboards, rules creation & fine tuning, installation/upgradation, signed firmware updates, asset Integration, Business Continuity data & configuration backup, restoration testing, archival, knowledge management, segregation of duties, change management, patch & version management, as per policies of the Bank for all the applications including databases in the scope. Bidder is expected to create and modify SOPs as per the requirement of the Bank periodically and from time to time, as applicable. All SOPs will be reviewed by the Bank on quarterly basis.
6. Provide post go-live support, which includes but is not limited to system maintenance & support, system performance monitoring, system tuning, root cause analysis, change release management and day to day support (L1, L2, L3), Solution maintenance, SLA compliance etc.
7. Provide support for the platform upgrades, customizations, configurations and resolving bugs/issues.
8. During the support period, the bidder will have to undertake comprehensive support of the solution and all new versions, releases, and updates for all standard product or specified

software supplied to BANK at no additional cost. The Bidder shall maintain the solution to comply with parameters defined in this RFP.

9. Comprehensive maintenance shall include, among other things, day to day maintenance of the product or specified software a reloading of software, compliance to security requirements, etc. when required or in the event of system crash/malfunctioning, arranging, and configuring facility as per the requirements of BANK, fine tuning, system monitoring, log maintenance, etc. The services and the deliverables should strictly adhere to the SLAs.
10. Support would be comprehensive in nature and must have back-to-back support from the OEMs of the tools and CSP.
11. In the event of system break down or failures at any stage, following shall be specified:
 - a) Diagnostics for identification of product or specified software failures and Root Cause Analysis (RCA)
 - b) Protection of data/ configuration
 - c) Recovery/ restart facility
 - d) Backup of product or specified software / configuration
 - e) The Bidder shall support the Software Solution, tools, and infrastructure provisioned during the entire contract duration as specified in Scope of work in this RFP.
12. The Bidder will be single point of contact and responsible for all, components, software, etc. The bidder must note that the managed services as a part of facilities management should be available for all environments viz., production, training, development, and test.
13. During contract period, the bidder will be responsible for:
 - a) Overall maintenance and working of the solution.
 - b) Bug fixing and delivery of patches/ version changes effected
 - c) Providing tools for creating knowledge repository for the bugs identified, resolution mechanism, version upgrade, future upgrade etc. of Application software, tools, OS, RDBMS, application server software, web server software, interfaces, integrations, customization, reports etc.
 - d) Provision should be available for version control and restoring the old versions if required by BANK
14. Bidder shall provide and implement enhancement/modification/patches/ upgrades/ updates for hardware/ software/ Operating System / Middleware etc. as and when released by Service Provider/ OEM or as per requirements of the Bank. Bidder should bring to notice of the Bank all releases/ version changes.
15. Configuration changes, performance monitoring, troubleshooting, patch installation, running of batch processes, database tuning, replacement / support, technical support, application, and data maintenance, taking backup of the database as required, recovery, query generation and management etc. of all software supplied under this RFP document.
16. Immediate bug fixing should be undertaken in the event of software failure causing an interruption of operation as per the response / resolution times defined by BANK. In case of any software /hardware /network failure, the solution should continue to function seamlessly.
17. All the detected software/hardware errors must be notified and corrected, as per the agreed timelines.
18. Support BANK in integrating any new applications to the proposed applications.
19. Provide BCP/DR procedures and conduct DR drills in conjunction with BANK policies/procedures
20. Routing the transactions through backup system in case the primary system fails switching to the DR site in case of system failure .
21. Service records and calls to helpdesk must be maintained and tracked for support, which will be reviewed monthly by BANK .

22. Coordinating and scheduling maintenance activities with BANK and appropriate support functions of BANK/other providers (e.g., network support, facilities support, etc.)
23. Provide maintenance data, as reasonably requested by BANK, to support replacement / refresh scheduling.
24. Provide a single-point-of-contact to users for the resolution of problems.
25. Provide support and assistance, as required, to isolate complex network, operational and software problems related to the proposed solutions .
26. Update, or provide the information required for BANK to update the asset management with BANK.
27. Track and report observed Mean Time Between Failures (MTBF) for Hardware and Software
28. Release Control shall include the following but not limited to:
 - a) All deliveries (full or patch) shall include a release note containing a full list of the contents of the delivery:
 - b) Versions, file sizes and file modification dates of all components included in the delivery
 - c) All reported faults which are newly fixed in the delivery, identified by fault reference code and including a brief description of the nature of the fix
 - d) All change requests which are completed in the delivery, identified by the appropriate reference code, and including a brief description of the means whereby the change is implemented
 - e) All information required to make any appropriate changes to the tuning and configuration of the production Systems or database such that they continue to meet their specifications
29. IT Infrastructure Operations includes but not limited to:
 - a) Major Incident Management
 - b) Determining scope of the problem
 - c) Managing the incident through service restoration
 - d) Validating severity classification of the problem
 - e) Facilitating Service Recovery Team meeting
 - f) Escalating the issue as required
 - g) Conducting Root Cause Analysis
 - h) Preparing restoration plans
30. IT Infrastructure Operations – System Operations includes but not limited to:
 - a) Monitor Cloud infrastructure
 - b) Administer and/or execute Service processes and procedures
 - c) Perform problem determination on systems and components managed by Bidder which include:
 - i IT Infrastructure, System Software and Network problems
 - ii Evaluate planned changes to IT Infrastructure environment and advise requirements to support such changes
 - iii Monitor status of system processes
 - iv Monitor and respond to system/hardware alerts and events, application alerts and application file system space issues
 - v Monitor and maintain system error logs
 - vi Perform required batch setup activities (ad hoc requests)
31. Compute Planning includes but not limited to
 - a) Configuration Management

- b) Performance Management
 - c) Capacity Management
32. Storage Infrastructure Installation and Maintenance includes but is not limited to
- a) File Management
 - b) Management of non-root application file systems including modifying file system sizes
 - c) Storage Environment Management including SAN Switch and device configurations Management, and disk storage arrays and configuration
33. Monitor hardware and system software status, process status, and take necessary action based on detected problems or issues.
34. Provide problem escalation and interact as necessary with third party suppliers.
35. Provide monitoring and troubleshooting for the entire in-scope IT infrastructure.
36. Provide timely notification and escalation to onsite personnel if any hardware and software conditions exist that must be resolved on site to meet the service levels provided in this schedule.
37. Monitor the status of system processes and events.
38. Monitor and respond to hardware, system alerts and event.
39. Monitor and maintain system error logs.
40. Perform application, database, storage replication across the DC & DR as per required Service Levels.
41. Shifting of IT hardware within the premises, reinstallation and configurations including cabling and asset labelling.
42. Execute backup and recovery procedures.

Note: BANK will not be liable to pay any additional charges in respect of any sort of maintenance required during the tenure of the contract.

The list of activities mentioned above are indicative, bidder is required to perform all the activities not limited to the one mentioned in the RFP for maintenance, management and successfully meeting the terms of the RFP.

7.11.2 DR Drill

The bidder is responsible for conducting the DR Drill on a regular basis and as per the frequency decided by the bank in the presence of bank officials. Coordination with the application team, OEMs and bank's team, is the responsibility of the bidder to ensure the successful execution of the DR drill. The bidder is required to maintain documentation of the DR Drill and provide suggestions on improving the RTO and RPO of DR drills. The DR Drill report with learnings, outcome of the drill must be submitted to the Bank and same will be subject to the audit by the Bank. The periodic DR Drill plan should be submitted in advance to the bank for scheduling the same in presence and approval of the bank.

7.11.3 NextGen SOC operations:

Bidder is responsible for below operational matters during the Contract period.

1. The bidder should manage, monitor, maintain and upgrade all NEXTGEN SOC solutions on ongoing basis encompassing all deployed hardware / firmware / middleware / software components by performing timely backups, continuous health monitoring, on-site and offsite support, troubleshooting, critical functional and performance bug fixes, all major product/feature enhancements within the AMC/ATS charges and as per the SLA defined by the Bank for Contract period.
2. All onsite resources should ensure to deliver the services leveraging NEXTGEN SOC technologies as mentioned in the technology details, architecture and Terms & conditions in the RFP, addendums, corrigendum, clarifications etc. issued by the Bank.

3. The onsite resources must be provided with adequate guidance, assistance & support by competent offsite subject matter experts (SME) of the bidder & OEMs.
4. There should be considerable reduction in MTTD (Mean Time to Detect) and (Mean Time to Remediate) MTTR for security incidents by leveraging technology's own capabilities. All daily routine and standard activities of L1 and L2 to be fully automated.
5. Bidder to ensure efficient utilization and monitoring of licenses, optimizing capacity utilization, ensuring quality of data and system performance is maintained optimal, there are no security events omission, misfiring rules, heavy rules and reports etc.
6. L3 personnel resources are expected to provide guidance to L1 & L2 resources. These resources must understand daily activities of L1 & L2 resources and automate the same in phases to achieve automation by the end of first year of operationalizing NEXTGEN SOC setup.
7. Participate and contribute to every DR drill, cyber security drill, table-top exercises by the Bank, regulators or any third party.
8. Conduct DR drill of the NEXTGEN SOC on quarterly interval or as and when required by the Bank.
9. Develop custom plug-ins, parsers, connectors, agents, adopters for all the systems in the Bank or related to the Bank periodically or as and when needed without any extra cost to bank.
10. Develop the baseline for the level of logs to be enabled across the different components of IT including infrastructure, databases, business applications and devices etc. The log baselines should be in line with global best practices including NIST, SANS etc. followed by govt., regulatory compliances, Cybersecurity framework and ISO 27001:2013.
11. Perform fortnightly & monthly gap analysis of issues/threat/vulnerabilities in OS, databases, web servers, applications and devices and entire IT infrastructure & recommend and implement remedial actions.
12. Periodically assess the business requirements and configure the required rules, AI/ML based analytics models, self-learning models & processes and generate alerts as per the global best practices and Bank's requirements.
13. The bidder should provide the on-site support for 24/7 around the year (365 days) for the period of AMC and ATS. L3 support executive should be available during Bank's business hours and whenever required by the Bank during any activity. The support should cover the equipment management, software management, customization, policy installation, maintenance, support, consultation, trouble shooting, forensic analysis etc. As per the bank guidelines, to ensure the effectiveness of business continuity procedure.
14. Creating new reports and customize existing reports, dashboards, rules, queries, user interface in all forms to meet the dynamic requirements of the Bank.
15. Define formats for MIS reporting that include daily, weekly and monthly or any periodical or ad-hoc reports, dashboards as per the Bank's requirements.
16. There should be alert generated and sent to concerned owner(s) for every Potential Security Threat and Incident identified based on the configured rules, and comprehensive AI/ML based modelling on the logs received from the respective Application(s). This mechanism should be based on OWASP foundation and other leading threat modelling Parameters based on the best practices. Unique use cases should be developed and implemented for each business application.
17. Transfer the knowledge to the Bank's SOC employees and/or Banks' IT security team about day-to-day operations, system / backend level troubleshooting, dashboarding, creating basic and advanced rules & analytical models, creation and customization of reports & queries etc.
18. End-to-End system level frontend and backend management & maintenance related knowledge need to be transferred to the Bank's staff by the bidder's onsite L1 & L2 resources.

19. There should not be any disruption or degradation in the Bank's network bandwidth utilization and availability due to excessive log transmission or any configurations/customization in the proposed solution.
20. Secure configuration baseline should be benchmarked and updated on a periodic basis with standards including SANS, NIST, CIS etc. followed by Bank's policies, CERT-IN, IDRT, RBI guidelines as updated from time to time.
21. The bidder should use bank provided Ticketing tool identified from time to time for ticketing system, tracking instructions received from application/asset owners like integration, VAPT, incident management etc. Instruction/actionable for the day-to-day operation within the NEXTGEN SOC team should be routed through such tool. Such entries in the ticketing tool should be able to provide activities/jobs completed, pending, pending at which/whose end etc. The performance & turnaround time/efficiency of onsite personnel resource would also be evaluated from the MIS generated from this tool/system.
22. All deliverables including reports, incidents/alerts, their closure, vulnerabilities reported and closed, dashboards, query optimization, indexing, automation based on AI/ML, backup & recovery activities etc. should undergo Quality Assurance process by the onsite resources on an ongoing basis. Project Manager of the bidder and Bidder should define quality metrics, measurement frequency and reporting periodicity in consultation with the Bank.
23. Bidder to ensure security of NEXTGEN SOC setup from cyber-attacks & malwares etc. Any suspicious activity, behaviour of the NEXTGEN SOC setup must be immediately taken into consideration and acted upon at the top priority.
24. For the security of the NEXTGEN SOC setup, bidder should integrate the complete NEXTGEN SOC setup with all the currently & to-be deployed tools and those procured from time to time by the bank.
25. The NEXTGEN SOC setup must be complete in all the respect with different solution components like SIEM, UEBA, SOAR, SBDL etc. are fully integrated to deliver the functionality as one comprehensive solution to ensure logs are captured and the process is automated to perform the desired processes in real-time basis 24x7x365. The system should also be automated to raise the alert to the designated official(s) of the Bank, if there is no log received for a period of 15 minutes. This duration of 15 minutes would be reviewed and reduced depending on the future requirements of the Bank.
26. Review onsite & offsite users as per Segregation of Duties (SoD) like their roles & responsibilities, access level / rights in the NEXTGEN SOC technologies and other related onsite / offsite systems etc. on periodic basis and deactivate / modify user access etc. as per requirement with prior approval from the Bank.
27. The digital forensic investigation should be conducted as and when required capturing the complete replay of attack including the ingress and egress of payload in order to provide the exhaustive insight and findings on "Who did it, what did happen, when did it happen, where did it happen, how did it happen, whom did it impact" for each security incident. This entire process should be fully automated with tight integration and collaboration among all the components of deployed NEXTGEN SOC solution.
28. Monitor, detect, prevent and appropriately respond against any known and un-knowns security threat, risk, bots' identification etc.
29. Bidder must provide the summary & presentation before going for any major hardware/firmware/middleware/software version upgrade to cover all new functionalities, features and bug fixes that are coming with new version/upgrade.
30. During the entire Contract period at any point of time, if the performance of any system of NEXTGEN SOC setup is found to be not satisfactory as per RFP requirement then the Bidder shall

be responsible to upgrade the hardware, software, applications etc. to meet the RFP terms at no extra cost to the Bank.

31. Bidder to ensure that the NEXTGEN SOC technologies/solutions, services are capable & configurable to send logs, data, network traffic, security alerts etc. on demand to regulators like CERT-in, NCIIIPC, RBI etc.
32. If any hardware, software, application, services has got additional component, feature, functionality, load bearing capability, domestic & foreign compliance requirements, security arrangement etc. the same can be activated or provided to the NEXTGEN SOC setup just by activating licenses and without procuring any hardware, then the same should be activated and provided in the NEXTGEN SOC setup of the Bank without any extra cost to the bank.
33. Email and Telephonic Support should also be provided by the back-end experts to the On-site support team.
34. The successful bidder should provide comprehensive AMC & ATS for proposed solutions, including other software, associated modules, hardware and services required to meet the requirements in the RFP.
 - a) The AMC/ATS support for the complete solution should include the following:
 - b) All minor version upgrades during the period of contract at no extra cost
 - c) Program updates, patches, fixes and critical security alerts as required.
 - d) Documentation updates.
 - e) 24*7*365 support for all the security application related malfunctions and ability to log requests online.
 - f) The Bidder should have back-to-back agreement with the OEMs for ATS and AMC support.

35. Application management includes but not limited to:

Task	Activities
Services required	<ol style="list-style-type: none"> 1. Installation, configuration, and Un-installation of application 2. Processing Change requests 3. Bug fixing & patch management 4. Vulnerability Assessment and management 5. Data Migration and Uploading 6. Application code migration to new environment 7. Incident and problem management 8. 24*7 Performance Monitoring & Management of application 9. Application Patch management and version control 10. Secondary site setup creation and DR management including DR synchronization, DR drill, etc. 11. Perform Primary – secondary site drills (DC-DR Drills) 12. Managing capacity and augmenting in order to meet the SLAs 13. Deploying objects in Application server 14. Troubleshooting Application server product related issues and Patch Management 15. Configure, start, stop, and manage Server services for all environment and nodes as required. 16. Configure and manage HTTP/HTTPS 17. Configure and use monitoring tools provided for Application Server 18. Backup & restoration management of application server 19. Performance management 20. Vendor management (Logging a call with product Vendor)

Task	Activities
	21. Version migration, testing and implementation 22. File Level Backup of compute 23. Portal/content management. 24. User management 25. Support to known errors and problems 26. Monitor web / Application server availability 27. Monitor alert notifications, checking for impending problems, triggering appropriate actions. 28. Bidder is required to factor in a solution to automate the batch jobs to meet the requirements of the RFP.

36. OS/Server/Appliance/Hardware Management categorized under Incident, Problem and performance Management Services

Bidder needs to provide below mentioned services but should not limit itself to this list:

- a) Account administration
- b) Performance, Incident and Problem Management
- c) Monthly / Fortnightly call analysis
- d) Device rights control
- e) Monitoring service availability, resource usage i.e., CPU, memory, disk space usage, storage bandwidth and utilization, load balancing, service performance,
- f) Preparation of Preventive Maintenance calendar, Checklist, Root cause analysis and Capacity report
- g) Updating knowledge base, Service pack, patch, and Antivirus definition
- h) OS Hardening
- i) Troubleshooting system alerts with knowledge base
- j) Closure of new incidents
- k) Primary site /Secondary site failure testing along with BANK where the operations will be carried out from secondary site.
- l) Liaise with Bidders for escalation.
- m) Audit of administrator accounts and log file archives
- n) Testing of backup for data reliability, patches, and service packs
- o) Patch Implementation
- p) Network reachability
- q) Configuring backup jobs
- r) Log analysis and monitoring
- s) Rotation of Log file
- t) Restoration Drill
- u) Defining Backup Policy, adherence to backup schedule and troubleshooting backup failures
- v) Performance Tuning

37. System administration services

Task	Activities
Client account maintenance	1. Creating users, groups, user accounts 2. Disabling user accounts 3. Modifying user accounts, etc. on the system 4. Review and approval processes

Task	Activities
File / system / access management	<ol style="list-style-type: none"> 1. Maintaining file and directory permissions on OS 2. Application access management like creating user accounts at application level 3. Access management should be adaptive, based on browser, location, device, time, holidays, etc. 4. Assigning application access 5. Setting application passwords, user lockout, etc.
Security monitoring and investigation	<ol style="list-style-type: none"> 1. Monitor physical security 2. Assess risks on a particular system OS environment and user needs 3. Monitor network security 4. Monitor denial of service attacks, bad bugs programmed threats etc. 5. Track logins, logouts, command runs 6. Perform regular security audits, etc.
Performance optimization and reporting	<ol style="list-style-type: none"> 1. Process and Memory Management 2. Monitoring CPU performance 3. Monitoring Memory performance 4. Conduct root cause analysis 5. Monitoring Input / Output performance 6. Monitoring Internet and Ethernet Traffic 7. Monitoring Load balancing 8. Monitoring Storage bandwidth 9. Error detection and correction 10. Troubleshooting and client support, etc.
Backup File Retention	<ol style="list-style-type: none"> 1. Creating backup schedule 2. Performing backups and restoring files 3. Storing backups, Bidder should take backups for the entire period of contract.

38. IT Service Desk and Managed Services

Service Desk and Managed Services Levels:

- a) Level 1 Service desk
- b) Level 2 Service desk
- c) Level 3 Service desk

A) Level 1 (L1) Support:

Role of L1:

- a) Serve as IT Service desk front-end for all users
- b) Provide services request sorting and ticket routing, if not applicable to bidder

Problems that L1 would address.

- a) Business application related issues/queries
- b) Queries related to business process, reports generation, presentation layer applications, etc.
- c) Enterprise applications (In-Scope), Operating System, Database, Middleware, Application server software, Generic IT Queries, IT Infrastructure queries
- d) Other environmental software related to the proposed solution

L1 staff responsibility

- a) Assessment in case of specific rights assignment
- b) Provision for assigning user rights only for certain fixed period
- c) Creation or modification of user profiles
- d) Periodic user right monitoring (at known frequency) must be specified and implemented
- e) Categorization of requests into functional clarification, bug or change request
- f) Functional clarification/ workaround to be provided by Level 1 support itself
- g) Logging bug and reporting for further processing
- h) Provide support through telephonic and/ or electronic mechanisms for problem reporting requests and for service and status updates

B) Level 2 (L2) Support:

Role of L2:

- a) Should cover entire management and support of the proposed solutions and all third-party solutions
- b) To act upon the tickets routed from Level 1 (L1)
- c) To address issues/queries related to the applications, i.e., proposed solutions and all proposed infrastructure
- d) To assess cause of the issue and accordingly resolve the same within the timelines
- e) Track problems from initial call to restore to service

L2 staff's responsibility (Bidder needs to provide mentioned services but should not limit itself to this list)

- a) Troubleshoot any query processing, online processing, or batch processing activity at various levels in the proposed solution
- b) Resolve the call within stipulated timeframe as defined in SLA by coordinating with the L1 or L3 teams if required
- c) Escalate unresolved calls as per escalation matrix
- d) Automatically log in calls during escalation
- e) Provide the timeframe for providing a resolution of the escalated calls
- f) Decide on preventive maintenance schedule with BANK
- g) Prepare a root cause analysis document with the resolutions provided for major issues such as: Production issues, Problems resulting in complete service disruptions or downtime, Delayed response times, Data /table corruptions, System Performance issues (high utilization levels), etc.
- h) Application database and presentation layer support
- i) Support and maintain all interfaces to the proposed solution and other solutions part of this scope document
- j) Modifications to existing scripts, reports
- k) Present to BANK management on critical issues reported, resolved, solution provided and suggested recommendations or leading practices as and when asked by BANK or monthly, whichever is earlier
- l) Perform performance tuning of the applications including database tuning
- m) Rectify any corruption in the software
- n) Ensure patch releases are deployed to the production environment with no business disruption or business loss
- o) Support BCP/DR drills
- p) Provide application support
- q) Routing the transactions through the backup system in case the primary system fails

- r) Providing BANK with hardware utilization reports (as per the frequency directed by BANK) and alerting in case of any performance issues or hardware upgrade requirements
- s) Support for integrating any applications that need to be interfaced with the proposed solution in the future
- t) The engineers are expected to provide following services: Configuration changes, version up-gradations, performance monitoring, trouble shooting, patch installation, running of batch processes, database tuning, and liaison with respective product owner/OEMs and/or CSP for various support issues, taking periodic backup of the database, query generation, etc.

Bidder is also expected to offer any other service that is required for the above purposes and is not mentioned in the list.

C) Level 3 (L3) Support:

Role of L3

- a) To handle all critical code level changes or issues related to hardware failure
- b) The support is required for all components that are mentioned in this RFP

L3 staff's responsibility (Bidder needs to provide mentioned services but should not limit itself to this list)

- a) Resolve the call within the stipulated timeframe as defined under the SLA
- b) Updating status, resolution or workaround and date of resolution and informing BANK on the same
- c) Preparing a root cause analysis document for issues referred to L3 support and provide to BANK along with the resolution
- d) Liaise with L2 support personnel for the call information and resolution
- e) Provide version upgrades and
 - i Perform version migration as per the version release plan of product owner/ OEM and agreed by BANK. It also includes porting of existing customizations
 - ii Provide training to BANK's core functional and technical team members on the new version functionalities and technical aspects
 - iii Plan and schedule implementation for the upgrades with BANK

Bidder is also expected to offer any other service that is required for the above purposes and is not mentioned in the list.

7.11.4 OEM Services & Deployment:

Assessment & performance review

1. Review of respective solutions configurations (Custom parsers, playbooks, controls, rules and process etc.) of the OEM solution
2. System Optimization review and suggestion including remedial actions.
3. Review the bidder's implementation of suggestions of remedial actions.

7.11.5 System recovery

1. In case of disaster, it is the responsibility of the Respective solution OEM along with the bidder to ensure that services remain unaffected and same is up and running from secondary site (DR) .
2. It is bidder's responsibility to maintain DC – DR patches, updates & upgrades on continuous basis. Bidder to ensure that scheduled / unscheduled DR drills is conducted on regular basis

- (Quarterly basis or as defined by BANK). As part of these exercises, bidder to submit compliance / completion of activity reports at the end of the activity.
3. Bidder is responsible for performing DR drills between the proposed primary (DC) & secondary site (DR). Also, bidder to participate and assist BANK in their DR drill (planned & unplanned) and ensure the availability of solution during BANK's drills. During the DR Drills, bidder to ensure that full manpower deployment is made available during the drill.
 4. Processes shall be in place to allow for recovery to a disaster recovery hardware platform, and the bidder shall provide Estimates of recovery time.
 5. Proposed method of recovering the logical state of the production service, Likely extent of data loss in the event of such recovery being required .
 6. The Bidder shall maintain following documentation and same shall be shared during the starting of the project and every MONTH highlighting the updates made in the document with respect to the previous version.
 - a) Disaster Recovery Plan- identifying the operations involved in disaster recovery and the dependencies between these operations.
 - b) Disaster Recovery Procedures- providing step-by-step instructions for the operations identified in the Disaster Recovery Plan .
 - c) Disaster Recovery Test Plan- identifying the steps and resources required to carry out a Disaster Recovery test to validate the Disaster Recovery Plan and Procedures .
 7. The Bidder shall ensure that each batch job (if any) can, following a failure, be restarted from the point of failure once the cause of the failure has been removed

7.12 Other In-Scope Services

7.12.1 Other Scope Activity

1. The Respective solution OEM along with the bidder is expected to ensure that all functionalities as mentioned in Appendix 1A: Functional Specification & Appendix 1B: Technical Specification are made available to PSB.
2. The Respective solution OEM along with the bidder is expected to ensure that for the purpose of this RFP, statutory and regulatory changes shall mean any change prescribed by the statutory and regulatory bodies governing/ affecting the banking industry in India viz. Reserve Bank of India, Ministry of Finance, CCIL, NPCI, IBA, SEBI, or any such bodies constituted by the RBI mandating change/s to an existing functionality of the Solution shall be provided to the Bank at no additional cost for the entire contract period. However, any Statutory and Regulatory changes post Go-Live of the respective application (which are not a part of the existing functionalities) will be on CR basis based on the rates provided in the Bill of Material.
3. The Respective solution OEM along with the bidder is expected to carry out a requirement study for the functionalities and services required by PSB, to gain understanding of the business requirements.
4. Respective solution OEM along with the bidder must note that it shall not be permitted to change the proposed OEM Solution after submission of bid. Bidder must also note that it shall not be permitted to quote any options of solution/OEM. Failure to adhere to this clause may attract disqualification of the bid / contract as well as invoke related damage clauses as specified in Terms and Conditions.
5. The Respective solution OEM along with the bidder is expected to customize the screens, design and layout of the solution depending on the requirements of the bank, at no additional cost to the bank as per the specific UI/UX design finalised during the SRS
6. The Respective solution OEM along with the bidder is expected to customize the solution based on the requirements of bank.
7. The Respective solution OEM along with the bidder is expected to support the bank in the installation, implementation, rollout and maintenance of all the proposed applications.
8. The Respective solution OEM along with the bidder is responsible to impart requisite training to the bank officials as per the ask of the RFP
9. The Respective solution OEM along with the bidder has to ensure the seamless switching of all the services to Disaster Recovery (DR) site during DR drill as and when decided by Bank or in case of non- availability of primary/ DC site.
10. The Respective solution OEM along with the bidder needs to mention any other security feature supported by the system with details and architecture of the security components.
11. The Respective solution OEM along with the bidder is required to make changes in the Solution including software, procedure and operations as required by regulators from time to time to comply with any new rules of Indian Law, RBI, IBA, TRAI, Govt. of India, NPCI guidelines and other Regulator body for all the proposed solutions.
12. The Bidder should ensure continual security of the software/solution. Any development activity for incorporating security measures should be a part of the ATS.
13. The hosting Space and Power arrangement shall be provided by the Bank at DC and DRC. However, the bidder is required to factor in the requisite racks in order to successfully operationalise the proposed hardware.

14. It is the responsibility of the Respective solution OEM along with the bidder to resolve any deficiency identified in the performance of proposed solutions, as observed during the acceptance test. This includes the replacement of some or all equipment at no additional cost to the Bank, to ensure that the solution meets the requirements of the Bank as envisaged in the RFP.

7.12.2 Escrow

The Bank and the Bidder shall agree to appoint an escrow agent to provide escrow mechanism for the deposit of the source code of any customization done on Commercial off the shelf software products supplied/ procured by the Bidder to the Bank in order to protect its interests in an eventual situation. The Bank and the Bidder shall enter into a tripartite escrow agreement with the designated escrow agent, which will set out, inter alia, the events of the release of the source code and the obligations of the escrow agent. Costs for the Escrow will be borne by the Bidder.

7.12.3 Exit Plan Management

1. The scope of work mentioned is illustrative and not exhaustive. Bidder needs to comply with the Bank's requirements and any statutory or regulatory guideline(s).
2. Bidder to provide Termination/Expiration Assistance regardless of the reason for termination or expiration
3. Bidder to comply/adhere to the Exit Plan
4. Bidder will not make any changes to the Services under the Agreement and continue to provide all Services to comply with the defined Service Levels.
5. Bidder to perform reverse transition of services to the bank's new vendor or bank's officials.
6. Bidder shall within ninety (90) days of the Signing Date, deliver to Bank a plan specifying the Termination/Expiration Assistance including functions and services of Bidder necessary to accomplish the transfer of responsibility of the Services from the Bidder to the Bank or a Third Party. In the event of Term Expiration or termination of this Agreement, the plan shall at minimum, contain Bidder's detailed plan for Operational and Knowledge Transfer requirements and list of documentations.
7. The Exit Plan shall be updated by the Bidder on an annual basis in accordance with Bank's requirements and delivered to Bank for its approval on or before the start of each Contract Year.
8. Knowledge Transfer and Handover of Services
9. Bidder to provide transfer of knowledge w.r.t. Services
10. Provide Bank's personnel or designated third party personnel training for the Services that are to be transferred.
11. Bidder shall train Bank's designated personnel and/or its designee(s) for any process or associated Equipment's', Materials, Systems or tools used in connection to the Services
12. Provide Bank and/or its designee(s) information regarding Services (as necessary) for implementation of the Exit Plan. Bidder to also provide information regarding Services as reasonably necessary to the Bank or its designee(s) to overtake responsibility for continued performance of Services in an orderly manner so as to minimize disruption in operations.
13. Provide Bank or its designee(s) a complete copy of the Bank's IP that are in Bidder's possession and Bidder's IP that Bank is licensed or otherwise authorized to use.
14. Explain the change management process, problem management process, Policies and Procedure Manual, reports and other standards and procedures to Bank's or its designated staff.
15. Provide technical documentation for Software used by the Service Provider for continued Services

16. Identify, record and provide release levels of Software and update of records of release levels prior to and/or during transition of Services
17. Provide assistance to the Bank or its designated officials for notifying the third-party vendors for procedures to be followed during the transition of Services.
18. Ensure transfer of Configuration Management Database (CMDB) that contains details of data elements that are used for management of Services. The CMDB must be in a form that can be migrated to a new environment that can manage Configured Items.
19. Bidder shall provide other technical and process related assistance, as requested by the Bank.
20. The bidder will not be allowed to take bank's IP information.
21. If the Reverse Transition is within the contract period, the successful bidder will be paid as per the support charges agreed in this contract, during the transition period till the completion of reverse transition. If the Reverse Transition occurs outside the contract period, then it will be mutually agreed terms and conditions. The transition out phase and the support required from the Successful Bidder shall be communicated to the Successful Bidder before the transition starts. The bank shall reserve the right to revise the transition period. During the Transition Period, successful bidder shall at least, but not limited to, provide support in terms of transition of assets and data, training and knowledge transfer and any other type of support during the defined transition period.
22. Bidder is required to provide the data dictionaries and data in the requested format to the bank/banks identified bidders.

7.12.4 Security Management

1. User id and login should determine level of access to data e.g. read/view data, print data, write/modify data, delete data etc.
2. The solution should support the following security features:
 - a) Username and password for accessing the applications and database
 - b) Access credentials should not be stored on the endpoints
 - c) Auto blocking/locking of applications access upon reaching maximum number of tries.
The maximum number of incorrect errors should be defined by the Bank
3. Termination of session and log off after lapses of configurable time period.
4. The solution should support the following transaction level security:
 - a) End-to-End encryption of data transmission (symmetric or asymmetric)
 - b) The solution should support multiple authentication-based bank's preferences
5. The solution should support the following platform security & reliability:
 - a) Data stored is encrypted in the platform database
 - b) Audit trails and logging features must be available in Web Server, application server and database server
 - c) Ability to assign specific rights to platform administrators for secure and restricted access
 - d) Solution should have the ability to support external certifying authority
 - e) The solution should have secure interfaces to various hosts systems according to prevailing security standards
 - f) Application access credentials should not be stored locally.
 - g) Solution should support standard algorithms like AES

- h) Solution should have a minimum encryption strength of 256 bit for end-to-end transaction (Standard encryption algorithms like 3DES, AES, PKI scheme, with minimum encryption strength of 256 bit)
- i) The predefined pages of the web portal should handle web application security threats like Cross-site scripting, SQL injection flaws, Malicious file execution, Information leakage, Improper error handling, Broken authentication and session management, Insecure Cryptographic storage, Failure to restrict URL access.
- j) Platform should have a clear separation of security responsibilities and should be designed for externalized security implementing JAAS (Java Authentication and Authorization Services) allows for pluggable providers
- k) OWASP Top 10 Compliant
- l) Password must be hashed by SHA256 at least and include Salt or using salt supported cryptography
- m) All the sensitive data (e.g. passwords), including their backups, stored in an encoded or encrypted form in order not to be readable in case of exploitation or other application corruption
- n) Sensitive Data Exposure:
 - i Sensitive data should be masked when output.
 - ii Sensitive data should not be stored in source code, config files and logs.
 - iii Passwords are hashed using Salt.
- o) Configurable approval rules set up for Bank administrator to perform the actions
- p) Regulatory & Statuary
 - i The solution should comply with the security principles and practices as stipulated by Statuary and regulatory authorities in India
- q) Application
 - i OS Security check up. Application should have capability to detect if the application is running on a jail-broken / rooted / malware infected device.
 - ii Application must prevent hackers from accessing the application in a case where the device is rooted or jail broken.
 - iii Blacklisting/Blocking of older versions of the Application on the back end, if there is a security breach.
- r) Transaction Logs
 - i Should maintain detailed transaction logs to enable processing audit trails to be reconstructed in the event of any disputes or errors
 - ii The storage and retention period of logs should be parameterized
 - iii Security safeguards should also be implemented to protect the information from unauthorized modification or destruction
 - iv System should facilitate maintaining logs.
 - v Provision to generate detailed reports, logs, audit trails

7.12.5 DR Setup - Activities are to be performed by Respective Solution OEM (supported by bidder)

1. Respective solution OEM along with the bidder has to ensure that DR setup is ready on the date of Go Live of respective Applications

2. Respective solution OEM along with the bidder should make necessary setup to enable the DR within the agreed timelines.
3. Respective solution OEM along with the bidder should carry out the deployment of the application in DC and DR, UAT as applicable.
4. To ensure proper rollback, Respective solution OEM along with the bidder has to ensure that the old setup at all the locations is as-IS as per the agreed timelines during migration strategy formulation.

8 CONTRACT PERIOD

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

The Bidder is required to sign the contract within 15 days from the date of acceptance of the Purchase Order.

The contract period for the project is the Implementation Period (as mentioned in Section 9: Project Timelines) + Support period (60 Month Post Go-live) which will commence from the effective date of agreement.

The bank may, at its sole discretion, extend the contract for an additional period of two years, in one-year increments tranches. During the extension period, the annual rates of respective support components shall not exceed 15-20% of the last year's support components (ATS/ AMC/ O&M/ Subscription/ Services) prices.

The decision to further extend the contract with the same bidder shall be at the sole discretion of the Bank. Further, the Bank will have the right to renegotiate prices of AMC, ATS rates at the end of the contract period.

End of Sales / End of support: The bidder must ensure that any equipment (hardware/software) supplied as part of this RFP should not have either reached or announced end of sales as on the date of such supply or end of support for at least duration of the contract (including the period of 2-year extension).

In the event if any equipment supplied by the bidder reaches the end of support, within the contract period, the bidder has to replace the equipment/component at no additional cost to the Bank.

During the extension period, if any product goes end of support bidder is required to provide the extended OEM support for proposed product or provide the bank with the alternative product of similar/higher configuration from OEM (with requisite support) at no additional cost to the bank.

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

9 PROJECT TIMELINES

Overall Implementation period shall be 6 Months for all solution & services

A) Hardware & Software Delivery & Installations

S.No.	Activity/Milestone	Start date	End Date
1	Delivery of Hardware	T0	T1= T0+2 Month

2	Delivery of Software	T1	T2 = T1+0.5 Month
3	Installation of hardware	T2	T3 = T1 + 0.5 Month
4	Installation of software	T3	T4=T2+0.5 Month

B) Product Implementation Timelines: The timelines are applicable to each of the proposed products

S.No.	Activity/Milestone	Start date	End Date
1	Milestone 1: SRS, HLD, LLD Signoff of Respective application	T0	T1= T0+2.5 Month
2	Milestone 2: Implementation, Configuration, UT & SIT	T1	T2 = T1+2.5 Month
3	Milestone 3: UAT & UAT Signoff	T2	T3 = T2 + 0.5 Month
4	Milestone 4: Go-live preparedness, DR readiness and Go-live	T3	T4=T3

*All the requirement marked by bidder as “S” and “C” has to be delivered before UAT

C) Services Implementation (One time) Timelines:

S.No.	Activity/Milestone	Start date	End Date
1	Milestone 1: SRS, HLD, LLD Signoff of Respective services	T0	T1= T0+1.5 Month
2	Milestone 2: Installation & configuration of software/solution/tools	T0	T2= T0+1.5 Month
3	Milestone 3: UAT & UAT Signoff in bank’s environment	T2	T3= T2+1 Month
4	Milestone 4: Go-live preparedness, and Go-live	T3	T4=T3+0.5 Month

T0- Date of acceptance of PO

Architecture Assessment on a half yearly basis- Within 15 days of bank notifying the bidder to initiate the assessment.

*The timelines provided are indicative, but the *overall implementation period* is non-negotiable. Individual milestones will be discussed and agreed upon with the bank, and the approved dates will be used for tracking progress and calculating SLAs and LDs.

10 EVALUATION CRITERIA

10.1 Preliminary Scrutiny

1. The Bank will examine the Bids to determine whether they are complete, required formats have been furnished, the documents have been properly signed, and the Bids are generally in order.
2. The Bank may, at its discretion, waive any minor infirmity, non-conformity, or irregularity in a Bid, which does not constitute a material deviation.
3. The Bank will determine the responsiveness of each Bid to the Bidding Document. For the purposes of these Clauses, a responsive Bid is one which conforms to all the terms and

conditions of the Bidding Document without material deviations. Deviations from, or objections or reservations to critical provisions, such as those concerning Bid Security, Applicable Law, Bank Guarantee will be deemed to be a material deviation.

4. The Bank's determination of a Bid's responsiveness will be based on the contents of the Bid itself, without recourse to extrinsic evidence. The Bank reserves the right to evaluate the bids on technical and functional parameters, including possible visits to inspect live site/s of the Bidder and witness demos of the system and verify functionalities, response times, etc.
5. If a Bid is not responsive, it will be rejected by the Bank and may not subsequently be made responsive by the Bidder by correction of the non-conformity.
6. If any information / data / particulars are found to be incorrect, bank will have the right to disqualify the company, take appropriate action and invoke the performance bank guarantee/ EMD

A stage bid system is adopted for selection of the bidder:

- ▶ Stage 1 – Eligibility Bid evaluation
- ▶ Stage 2 - Evaluation methodology for eligible bidders
 - Technical Bid Evaluation
 - Commercial Bid Evaluation
 - Weighted evaluation (H1)

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

10.2 Eligibility Evaluation Criteria

Eligibility criteria to be met mandatorily by the bidders:

#	Eligibility Criteria/Clause	Documents
1	Proof of Earnest Money Deposit	To be submitted along with the bid.
2	The Bidder should be operating in India as a registered company under Companies Act, 2013/1956 or LLP (Limited Liability Partnership) Act 2008 or Partnership firms registered under the Indian Partnership Act, 1932 with registered offices in India, and should be in existence in India for at least the last 5 (five) years as on date of opening of the bid	Copy of Certificate of Incorporation or Partnership Deed Copy of Registration Certificate/GST Registration certificate Copies of all documents listed above should be attested by authorized signatory and must be submitted along with the response.
3	The bidder should have valid PAN and GST Registration in India	Copy of Valid PAN Card, GST Registration Certificates issued by competent authority in India
4	The bidder should have a minimum turnover of INR 500 crore per annum in India for each of the past 3 financial years (i.e. 2021-22, 2022-23 & 2023-24) along with positive net worth. Note – In case of MSMEs only, the turnover may be relaxed subject to meeting the quality and technical specifications.	CA Certificate mentioning the turnover and net worth for each financial year. and Audited Financial statements (Balance sheet & Profit & Loss statement). The CA certificate provided in this regard should be without any riders or qualification.
5	The bidder should be an authorized representative/ partner/ reseller of OEM in India. MAF should be submitted from the following solution OEMs: a. SIEM b. S-BDL c. SOAR d. UEBA	MAF from the respective OEMs of the solution & services

#	Eligibility Criteria/Clause	Documents
	<ul style="list-style-type: none"> e. Extended Detection & response (XDR) f. Decoy g. Threat Intelligence Platform h. Vulnerability Assessment & Lifecycle management i. Application Security Testing j. Cloud Security Posture Management Tool <p>MAF should also be submitted from the following services OEMs:</p> <ul style="list-style-type: none"> a. Breach Attack & Simulation b. Red Teaming services c. Attack Surface management d. Phishing simulation e. Anti-phishing f. Dark web monitoring g. Brand protection & Monitoring h. Threat Intelligence feed i. Threat hunting services 	
6	Bidder must have at least enrolled manpower (on bidder's payroll) of 100 experienced employees skilled in areas of Cyber security.	Self-certification from the bidder
7	The Bidder must have successfully supplied, installed and maintained (or under maintenance) SIEM Solution of minimum 20000 EPS / 0.8 TB per day in one PSU/ PSE/ Government Organizations / BFSI in India	<p>Copy of Purchase Order/Work Order/ Contract AND</p> <p>Client Credential letter highlighting the product and stage of the project/Email Confirmation from the client highlighting the product and stage of the project.</p>
8	<p>Bidder should have supplied, installed and maintained (or under maintenance) any three (3) of the below solutions in any one PSU/PSE/ Government Organizations / BFSI in India</p> <ul style="list-style-type: none"> a. SOAR b. UEBA 	<p>Copy of Purchase Order/Work Order/ Contract AND</p> <p>Client Credential letter highlighting the product and stage of the project/Email Confirmation from the client highlighting the product and stage of the project.</p>

#	Eligibility Criteria/Clause	Documents
	<p>c. Extended Detection & response (XDR)/ Endpoint Detection & response (EDR)/Network Detection & response (NDR)</p> <p>d. Threat Intelligence Platform</p> <p>e. Vulnerability Assessment & Lifecycle management</p> <p>f. Decoy/Honeypot</p> <p>g. Application security testing tool</p> <p>h. Cloud Security posture management tool</p> <p>Note: - Experience of solution can be shown in single /multiple Clients/work orders meeting the above criteria</p>	
9	Bidder must have back-to-back support relation with the proposed OEMs of solutions & services.	<p>Self-Declaration from the bidder's authorized signatory stating the following:</p> <p>"We M/s _____ confirm that we shall backline with the respective solutions & services OEMs proposed through this RFP within 1 month of issuance of the Purchase order.</p> <p>We shall submit the relevant copy of the backlining agreement/ excerpt of the agreement/OEM confirmation for the duration of the contract" to substantiate the said clause.</p>
10	<p>If the bidder or its subsidiary or its associate or sister company or its holding company has already had an association with Punjab & Sind Bank in the past 5 years or at present as a service provider on any project, then the bidder is required to submit the satisfactory certificate from the bank issued/dated post the issuance of the RFP.</p> <p>Additionally, the Bidder should not have any Service Level Agreement/Contract pending to be signed with the Bank pending for more than 6 months from the date of issue of purchase order</p>	Self-Certification from the bidder along with the satisfactory certificate from PSB (In case of association)

#	Eligibility Criteria/Clause	Documents
11	The Bidder to provide information that none of its subsidiaries or sister company or associate or holding company or companies having common director/s or companies in the same group of promoters/management or partnership firms/LLPs having common partners is not owned by any Director or Employee of the Bank.	Self-Certification from the bidder
12	The Bidder should not have been blacklisted at the time of submission of the bid by any regulator / statutory body/ any government department/ PSU/ BFSI in India.	Self-Certification from the bidder as per Annexure 11
13	The bidder should not be involved in any litigation which threatens the solvency of company.	Self-Certification from the bidder as per Annexure 10
14	Labor Law Compliance	Self-Certification from the bidder
15	Integrity Pact	Document on 100 Rs Stamp paper, duly signed and stamped by the authorized signatory.
16	Non-Disclosure Agreement	Document on 100 Rs Stamp paper, duly signed and stamped by the authorized signatory.
17	To avoid conflict of interest the successful bidder or its subsidiary or its associate or sister company or its holding company should not be the IT Security vendor of the bank under the existing or new contract	Self-declaration signed by Authorized Signatory of the bidder.
OEM Evaluation Criteria		
18	The proposed OEM SIEM solution with minimum 100000 EPS/ 4TB per day should have been implemented in at least “One scheduled Commercial Banks”.	Copy of Purchase Order/Work Order/ Contract AND Client Credential letter/Email Confirmation from client highlighting the product & stage of the project OR Self-Declaration from OEM confirming the product & stage of the project
19	The proposed OEM solution should have been implemented in at least one Scheduled Commercial Bank/PSU/ PSE/Government Organizations / BFSI in India. Credential is to be submitted for the following solutions: a. SOAR	Copy of Purchase Order/Work Order/ Contract AND Client Credential letter/Email Confirmation from client highlighting the product & stage of the project OR Self-Declaration from OEM confirming the product & stage of the project

#	Eligibility Criteria/Clause	Documents
	<ul style="list-style-type: none"> b. UEBA c. Extended Detection & response (XDR) d. Decoy/Honey-Pot e. Threat Intelligence Platform f. Vulnerability Assessment & Lifecycle Management g. Application Security testing Tool h. Cloud Security Posture Management solution (CSPM) 	
20	<p>The proposed OEM services should have been implemented in at least one PSU/ PSE/ Government Organizations / BFSI in India.</p> <p>Credential is to be submitted for the following services:</p> <ul style="list-style-type: none"> a. Breach Attack & Simulation b. Red teaming services c. Attack surface management d. Phishing simulation e. Anti-phishing services f. Dark web monitoring g. Brand protection & monitoring h. Threat Intelligence feed i. Threat Hunting services 	<p>Copy of Purchase Order/Work Order/ Contract AND</p> <p>Client Credential letter/Email Confirmation from client highlighting the product & stage of the project OR Self-Declaration from OEM confirming the product & stage of the project.</p>
21	<p>Compliance with the Functional Requirement sheet (FRS), Technical Requirement sheet (TRS), SoW and SBOM & CBOM</p>	<p>Self-declaration from the respective OEM for each of the products & services as mentioned below.</p> <p>FRS and TRS compliance sheet (Excel) are to be submitted along with the self-declaration.</p> <p>Solution List:</p> <ul style="list-style-type: none"> a. SIEM b. SOAR c. UEBA

#	Eligibility Criteria/Clause	Documents
		<ul style="list-style-type: none"> d. Extended Detection & response (XDR) e. Decoy f. Threat Intelligence Platform g. Vulnerability Assessment & Lifecycle management h. Application Security Testing i. Cloud Security Posture Management Tool <p>Services List:</p> <ul style="list-style-type: none"> a. Breach Attack & Simulation b. Red Teaming c. Attack Surface management d. Phishing simulation e. Anti-phishing f. Dark web monitoring g. Brand protection & Monitoring h. Threat Intelligence feed i. Threat hunting services

Note:

- a. Attested photocopies of all relevant documents / certificates should be attached as proof in support of the claims made. The bidder should provide relevant additional information wherever required in the eligibility criteria. PSB reserves the right to verify /evaluate the claims made by the Bidder independently. Any decision of PSB in this regard shall be final, conclusive, and binding upon the Bidder.
- b. In case of business transfer where bidder has acquired a Business from an entity (“Seller”), work experience credentials of the Seller in relation to the acquired business may be considered.
- c. In the case of corporate restructuring the earlier entity’s incorporation certificate, financial statements, Credentials, etc. may be considered.
- d. Either the bidder on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the said RFP.
- e. The bidder/OEM comply with CVC guideline 3 (a,b) circular no. 03/01/12, GFR Rule 16(a) of 2005 and OM of DOE dated 25/07/2016
In a tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product, in the same tender.

- f. If an agent submits a bid on behalf of the principal/OEM, the same agent shall not submit a bid on behalf of another principal/OEM in the same tender for the same item/product.
- g. Documentary evidence must be furnished against each of the above criteria along with an index. All documents must be signed by the authorized signatory of the Bidder. Relevant portions in the documents submitted in pursuance of eligibility criteria should be highlighted.

10.3 Technical Evaluation Criteria

The technical bid submitted by the Bidder will be evaluated only if they fulfil the eligibility criteria as defined in section 10.2 Eligibility evaluation criteria. The technical bid evaluation will be done with a total score of 100 marks.

Bidders scoring at least the minimum score of 70 marks or more will be declared technically qualified.

The bidders scoring less than 70 marks (cut-off score) out of 100 marks in the technical evaluation criteria defined in the below table shall not be considered for further selection process and their offers will be dropped at this stage.

Detailed Evaluation Criteria:

S.No.	Technical Evaluation Clause	Scoring
Financial Strength		
1	a. Point 1 = 500 Cr. < Minimum turnover of bidder in each of the 3 financial years in India < 750 Cr. b. Point 2 = 750 Cr. <= Minimum turnover of bidder in each of the 3 financial years in India < 1000 Cr. c. Point 3 = Minimum turnover of bidder in each of the 3 financial years in India >= 1000 Cr. Financial years (i.e. 2021-22, 2022-23 & 2023-24)	a. Point 1 = 2 b. Point 2 = 3 c. Point 3 = 4 Max Marks – 4
Bidder's Experience		
2	Bidder should have supplied, installed and maintained (or under maintenance) from the following solutions: a. SOAR b. UEBA c. Extended Detection & response (XDR)/Endpoint Detection & response (EDR)/Network Detection & response (NDR) d. Threat Intelligence Platform e. Vulnerability Assessment & Lifecycle management f. Decoy/Honeypot g. Application security testing tool h. Cloud Security posture Management tool	a. Point 1 = 2 b. Point 2 = 4 c. Point 3 = 6 Max Marks – 6

	<p>Point 1: 4 out of 8 above mentioned solution in any PSU/ PSE/ Government Organizations / BFSI in India</p> <p>Point 2: 5 out of 8 above mentioned solution in any PSU/ PSE/ Government Organizations / BFSI in India</p> <p>Point 3: More than 5 above mentioned solution in any PSU/ PSE/ Government Organizations / BFSI in India"</p>	
3	<p>The bidder must have implemented a SIEM solution (either on-premises or cloud-based) in BFSI/PSU/ PSE/Govt Organization in India and must be currently managing or must have managed the SIEM solution during the past 5 years in BFSI/PSU/PSE/Govt. Organization as on the date of bid opening.</p> <p>a. Point 1: 1 Client b. Point 2: 2 Clients c. Point 3: ≥ 3 Clients</p>	<p>a. Point 1 = 4 b. Point 2 = 5 c. Point 3 = 6 Max Marks – 7 <i>Currently, managing then bank would give additional 1 mark</i></p>
4	<p>The bidder must have supplied, implemented and maintained (or under maintenance) SIEM solution in any one project of BFSI/PSU/PSE/Govt. Organization in India</p> <p>a. Point 1: 20000 to 49999 EPS or 0.8 TB to 2 TB Per Day b. Point 2: 50000 to 99999 EPS or 2 TB to 4 TB Per Day c. Point 3: 100000 EPS and above or 4 TB Per Day and above</p>	<p>a. Point 1 = 3 b. Point 2 = 4 c. Point 3 = 5 Max Marks – 5</p>
OEM Evaluation Criteria		
5	<p>The proposed OEM SIEM solution should have been implemented in a client with the following requirement as mentioned in the category.</p> <p>Category:</p> <p>a. Point 1: OEM SIEM solution should be deployed in a client with an environment handling minimum 1,00,000 EPS/4TB per day in at least one BFSI/PSU/PSE/Govt. Organization in India OR OEM SIEM solution should be deployed in Scheduled commercial bank in India with minimum 1500 branches</p> <p>b. Point 2:</p>	<p>a. Point 1 = 6 b. Point 2 = 10 Max Marks – 10</p>

	<p>OEM SIEM solution should be deployed in a client with an environment handling minimum 1,00,000 EPS/4TB per day in at least one BFSI/PSU/PSE/Govt. Organization in India</p> <p>AND</p> <p>OEM SIEM solution should be deployed in Scheduled commercial bank in India with minimum 1500 branches</p>	
6	<p>The proposed OEM solution (solution list in mentioned below) should have been implemented in Client (BFSI/PSU/PSE/ Govt Organization/Fortune 500 India 2024 Companies) in India.</p> <p>Bidder to substantiate the clause for each of the below-mentioned solution and scoring for each of the solution would be summed to arrive at the solution OEM experience score.</p> <p>List of Solutions are:</p> <ul style="list-style-type: none"> a. SOAR b. UEBA c. Extended Detection & response (XDR) d. Decoy/HoneyPot e. Threat Intelligence Platform f. Vulnerability Assessment & Lifecycle Management g. Application Security testing Tool h. Cloud Security posture Management tool (CSPM) <p>Category:</p> <ul style="list-style-type: none"> i. Point 1: = 1 Client j. Point 2: ≥ 2 Client 	<p>a. Point 1 = 2</p> <p>b. Point 2 = 4</p> <p>Max Marks – 32</p>
7	<p>The bidder's proposed solution should be consolidated to minimize the number of proposed OEMs.</p> <p>List of Solutions are:</p> <ul style="list-style-type: none"> a. SIEM b. SOAR c. UEBA 	<p>a. Point 1: 3 Marks</p> <p>b. Point 2: 4 Marks</p> <p>c. Point 2: 5 marks</p> <p>Max Marks – 7</p>

	<ul style="list-style-type: none"> d. Extended detection & response (XDR) e. Decoy/ HoneyPot f. Threat Intelligence Platform g. Vulnerability Assessment & Lifecycle Management h. Application security testing Tool i. Cloud Security posture Management (CSPM) <p>Category:</p> <ul style="list-style-type: none"> a. Point 1: The Number of solutions consolidated under the same OEM: 3 solutions (of Total 9 Solution) b. Point 2: The Number of solutions consolidated under the same OEM: 4 solutions (of Total 9 Solution) c. Point 3: The Number of solutions consolidated under the same OEM: 5 or more solutions (of Total 9 Solution) 	In case, the bidder proposes the consolidation of XDR & SIEM additional 2 marks would be awarded
8	<p>The proposed OEM services (below mentioned to the services) should have been implemented in Client (BFSI/PSU/PSE/ Govt Organization) in India.</p> <p>Bidder to substantiate the clause for each of the below mentioned OEM service and scoring for each of the service would be summed to arrive at the services OEM experience score.</p> <p>Credential is to be submitted for the following services:</p> <ul style="list-style-type: none"> a. Breach Attack & Simulation b. Red teaming services c. Attack surface management d. Phishing simulation e. Anti-phishing services f. Dark web monitoring g. Brand protection & monitoring h. Threat Intelligence feed i. Threat Hunting services <p>Category:</p>	<ul style="list-style-type: none"> a. Point 1 = 0.5 b. Point 2 = 1 <p>Max Marks – 9</p>

	a. Point 1: 1 Client b. Point 2: ≥ 2 Clients	
9	<p>A presentation to be made by the bidder covering the following aspects (but not limited to):</p> <ol style="list-style-type: none"> Capability demonstration by the bidder Understanding of Scope of work & terms of the RFP Proposed Approach and Methodology for implementation Approach & methodology for providing Managed Security Services (MSS) to run Security Operation Centre (SOC) services Solution Description, Functionality, Architecture & Deployment model, Posture of proposed architecture Resource Deployment plan, Implementation Plan Bidder to demonstrate a relevant AI/ML capability use case, playbooks, models etc. <p>All eligible bidders will be required to make presentations. The bank will schedule presentations, and the time and location will be communicated to the bidders. Failure of a bidder to complete a scheduled presentation to the bank may result in rejection of the proposal.</p> <p>Bank reserves to right to perform the reference check through VC/Reference call/site visit/other mode of communication as deemed necessary by the evaluation team.</p>	Max Marks – 20

*Documentary evidence as mentioned in the eligibility criteria's

1. When deemed necessary the Tender Evaluation Committee may seek clarification on relevant aspects from the Bidder. However, that would not entitle the Bidder to change or cause any change.
2. Scores for the above individual parameters shall be added to determine the technical scores of the Bidders. The Bidder with the highest technical score shall be ranked as T1.
3. Bank reserves the right to conduct reference site visit/ video conference/ voice call with the Client to substantiate the credentials/ copy of PO/ Contract copy/ sign-off submitted by Bidder and/ or OEM. In case the input/ feedback received from the Customer is negative/ unsatisfactory, bank reserves the right to reject the Bid.
4. In case no or only a single vendor qualifies the technical evaluation, in such event, Bank may cancel the tender process and re-tender it in conventional two part bid method as per GeM Rule.

10.4 Commercial Evaluation Criteria

The commercial bid of only technically qualified bidders shall be opened. These technically qualified bidders as per technical evaluation process will participate in Commercial evaluation process.

The Commercial offers of only those Bidders, who are short-listed after technical evaluation, would be opened. The format for quoting commercial bid is set in Appendix 2-Commercial Bill of Material. The commercial offer should consist of comprehensive cost for required solution. The bidder must provide detailed cost breakdown, for each category mentioned in the commercial bid.

The BANK will determine whether the Commercial Bids are complete, unqualified and unconditional. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfil its obligations as per the Scope of the RFP within the total quoted price shall be that of the Bidder.

The Commercial Bid (CB) with the lowest value will be awarded a financial score (Sf) of 100 points. The financial scores for all other bids will be calculated using the following formula:

$$Sf = 100 \times CB / F$$

(F = amount of Commercial Bid (Last value quoted/entered by the bidder)).

10.5 Final Evaluation – Weighted Techno-Commercial Evaluation

The Proposals will be finally ranked according to their combined Technical Score(s) and Financial Score as follows:

$$S = ST \times Tw + SF \times Fw$$

Where S is the combined score, and Tw and Fw are weights assigned to Technical Proposal and Financial Proposal that shall be 0.70 and 0.30 respectively.

ST and SF will be calculated for individual bidders, as per description mentioned in Evaluation Criteria Section respectively.

Bidder with the highest Final score shall be considered for award of the Contract.

For example:

Three bidders, namely A, B and C, participated in the bid process and their technical scores are as below:

A=70, B=85, C= 90

After converting them into percentile, we get

ST for A= (70/90)*100 = 77.77

ST for B= $(85/90)*100=94.44$

ST for C= $(90/90)*100=100$

The Final prices of the bidders are as under: A= Rs. 8500, B= Rs. 9000, C= Rs. 12000

The final cost quoted by the bidders converted into percentile score shall be as under:

SF for A = $(8500/8500)*100 = 100$

SF for B= $(8500/9000)*100 = 94.44$

SF for C= $(8500/12000)*100 = 70.83$

As the weightage for technical parameter and cost are $T_w = 70\%$ and $F_w = 30\%$ respectively, the final scores shall be calculated as below:

S for A= $(77.77*0.7) + (100*0.3) = 84.439$

S for B= $(94.44*0.7) + (94.44*0.3) = 94.44$

S for C= $(100*0.7) + (70.83*0.3) = 91.25$

Hence, the offer of 'B' (being highest score) will be considered and the contract shall be awarded B' at Rs. 9000 being the final price quoted by B.

Note:

1. The bank will at its own discretion decide to either –
 - Open commercial bids in front of the bidders after the technical evaluation is complete, and calculate the TCO, Or
 - The highest technical bidder shall not automatically qualify for becoming selected bidder and for the award of contract by the bank.
2. The Successful Applicant shall be the first ranked Applicant (having the highest combined score). The final decision on the successful bidder will be taken by the bank. The implementation of the project will commence upon acceptance of purchase order and signing of Contract by the selected bidder.
3. If for some reason, the successful bidder fails to execute an agreement within a specified timeline, the bank reserves the right to award the contract to the next most eligible bidder based on the final evaluation scope of technical evaluation scores and commercial prices quoted.
4. In case of a tie of Total Score between two or more bidders, the Bid with higher technical score would be chosen as the successful Bidder.
5. The bank will calculate the scores up to two decimal points only. If the third decimal point is greater than .005 the same shall be scaled up else, it shall be scaled down to arrive at two decimal points.

11 PAYMENT TERMS

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

All out of pocket expenses, travelling, boarding and lodging expenses for the entire term of this RFP and subsequent agreement is included in the amount and service provider shall not be entitled to charge any additional cost on account of any items or services or by way of any out-of-pocket expense, including travelling, boarding, and lodging etc.

Bank will release payment within 30 days from the date of receipt of invoice. In case of dispute, payment will be made within 30 working days of the resolution of disputes.

11.1 Product (Software) Cost

Product Cost is defined as the sum of One time Product License Cost and One time implementation cost of the respective product

S. No	Items	Milestone	Percentage
1.	License Cost	On successful Delivery of the Licenses which would be considered delivered once the software (with OOTB features) is made available for view and review of the bank on the proposed hardware. The Bidder is required to submit the required to submit the following: <ul style="list-style-type: none"> • Delivery proof • OOTB Installation Proof • Invoice of the Product 	50%
		On successful UAT Signoff of the respective product	20%
		On successful Go-live of the respective product	30%
2	Implementation Cost	On Successful installation of OOTB product on the sourced hardware and handing over the environment with OOTB product to Bank	20%
		On successful UAT Signoff of the respective product	50%
		On successful Go-live of the respective product	20%
		Within 3 months of successful Go-live	10%
3.	Subscription Cost (One time license Cost)	On successful Delivery of the Licenses which would be considered delivered once the software (with OOTB features) is made available for view and review of the bank on the proposed hardware. The Bidder is required to submit the required to submit the following: <ul style="list-style-type: none"> • Delivery proof • OOTB Installation Proof 	50%

S. No	Items	Milestone	Percentage
		<ul style="list-style-type: none"> Invoice of the Product 	
		On successful UAT Signoff of the respective product	20%
		On successful Go-live of the respective product	30%

*No factors, under any circumstances, shall affect the bank's services, infrastructure, solutions, or the committed costs and SLAs as defined in the RFP.

11.2 OEM Services Cost

S. No	Items	Milestone	Percentage
	OEM Services Cost	Payable in arrears post providing the service	Quarterly in arrears
2	Architecture Assessment	Submission of Report to Bank along with detailed presentation to bank's senior management on half yearly basis	Half-yearly in arrears

Payment will begin after sign-off of the services configurations and the bank has started using the same for its intended use.

11.3 Hardware Cost

(Hardware cost is defined as the sum of One time Hardware Cost, and Installation cost of the respective hardware)

S. No.	Items	Milestone	Percentage
3.	Hardware Cost	Delivery of hardware and submission of invoice with Proof of Delivery and other documents of the hardware supplied. Bank may at its discretion verify the details before releasing the payment (This verification, if required, shall be completed within 1 month of delivery of the hardware on the bank's premises).	70%
		On successful installation of at least 50% of the OOTB product/solutions* on the hardware (as detailed in Virtual to Physical mapping -Appendix 3: BoQ) sought by Bank mentioned in the table (Section 7) *50% of the OOTB product here refers to the following: <ul style="list-style-type: none"> a. Total Count of product/solutions should be at least 50% of the sought product/solutions as mentioned in the table (Section 7) and b. Total Cost (as per the Appendix 2: Commercial Bill of Material) of the product/solutions should 	20%

S. No.	Items	Milestone	Percentage
		be at least 50% of the total product cost sought as mentioned in the table (Section 7)	
		On successful installation of remaining 50% of the OOTB products/solutions on the hardware	10%

OOTB – Out of the Box (The features marked as standard feature by the OEMs of the respective solution in the compliance sheets)

11.4 ATS/subscription cost & AMC Cost

(ATS/ subscription cost & AMC Cost – Annual ATS & AMC Support of the respective software & hardware)

S. No	Items	Milestone	Percentage
6.	ATS/ Annual Subscription & AMC Cost	ATS/ Annual Subscription Cost	Yearly in advance (Post submission of 110% of the yearly ATS Amount of the respective product) or quarterly in arrears
		AMC	Yearly in advance (Post submission of 110% of the yearly AMC Amount of the respective product) or quarterly in arrears

11.5 Facility Management (FM) Cost:

(FM manpower Support for maintaining and managing the application, IT Infrastructure and other terms of the RFP)

S. No	Items	Milestone	Percentage
7.	FM Manpower Cost	Submission of SLA report and Submission of attendance record/register of Onsite resources on Quarterly basis	Quarterly in arrears

11.6 Other Cost

Cost for the respective line items in the Bill of Material

S. No	Items	Milestone	Percentage
9.	Other Cost	Payable in arrears	After completion of respective activity

Note:

- Annual Maintenance Contract (AMC)/ Annual Technical Support (ATS) includes all hardware, software, applications, services deployed in the NextGEN SOC
- Activities need to be carried out simultaneously for speedy production roll out as per Bank's expectations and standards. Bank may involve third parties at various stages for review, verification of completeness of NextGEN SOC setup and onsite & offsite activities etc. without obtaining permission from the bidder & OEMs

12 SERVICE LEVELS & PENALTIES

12.1 Service Level Agreement

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

1. The successful bidder shall have to enter into the "Service Levels Agreement" having all terms and conditions of this RFP to maintain uptime and provide the service support and onsite support during the entire contract period.
2. Both the bidder and OEM will be totally responsible for the maintenance, configuration and fault-free operations of supplied infrastructure, i.e. hardware, software and its maintenance during the AMC/ATS period.
3. Any technical glitch/ issue in installed infrastructure of the solution (i.e. hardware and software, OS/DB etc.) should be attended on priority and should be covered under AMC.
4. The bidder has to maintain a guaranteed minimum uptime for all systems/ solutions supplied under this RFP to avoid any business disruption due to breakdown of system or degraded performance impacting on business or unavailability of data. The calculation of uptime will be monthly.
5. The issue/ break down message may be communicated to/by the Bank team by way over phone / email/ call logging.
6. For penalty calculation, the total time elapsed between the intimation of break down message from Bank side to the bidder and receipt of rectification message from the bidder to Bank side will be considered.
7. The penalty will be deducted in quarterly FMS/AMC/ATS payment. In case the Bank is unable to adjust penalty in FMS/AMC/ATS payment, the Bank at its discretion may invoke the Performance Bank Guarantee (PBG) to deduct the penalty amount.
8. If the support services are not provided on 24*7 basis and/or satisfactory services are not provided as sought in the RFP, the Bank with its discretion may reject the proposal/ terminate the contract, without assigning any reason.
9. The bidder is required to mandatorily conduct quarterly preventive and breakdown maintenance activities to ensure (without any impact on day-to-day operations) maintaining uptime on a monthly basis covering 24*7*365 days.
10. The business hours are 6 AM to 10 PM on any calendar day the Bank 's branch is operational. The Bidder, however, recognizes the fact that the branches will require them to work beyond the business hours and holidays on need basis
11. Apart from maintaining uptime, for any breakdown / malfunctioning of hardware and it's any of the components or accessories or any system software issue etc., the resolution time is mentioned below: -

Uptime % =

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

12. For calculation of uptime (penalty), planned/ scheduled down time will be exempted. Bank will pay the bidder after deducting the calculated penalty from the payable amount.
13. If any critical component of the entire configuration setup is out of service, then the bidder & OEM shall either immediately replace the defective unit (with new one) or replace it at its own cost or provide a standby, on an immediate basis, not more than 4 hours, The bidder should maintain proper inventory of standby components for early resolution of issues.

14. If the bidder, having been notified, fails to remedy the defect(s) within the 4 hours' time duration from the incident, the Bank may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights, which the Bank may have against the supplier under the Contract.
15. The bidder should comply with the security and audit standards of the Bank and various regulatory guidelines. For this, the bidder should apply new patches related to OS/ firmware & BIOS updates etc, without any additional cost to the bank, during the contract period.
16. For all issues related to the solution supplied by the bidder, RCA (Root Cause Analysis) from the respective OEM to be provided by the bidder within 3 working days. The delay in submission of RCA will lead to penalty Rs. 20000/day

Level Classifications

Level	Function/Technologies	Typical Response & Resolution Time
Critical	<ul style="list-style-type: none"> i Such a class of errors will include problems, which prevent users from making operational use of solutions and impact the other solutions functioning. ii All the proposed solutions, IT Infrastructure and proposed services iii Security Incidents iv No work-around or manual process available v Financial/reputational impact on Bank vi Infrastructure related to providing solutions to the Bank users comprising of but not limited to the following: <ul style="list-style-type: none"> • Proposed Solution Tools / IT Infrastructure application servers/infra • Proposed Solution Tools / IT Infrastructure web servers/infra • Proposed Solution Database Servers / Appliance • Proposed Solution servers/appliances • Network components, if any proposed by the bidder 	<p>During business hours – Response Time: Within 30 minutes Resolution Time: Within 120 minutes</p> <p>Non - business hours – Response Time: Within 30 minutes Resolution Time: Within 4 hours or earlier as per business hours if business hours begin</p> <p>For the Business, Network & Security Infrastructure & Systems procured by the Bank from Third party Vendor or for the services where the Bank has direct contract with the 3rd Party Vendor,</p> <p>Bidder shall ensure that the calls are logged with the respective Vendor within 30 minutes of occurrence of such incidents post identification of the issue.</p>
Key	<ul style="list-style-type: none"> i Any incident which is not classified as “Critical” for which an acceptable workaround has been provided by the Bidder or; ii Any problem due to which the infrastructure of the proposed solution is not available to the Bank users or does not perform according to the defined performance and query processing parameters required as per the RFP or; iii Users face severe functional restrictions in the application irrespective of the cause. iv Key business infrastructure, systems and support services comprising of but not limited to the following: 	<p>During business hours – Response Time: Within 30 minutes Resolution Time: Within 240 minutes</p> <p>Non-business hours – Response Time: Within 30 minutes Resolution Time: Within 6 hours or earlier as per business hours if business hours begin</p>

Level	Function/Technologies	Typical Response & Resolution Time
	<ul style="list-style-type: none"> Proposed solution Non-production environment (Test & Development and Training Infrastructure) 	For the Business, Network & Security Infrastructure & Systems procured by the Bank from Third party Vendor or for the services where the Bank has direct contract with the 3rd Party Vendor, Bidder shall ensure that the calls are logged with the respective Vendor within 15 minutes of occurrence of such incidents post identification of the issue.
Significant	<ul style="list-style-type: none"> i Any incident which is not classified as “key” or “critical” for which an acceptable workaround has been provided by the Bidder. ii Moderate functional restrictions in the application irrespective of the cause. It has a convenient and readily available workaround. iii No impact on processing of normal business activities iv Equipment/system/Applications issues and has no impact on the normal operations/day-to-day working. v All other residuary proposed solution Infrastructure not defined in “Critical” and “key” 	<p>During business hours – Response Time: Within 30 minutes Resolution Time: Within 6 hours.</p> <p>Customizations-Time period decided by mutual agreement. Scheduled monitoring activities decided by mutual agreement. Response and resolution time for Bank infrastructure should be 1 working day.</p> <p>Response and resolution for other criteria- During business hour – within 4 hours. Non- Business Hours- The issue has to be resolved on the next business day adhering within 4 hours.</p>

Service Levelss

Service Levels will include Availability measurements and Performance measurements parameters.

The bidder shall provide the Availability Report on a monthly and quarterly basis and a review shall be conducted based on this report. A monthly report shall be provided to the BANK at the end of every month containing the summary of all incidents reported and associated with Bidder performance measures for that period. Performance measurements would be assessed through audits or reports, as appropriately to be provided by Bidder e.g. utilization reports, response time measurements reports, etc. The tools to perform the audit will need to be provided by Bidder. Audits will normally be conducted on a regular basis or as required by BANK and will be performed by BANK or BANK appointed third party agencies.

Monthly Maintenance Cost	Total FM(O&M) Manpower Cost + Total AMC of Infrastructure + Total ATS or Subscription cost of proposed software's/tools
=	Support Period in years * 12

Availability Measurements

Level	Type of Infrastructure	Measurement	Minimum Service Level	Penalty
Cyber Security Solutions and IT Infrastructure (HCI/Virtualization, OS, DB, IT Components Etc.) for Cyber security solutions	Proposed Infrastructure & Systems	Availability of each solution, Infrastructure Elements & Systems, any individual component	99.90%	For every 0.05% or part thereof drop in service levels penalty will be 1% of the Monthly Maintenance Cost The Calculation of penalty will happen based monthly performance data as received

- Availability Service Level will be measured monthly.
- The Bidder's performance to Availability Service Levels will be assessed against Minimum Service Level requirements monthly for each criterion mentioned in the Availability measurement table.
- An Availability Service Level Default will occur when: The Bidder fails to meet Minimum Service Levels, as measured monthly, for a particular Service Level.

Services SLAs:

Service Area	Service Level	Penalty
Each Proposed Services Uptimes	99.90%	For every 0.05% or part thereof drop in service levels penalty will be 1% of the Monthly Maintenance Cost

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Service Area	Service Level	Penalty
		Service level drop below 90%, penalty shall amount to 100% of the Monthly Maintenance Cost
Anti-phishing, Anti-rogue app, anti-malware etc. Brand protection and Monitoring Dark Web Monitoring	<p>a. Detection of phishing sites, rogue app, brand abuse, malicious content etc. elaborated in RFP $\geq 85\%$</p> <p>b. Site take-down time for identified Phishing URLs – Resolution within 8 hours</p> <p>c. Site take-down time for Brand Abuse – Resolution within 36 hours</p> <p>d. Enrichment: Cybercrime – Resolution within 1 Hours</p> <p>e. Enrichment: Nation State– Resolution within 1 Hours</p> <p>f. Any other (Like Interaction, Ransomware, Malware Reverse Engineering etc.) – Resolution within 1 Hours</p> <p>(From the time of reporting the request / issue through phone call / email / web-based portal)</p>	<p>Non-detection or late detection - Rs. 1 Lakh each for non-detection or late detection of phishing site, anti-rogue, malware, social media, mobile app, etc.</p> <p>Point b to Point f -- Rs.5000/- for every hour beyond resolution time.</p>
Continuous Red teaming Services	<ul style="list-style-type: none"> Performing the Activity as per the defined frequency and/or Submission of report to the bank 	Delay in performing the activity – 1% of monthly maintenance cost per day of delay
Threat Intelligence Feed		Delay in submission of the report – 1% of monthly maintenance cost per day of delay
Threat Hunting Services		The penalties for delay in completion of Exercise and submission of report will be mutually exclusive
Phishing Simulation		
Attack Surface Management		
Breach Attack & Simulation		

The mechanism for monitoring the SLA would need to be proposed by the bidder and agreed by the BANK.

Performance Measurements

Performance Measurements will be made on a monthly basis or as required by BANK.

Type of Infrastructure	Measurement	Minimum Service Level	Measurement Tools	Penalty
Hardware Utilization	<p>The daily peak utilization of CPU RAM, NIC and Hard disk etc. of the specific hardware (including each VM) exceeds 75% at any given point of time. Each incident should not exceed 5 minutes, or part thereof will be a new incident.</p> <p>In case VMs are created on the physical Hardware, Utilization SLA would also be monitored at each VM/container and utilization of each VM/Container should also not cross 75% at any given point of time. Each incident should not exceed 5 minutes, or part thereof will be a new incident.</p>	100%	Each Incident Reporting	<p>If less than 3 times in a month: for every incident in service level, Penalty of 1% of the monthly maintenance cost.</p> <p>If there are more than 3 times in a month: Bidder will be responsible for replacing/augmenting the hardware at no additional cost to the BANK within 3 months of exceeding the thresholds.</p> <p>In-case bidder fails to replace the hardware, LD (over and above the penalty for incident breaching during the replacement or augmentation period for each incident) of 1% of affected product cost will be levied for every week of delay or part thereof. Till the replacement/augmentation is done the bidder has to provide the alternative infrastructure to ensure compliance to the service during the replacement/augmentation period.</p>

Type of Infrastructure	Measurement	Minimum Service Level	Measurement Tools	Penalty
Storage Utilization	If the daily peak utilization level exceeds 90% at any given point of time and such incidents occur more than 3 times in a month. Each incident should not exceed 5 minutes, or every part thereof will be a new incident.	100%	Each Incident Reporting	<p>If less than 3 times in a month: for every incident in service level, Penalty of 1% of the monthly maintenance cost.</p> <p>If more than 3 times a month: Bidder will be responsible for replacing/augmenting the hardware at no additional cost to the BANK within 3 months of exceeding the thresholds.</p> <p>In case, the bidder fails to replace the hardware, LD (over and above the penalty for incident breaching during the replacement or augmentation period for each incident) of 1% of affected product cost will be levied for every week of delay or part thereof. Till the replacement/augmentation is done bidder has to provide the alternative infrastructure to ensure the compliance to the service during the replacement /augmentation period.</p>
Disaster Recovery Instance Availability	Business operations to resume from Disaster Recovery Site within defined RTO and RPO from data Centre failing/down. Specific RTO and RPO are defined below	100% (Instance Wise)	BANK will measure through Periodic audits and reports	INR 10,000 for every 10 Minutes of delay above defined RPO and RTO

Type of Infrastructure	Measurement	Minimum Service Level	Measurement Tools	Penalty
	<ul style="list-style-type: none"> Recovery Point Objective (RPO) is 30 minutes Recovery Time Objective (RTO) is 60 minutes 			

Incident Management

Services	Description	Calculation	Periodicity	MSL	Penalty
Incident logging	Bidder shall ensure that all incidents reported by the users / testing team shall be duly logged and assigned to teams with a unique ID for reference purposes. Users shall be informed about the reference ID maximum within 30 minutes from recording the complaint	Manually through various communication channels	Monthly	100%	Penalty of INR 10,000 will be levied for every 30 minutes delay or part thereof

Services	Description	Calculation	Periodicity	MSL	Penalty
Incident resolution within targets	This Service Level measures the number of all category calls/ incidents per month that get resolved within the response time & resolution time defined divided by the total number of calls that get logged	Call Tickets per month responded and resolved within the timelines divided by the total number of call tickets per month	Monthly	100%	<p>Business hours- For every 0.5% drop in service level or part thereof, Penalty shall be 0.5% of the monthly maintenance Cost</p> <p>Non-Business Hours For every 1% drop in service level or part thereof, Penalty shall be 0.5% of the monthly maintenance Cost</p>

Management, Reporting and Governance

Service Details	SLA Measurement	SLA	Penalty	Remarks
Key Resources	Any change during the contract period	100%	More than 1 change would lead to a penalty of INR 2,00,000 for each default for each key resource	
Manpower availability	Bidder to provide experienced manpower at Bank premises as per requirement mentioned RFP.		<p><80% of required strength -- Rs. 25,000/- per resource per week or part thereof</p> <p><60% of required strength -- Rs. 50,000/- per resource per week or part thereof</p> <p><35% of required strength -- Rs. 1 Lakh per resource per week or part thereof</p>	<p>Service Level Agreements (SLAs) will be calculated on a monthly basis, based on the availability of the resources during that month.</p> <p>Absence of any resource must be complemented</p>

Service Details	SLA Measurement	SLA	Penalty	Remarks
			from the day of breach of SLA until the required strength is achieved.	with an equally skilled resource.
Report Generation	Adherence to delivery of SLA report	100%	The SLA reports are to be shared with the BANK by the 7th of every month. For each default the penalty of INR 20,000 per week or part thereof may be charged to the bidder	The indicative list of required reports is mentioned in RFP. However, BANK may add or remove reports as at its discretion.
Security Device Management and Administration	Bidder is expected to provide this service 24/7 on a 24-hour basis. Management and administration of all in-scope security devices and/or solutions	100%	<u>Penalty:</u> <ul style="list-style-type: none"> For wrong rule modification (as approved by BANK) in any of the security solutions will incur a penalty of INR 20,000 for each default. For a wrong rule modification (as approved by BANK) in any of the security solutions by which BANK incur any service disturbance will incur a penalty of INR 30,000 for each default. 	

Security Vulnerability Management:

Service Area	Service Level	Penalty
Version Upgrade Major/ Minor for all Software/ Middleware/ OS (All version)	The Operations Team has to have version upgrades /patching of all underlying software / hardware/ Middleware as per respective OEM	For breaches of Version upgrade/patching – <ul style="list-style-type: none"> 95-100 % -- No penalty

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Service Area	Service Level	Penalty
and Patching of all Hardware/ Software/ Middleware/ OS (All version)	<p>recommendations & publish the Monthly version/Patch upgrade calendar for the same.</p> <p>Failure to comply with the Version upgrade/patches etc. calendar will attract penalties.</p> <p>SLA related to this will start after 1 month's post signoff</p>	<ul style="list-style-type: none"> Below 95 %-- INR 500 per day will be deducted per percentage of non-compliance till the approved upgrades/updates/patches are applied in the system

Management & health checkup:

Service Area	Service Level	Penalty
OEM Involvement	Review to be conducted by OEM	Penalty of Rs. 2,00,000 per day for each such a solution for each default would be imposed.
Open OEM Support tickets/cases	Closure of OEM Support tickets within 2 weeks	<p>Unable to close the OEM support tickets within 2 weeks without any workaround</p> <p>1% of overall monthly maintenance cost per week for non-compliance after the timelines</p>
Compliance of RBI/ CERT-IN Advisories/ other regulatory advisory	Compliance by end date, as notified in the advisory	Compliance by end date - No Penalty
	Penalty by delay by each day.	By Delay of each day, 0.5% of Monthly Contract Value, per day

Audit (IS & VAPT and other internal/external audit) Gaps

Item	Issue Categorization	Resolution Period	Penalty Amount
Audit Gaps Resolution	Critical	Within 1 Month	INR 16,000 per issue per day post the resolution period till the issue/gap closure date
	High	Within 1 Month	INR 8,000 per issue per day post the resolution period till the issue/gap closure date
	Medium	Within 2 Months	INR 5,000 per issue per day post the resolution period till the issue/gap closure date
	Low	Within 3 Months	INR 3,000 per issue per day post the resolution period till the issue/gap closure date

****Bidder is required to submit the compliance document confirming that the identified gaps have been closed.**

12.2 Penalties

For the purpose of this RFP, the total penalties as per LD & SLA will be subject to a maximum of 10% of the overall contract value.

Liquidated Damages

Supply, Delivery & Installation

If the bidder fails to deliver any or all of the products and/or systems and/or services solutions within the time period(s) specified in the Delivery Schedule or installation, the Bank shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to 1 percent per week or part thereof of respective new product cost /Existing product cost/Hardware Cost subject to maximum deduction of 10% of the total contract value, until actual delivery and installation as per related clauses mentioned in RFP.

Implementation

If the bidder fails to Implement solution and/or services within the time period(s) specified in the Delivery Schedule or implementation, the Bank shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to 1 percent per week or part thereof of respective new/ Existing product cost* subject to maximum deduction of 10% of the total contract value, until actual delivery and implementation as per related clauses mentioned in RFP.

*Product cost (new/existing) here defined as the sum of Product license cost and product implementation cost



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If the LD due to Implementation of the respective product cost/existing product cost reaches 25% of the implementation cost of the respective product/services, the bidder is required to replace the product/services.

Once the maximum deduction is reached, the Bank may consider termination of the Contract at its discretion.

In the event of Bank agreeing to extend the date of delivery at the request of successful bidder(s), it is a condition precedent that the validity of Bank guarantee shall be extended by further period as required by Bank immediately. Failure to do so will be treated as breach of contract.

12.3 At-Risk Amount

The monthly At-Risk Amount (ARA') shall be 15% of the estimated monthly payout of the respective month.

13 TERMS AND CONDITIONS

13.1 Assignment & Subcontracting

1. The selected bidder shall not subcontract or permit anyone to perform any of the work, service or other performance required under the contract.
2. If the Bank undergoes a merger, amalgamation, takeover, consolidation, reconstruction, change of ownership, etc., this tender shall be assigned to the new entity, and such an act shall not affect the rights of the Agency under this tender.

13.2 Delays in the Bidder's Performance

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

- a. Claiming Liquidated Damages
- b. Termination of the purchase agreement fully or partly and claim liquidated damages.
- c. Execution of Bid Declaration Form / Invoking EMD or Performance Bank Guarantee

13.3 Jurisdiction

Jurisdiction: It is hereby agreed between the parties that any suit or legal proceedings to enforce the rights of either party under this Agreement shall be instituted and tried by a competent court in the city of Delhi only.

13.4 Dispute Resolution

If any dispute, difference or claim arises between the parties hereto in connection with the validity, interpretation, implementation or alleged breach of the terms of this Agreement or anything done or omitted to be done pursuant to this Agreement, the Parties shall attempt in the first instance to resolve the same through negotiation. If the dispute is not resolved through negotiation within 30 (thirty) days after commencement of discussions, then, the parties shall be at liberty to approach competent court of law at Delhi for adjudication of the disputes.

13.5 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.

13.6 Authorized Signatory

The selected Bidder shall indicate the authorized signatories who can discuss and correspond with the bank about the obligations under the contract. The selected Bidder shall submit at the time of signing the contract a certified copy of the resolution of their board, authenticated by the company secretary, authorizing an official or officials of the Bidder to discuss, sign agreements/contracts with

The Bank, raise invoice and accept payments and also to correspond. The Bidder shall provide proof of signature identification for the above purposes as required by the bank.

13.7 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 (BE-II) dated 19th July 2024 subsequent amendments.

The local supplier at the time of submission of bid shall be required to provide a certificate as per Annexure 25 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.

13.8 Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the selected Bidder or The Bank as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:-

- Natural phenomenon, including but not limited to floods, droughts, earthquakes, epidemics and pandemics
- Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos
- Terrorist attack, public unrest in work area
- Provided either party shall within 10 days from occurrence of such a cause, notify the other in writing of such causes. The Bidder or The Bank shall not be liable for delay in performing his/her obligations resulting from any force Majeure cause as referred to and/or defined above. Any delay beyond 30 days shall lead to termination of contract by parties and all obligations expressed quantitatively shall be calculated as on date of termination. Notwithstanding this, provisions related to indemnity, confidentiality survive termination of the contract.
- Unless otherwise directed by the bank in writing, the Bidder affected by force majeure shall continue to perform the obligations under this agreement, which are not affected by the force majeure event and shall take such steps as are reasonably necessary to remove the causes resulting in force majeure and to mitigate the effect thereof.
- As soon as the cause of force majeure has been removed, the Bidder shall notify the Bank and resume the affected activity without delay.
- Notwithstanding the above, the decision of the bank shall be final and binding on the Bidder in the event of force majeure.

13.9 Ownership & Retention of Documents:

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

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

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

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

13.10 Conflict of Interest:

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

13.11 Signing of Pre-Contract Integrity Pact:

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

13.12 Liquidated Damages

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

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

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

If the bidder fails to deliver any or all of the products and/or systems and/or services solutions within the time period(s) specified in the Delivery Schedule or installation, the Bank shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to 0.5 percent per week or part thereof of Contract Price subject to maximum deduction of 10% of the total contract value, until actual delivery, installation or performance as per related clauses mentioned in RFP.

Once the maximum deduction is reached, the Bank may consider termination of the Contract at its discretion.

In the event of Bank agreeing to extend the date of delivery at the request of successful bidder(s), it is a condition precedent that the validity of Bank guarantee shall be extended by further period as required by Bank immediately. Failure to do so will be treated as breach of contract.

13.13 Intellectual Property Indemnity:

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

13.14 Limitation of Liability

The aggregate liability of bidder in connection with this Agreement, in respect of any claims, losses, costs or damages arising out of or in connection with this RFP/Agreement shall not exceed the total Project Cost. Under no circumstances shall either Party be liable for any indirect, consequential or incidental losses, damages or claims including loss of profit, loss of business or revenue.

The limitations set forth herein shall not apply with respect to:

- a. claims that are the subject of indemnification pursuant to infringement of third-party Intellectual Property Right,
- b. damage(s) occasioned by the Gross Negligence or Willful Misconduct of Service Provider,
- c. damage(s) occasioned by Service Provider for breach of Confidentiality Obligations,
- d. Regulatory or statutory fines imposed by a government or Regulatory agency for non-compliance of statutory or regulatory guidelines applicable to the Bank, provided such guidelines were brought to the notice of Service Provider.

“Gross Negligence” means any act or failure to act by a party which was in reckless disregard of or gross indifference to the obligation of the party under this Agreement and which causes injury, damage to life, personal safety, real property, harmful consequences to the other party, which such party knew, or would have known if it was acting as a reasonable person, would result from such act or failure to act for which such Party is legally liable. Notwithstanding the forgoing, Gross Negligence shall not include any action taken in good faith.

“Willful Misconduct” means any act or failure to act with an intentional disregard of any provision of this Agreement, 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.

13.15 Order Cancellation

1. The Bank reserves its right to cancel the entire / unexecuted part of the Purchase Order at any time by assigning appropriate reasons (after providing a cure period of 30 days and thereafter providing a 30 days' notice period) and recover expenditure incurred by the Bank in addition to recovery of liquidated damages in terms of the contract, in the event of one or more of the following conditions:
 - a) Delay in delivery of services in the specified period.
 - b) Serious discrepancies are noted in the inspection.
 - c) Breaches in the terms and conditions of the Order.

2. The Bank reserves the right to cancel the contract placed on the selected bidder and recover the expenditure incurred by the Bank on the following circumstances:
 - a) Non submission of acceptance of order within 7 days of order.
 - b) Excessive delay in execution of orders placed by the Bank.
 - c) The selected bidder commits a breach of any of the terms and conditions of the bid.
 - d) The bidder goes into liquidation voluntarily or otherwise.
 - e) An attachment is levied or continues to be levied for a period of 7 days upon the effects of the bid.
 - f) The progress made by the selected bidder is found to be unsatisfactory.
 - g) If deductions on account of liquidated Damages/penalties exceeds more than 10% of the total contract price.
 - h) If found blacklisted by any Govt. Department / PSU / other Banks / CERT-In, during contracted period.
 - i) Non satisfactory performance of the Project in terms of affecting the Core Systems of the Bank or the Core Business of the Bank and the functioning of the Branches/Offices of the Bank.
3. Bank shall serve the notice of termination to the bidder at least 30 days prior of its intention to terminate services without assigning any reasons.
4. In case the selected bidder fails to conduct an event as per stipulated schedule, the Bank reserves the right to get it conducted by alternate sources at the risk, cost and responsibility of the selected bidder by giving 7 days' prior notice to the bidder.
5. After the award of the contract, if the selected bidder does not perform satisfactorily or delays execution of the contract, the Bank reserves the right to get the balance contract executed by another party of its choice by giving one-month notice for the same. In this event, the selected bidder is bound to make good the additional expenditure, which the Bank may have to incur to carry out for the execution of the balance of the order/contract. Such additional expenditure shall be incurred by the bank within reasonable limits & at comparable price prevailing in the market. This clause is also applicable if for any reason, the contract is cancelled.
6. The Bank reserves the right to recover any dues payable by the selected bidder from any outstanding amount to the credit of the selected bidder, including the pending bills and security deposit, if any, under this contract.
7. In addition to the cancellation of purchase order, the Bank reserves its right to take appropriate action on the bidder for non- performance and/or invoke the Bank Guarantee or foreclose the Security Deposit given by the bidder towards non- performance/non-compliance of the terms and conditions of the contract, to appropriate towards damages.

13.16 Consequences of Termination

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

In the event that the termination of the Contract is due to the expiry of the term of the Contract, a decision not to grant any (further) extension by the Bank , the Bidder herein shall be obliged to provide all such assistance to the next successor Bidder or any other person as may be required and as The Bank may

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

13.17 Audit by Third Party

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

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

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

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

13.18 Access Through Virtual Private Network (VPN)

The Bank may, at its sole discretion, provide remote access to its information technology system to IT Service Provider through secured Virtual Private Network (VPN) to facilitate the performance of IT Services. Such remote access to the Bank's information technology system shall be subject to the following:

1. Service Provider shall ensure that the remote access to the Bank's VPN is performed through a laptop/desktop ("Device") specially allotted for that purpose by the Service Provider and not through any other private or public Device.
2. Service Provider shall ensure that only its authorized employees/representatives access the Device.
3. Service Provider shall be required to get the Device hardened/configured as per the Bank's prevailing standards and policy.
4. Service Provider and/or its employee/representative shall be required to furnish an undertaking and/or information security declaration on the Bank's prescribed format before such remote access is provided by the Bank.
5. Service Provider shall ensure that services are performed in a physically protected and secure environment which ensures confidentiality and integrity of the Bank's data and artifacts, including but not limited to information (on customer, account, transactions, users, usage, staff, etc.), architecture (information, data, network, application, security, etc.), programming codes, access configurations, parameter settings, executable files, etc., which the Bank representative may inspect. The service Provider shall facilitate and/ or handover the Device to the Bank or its authorized representative for investigation and/or forensic audit.
6. Service Provider shall be responsible for protecting its network and subnetworks, from which remote access to the Bank's network is performed, effectively against unauthorized access, malware, malicious code and other threats to ensure the Bank's information technology system is not compromised in the course of using remote access facility.

14 APPENDIX

14.1 APPENDIX 1A: Functional Compliance Sheet:

Attached as a separate Excel file.

- Exceptions, disclaimers, limitations, conditional compliance submitted by bidder and / or OEMs in the bid shall not be taken on record and selected bidder & respective OEM must mandatorily provide such features, modules, add-ons, service etc. sought by the bank in the RFP.
- Generic, speculative & theoretical points should be avoided in the responses.

14.2 APPENDIX 1B: Technical Compliance Sheet

Attached as a separate Excel file.

- Exceptions, disclaimers, limitations, conditional compliance submitted by bidder and / or OEMs in the bid shall not be taken on record and selected bidder & respective OEM must mandatorily provide such features, modules, add-ons, service etc. sought by the bank in the RFP.
- Generic, speculative & theoretical points should be avoided in the responses and shall be considered null and void

14.3 APPENDIX 2: Commercial Bill of material Sheet

Attached as a separate Excel file.

- Exceptions, disclaimers, limitations, conditional compliance submitted by bidder and / or OEMs in the bid shall not be taken on record and selected bidder & respective OEM must mandatorily provide such features, modules, add-ons, service etc. sought by the bank in the RFP.
- Generic, speculative & theoretical points should be avoided in the responses and shall be considered null and void

14.4 APPENDIX 3: Bill of Quantity

Attached as a separate Excel file.

- Exceptions, disclaimers, limitations, conditional compliance submitted by bidder and / or OEMs in the bid shall not be taken on record and selected bidder & respective OEM must mandatorily provide such features, modules, add-ons, service etc. sought by the bank in the RFP.

- Generic, speculative & theoretical points should be avoided in the responses and shall be considered null and void

15 ANNEXURES

15.1 Annexure 1: Submission Checklist (on bidder's letterhead)

Checklist			
S.No.	Particulars	Submitted (Yes/No)	Page No
1	Bidder's Information		
2	Tender Covering Letter		
3	Bid Security Declaration		
4	Pre-Qualification Criteria		
5	Acceptance/Compliance Certificate		
6	Manufacturer's Authorization form		
7	Certification on OEM requirement		
8	Escalation matrix		
9	Litigation Certificate		
10	Non- Blacklisting undertaking		
11	Undertaking of Authenticity		
12	Non-Disclosure agreement		
13	Commercial proposal submission checklist		
14	Bank guarantee format for EMD		
15	Performance guarantee		
16	Pre-contract integrity pact		
17	Compliance with FRS, TRS, SoW & SBOM		
18	Stack Confirmation Sheet		
19	S-BOM & C-BOM Details of all the proposed Tool/solutions		
20	Technical Presentation Submission		
21	Signed Copy of RFP		
22	Signed Copy of Corrigendum, if any		
23	Appendix 1A, Appendix 1B , Appendix 3 & Masked Appendix 2		

Note:

a) All pages of the bid documents must be sealed & signed in full by authorized person.

b) All pages of the bid documents should be numbered in serial order i.e. 1, 2, 3....

c) Bank may ask for any other document on its discretion.

Signature & Seal of the Bidder

15.2 Annexure 2: Bidder's Information

Bidder's Information

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

Reg: Request for proposal for Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services

Ref: RFP No. _____ dated _____

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

#	Particulars	Details
	Mobile No.	
	Email Address	

Wherever applicable submit documentary evidence to facilitate verification.

DECLARATION:

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

1. The Bank is not bound to accept the lowest bid or may reject all or any bid at any stage at its sole discretion without assigning any reason, therefore.
2. If our Bid for the above job is accepted, we undertake to enter into and execute at our cost, when called upon by the Bank to do so, a contract in the prescribed form. Unless and until a formal contract is prepared and executed, this bid together with your written acceptance thereof shall constitute a binding contract between us.
3. We have read and understood all the terms and conditions and contents of the RFP and also undertake that our bid conforms to all the terms and conditions and does not contain any deviation and misrepresentation. We understand that the bank reserves the right to reject our bid on account of any misrepresentation/deviations contained in the bid.
4. Bank may accept or entrust the entire work to one Bidder or divide the work to more than one bidder without assigning any reason or giving any explanation whatsoever and the Bank's decision in this regard shall be final and binding on us.
5. I/ We do not have any conflict of interest as mentioned in the RFP document.
6. I/We submit this application under and in accordance with the terms of the RFP document and agree and undertake to abide by all the terms and conditions of the RFP document.
7. The Prices submitted by us have been arrived at without agreement with any other Bidder of this RFP for the purpose of restricting competition.
8. The prices submitted by us have not been disclosed and will not be disclosed to any other Bidder responding to this RFP.
9. We have not induced or attempted to induce any other Bidder to submit or not to submit a Bid for restricting competition.
10. We have quoted for all the services/items mentioned in this RFP in our price Bid.
11. The rate quoted in the price Bids are as per the RFP and subsequent pre-Bid clarifications/ modifications/ revisions furnished by the Bank, without any exception.
12. We agree to the splitting of order in the proportion as stated in the RFP at the discretion of Bank.
13. We certify that while submitting our Bid document, we have not made any changes in the contents of the RFP document, read with its amendments/clarifications provided by the Bank.
14. If our bid is accepted, we are to be jointly and severally responsible for the due performance of the contract.
15. We ensured that salary payments to resources deployed for Bank's Project is done through Transfer mode from bidder's Bank a/c directly to credit into their specific salary accounts only. No cash payments are to be made to provide remuneration for services provided to the Bank on behalf of the selected bidder.
16. Bidder means the vendor(s) who is decided and declared so after examination of commercial bids.

17. We ensure that the entire data relating to payment systems operated by them will be stored in a system only in India. This data should include the full end-to-end transaction details / information collected / carried / processed as part of the message / payment instruction.
18. We confirm that Payment of statutory dues like PF, ESIC etc. are being made on time to the employees.

Date:

Place:

Bidder's Authorized Signatory

Designation

Bidder's name

Company Name and Seal

15.3 Annexure 3: Tender Covering Letter

Tender Covering Letter

(Should be submitted on Company's letter head)

To Assistant General Manager (Cyber Security)

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

Dear Sir,

Sub: Request for proposal for Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services

Ref No. _____ dated _____

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

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

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

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

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

Dated this ____ day of _____, 2025



Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services

Authorized Signatory

Designation

Bidder's name

(Name of Address Authorized Signatory)

Company Name and Seal

15.4 Annexure 4: Bid Security Declaration

Bid Security Declaration

(To be stamped in accordance with stamp act)

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

Date: _____

To,

Assistant General Manager (Cyber Security)

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

Dear Sir,

We, the undersigned, declare that:

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

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

- Fails to honor submitted bid; and/or
- If the bidder withdraws the bid during the period of bid validity (180 days from the date of opening of bid).
- If the bidder makes any statement or encloses any form which turns out to be false, incorrect and / or misleading at any time prior to signing of contract and/or conceals or suppresses material information; and / or
- The selected bidder withdraws his tender before furnishing the unconditional and irrevocable Performance Bank Guarantee.
- The bidder violates any of the provisions of the terms and conditions of this tender specification.
- In case of the successful bidder, if the bidder fails:
 - To sign the contract in the form and manner to the satisfaction of Punjab & Sind Bank
 - To furnish Performance Bank Guarantee in the form and manner to the satisfaction of Punjab & Sind Bank either at the time of or before the execution of Agreement.

- Bank may proceed against the selected bidder in the event of any evasion, avoidance, refusal or delay on the part of bidder to sign and execute the Purchase Order / Service Level Agreements or any other documents, as may be required by the Bank, if the bid is accepted.

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

Name of Signatory

Designation

15.5 Annexure 5: Pre-Qualification Criteria

Ref: RFP No. _____ dated _____

S

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

- The bidder/OEM comply with CVC guideline 3(a,b) circular no. 03/01/12, GFR Rule 16(a) of 2005 and OM of DOE dated 25/07/2016
 In a tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product, in the same tender.
- If an agent submits bid on behalf of the principal/OEM, the same agent shall not submit a bid on behalf of another principal/OEM in the same tender for the same item/product.

Date

Signature with seal

Name:

Designation:

15.6 Annexure 6: Acceptance/Compliance Certificate

ACCEPTANCE/ COMPLIANCE CERTIFICATE

Ref: RFP No. _____ dated _____

All Terms and Conditions including scope of work

We hereby undertake and agree to abide by all the terms and conditions, scope of work & other terms stipulated by the Bank in this RFP including all addendum, corrigendum, clarification issued by bank etc.

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

Any assumptions, deviation or exclusions may result in the disqualification of our bids.

We also understand that the bank may not consider our assumptions, deviations or exclusions quoted by us anywhere in the proposal during the evaluation or during the contract period and we shall be liable make necessary arrangements at no additional cost to the bank in order to meet the requirements stated in the RFP including all addendum, corrigendum, clarification issued by bank etc.

Signature:

Seal of company

Signature:

Seal of company

15.7 Annexure 7: Manufacturer's Authorization Form

MANUFACTURER'S AUTHORIZATION FORM

RFP No:

(Letter to be submitted by the OEM's letter head)

To,

Assistant General Manager (Cyber Security)

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

Dear Sir,

Sub: Request for proposal for Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services vide RFP No: _____

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

1. We hereby extend our full ATS/AMC support for the Products and services offered by the above _____ against the above RFP.
2. We also undertake to provide any or all of the following materials, notifications, and information pertaining to the Products supplied by the _____:
 - a. Such Products as the Bank may opt to purchase from the _____, provided that this option shall not relieve the ABP of any ATS/AMC support obligations under the RFP; and
 - b. In the event of termination of production of such Products:
3. Advance notification to the Bank of the pending termination, in sufficient time to permit the Bank to procure needed requirements; and following such termination, furnishing at no cost to the Bank operations manuals, standards and specifications of the Products, if requested.
4. We duly authorize the said _____ to provide on our behalf in fulfilling all installations, technical support and maintenance obligations required by the contract.
5. We hereby certify that we have read the clauses contained in O.M. No. 6/18/2019-PPD, dated 23.07.2020 order (Public Procurement No. 1), order (Public Procurement No. 2) dated 23.07.2020 and order (Public Procurement No. 3) dated 24.07.2020 regarding restrictions on procurement from a

bidder of a country which shares a land border with India. We further certify that we are not from such a country or if from a country, have been registered with competent authority. We certify that we fulfil all the requirements in this regard and our ABP is eligible to participate in the above RFP.

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

Yours faithfully

Authorized Signatory

(Name of manufacturers):

Place:

Name:

Date:

Phone No.:

Fax:

E-mail:

15.8 Annexure 8: Certification on OEM Requirements

RFP No:

(Letter to be submitted by the OEM's letter head)

To,

Assistant General Manager (Cyber Security)

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

Dear Sir,

Sub: Request for proposal Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services vide RFP No: _____

We, who are established and reputable manufacturers / producers of _____ having factories / development facilities at _____ (address of factory / facility) confirms the following:

- i. Scope of work pertaining to Requirement analysis, System design, Development & implementation, Documentation, Final Deployment and Go-live will be performed by us for our proposed product as mentioned in the RFP.
- ii. We will provide our highest-level support during the O&M, ATS & AMC phase
- iii. We also confirm that, starting from Year 2 and continuing annually during the Operations and Management phase, our personnel will conduct a comprehensive review of configurations, rules, and parameterizations, as well as a solution architecture review for all PSB Bank environments related to our product. This review will also address any observations raised by regulators concerning the implementation of our solution in the Bank. A detailed report of the review will be submitted directly to the designated SPOC at PSB Bank by our assigned project manager.
- iv. Additionally, we will liaison with the bidder to close all the observation in the review report, if required, or we shall close through our personnel. Timelines to close the issue would be discussed and agreed with the bank while submitting the report based on the criticality defined in the report, based on the discussion.

Yours faithfully

Authorized Signatory

(Name of manufacturers):

Place:



Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services

Name:

Date:

Phone No.:

Fax:

E-mail:

15.9 Annexure 9: Escalation Matrix

Escalation Matrix

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

Ref: RFP No. _____ dated _____.

Name of the Company/Firm:

Service-Related Issues

#	Name	Designation	Full Office Address	Phone No.	Mobile No.	Email address
a.		First Level Contact (Senior by designation to the project Director)				
b.		Second level contact (If response not received in 4 Hours)				
c.		Regional/Zonal Head (If response not received in 24 Hours)				
d.		Country Head (If response not received in 48 Hours)				

Any change in designation, substitution will be informed to bank immediately.

Date

Signature with seal

Name:

Designation:

15.10 Annexure 10: Litigation Certificate

Litigation Certificate

Reg.: Selection of Bidder(s) For Request for proposal for Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services

To be provided by Statutory Auditor/Chartered Accountant

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

Date: _____

Place: _____

Signature of CA/Statutory Auditor

Name of CA/Statutory Auditor:

Designation:

Email ID:

Mobile No:

Telephone No.:

Seal of Company:

15.11 Annexure 11: Non-blacklisting undertaking

Undertaking for non-blacklisting

To,

Assistant General Manager (Cyber Security)

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

Dear Sir,

Reg.: Request for proposal for Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services

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

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

Thanking You,

Yours faithfully,

Date: _____

Place: _____

Signature of Authorized Signatory

Name of Signatory:

Designation:

Email ID:

Mobile No:

Telephone No.:

Seal of Company:

15.12 Annexure 12: Undertaking of Authenticity (on bidder's letterhead)

To:

(Name and address of Procuring Office)

Sub: Undertaking of Authenticity for supplied Product(s)

Ref: RFP No. xx:xx dated dd/mm/yyyy

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

1. We also undertake that in respect of licensed operating systems and other software utilities to be supplied, the same will be sourced from authorized sources and supplied with Authorized License Certificate (i.e. Product keys on Certification of Authenticity in case of Microsoft Windows Operating System).
2. Should you require, we hereby undertake to produce the certificate from our OEM supplier in support of above undertaking at the time of delivery/installation. It will be our responsibility to produce such letters from our OEM supplier's at the time of delivery or within a reasonable time.
3. In case of default and/or the Bank finds that the above conditions are not complied with, we agree to take back the Product(s) supplied and return the money paid by you, in full within seven days of intimation of the same by the Bank, without demur or any reference to a third party and without prejudice to any remedies the Bank may deem fit.
4. We also take full responsibility of both Product(s) & Service(s) as per the content of the RFP even if there is any defect by our authorized Service Centre / Reseller / SI etc.

Dated this day of 2025

(Signature)

(Name)

(In the capacity of)

Duly authorised to sign Bid for and on behalf of _____

15.13 Annexure 13: Non-Disclosure Agreement

NON-DISCLOSURE AGREEMENT

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

NDA format is provided below.

(To be stamped in accordance with stamp act)

Strictly Private and Confidential

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

AND

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

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

WHEREAS:

1. Punjab & Sind Bank is engaged in the business of providing financial services to its customers and intends to engage service provider _____
2. In the course of such an assignment, it is anticipated that Punjab & Sind Bank or any of its officers, employees, officials, representatives or agents may disclose, or deliver, to the Bidder some Confidential Information (as hereinafter defined), to enable the Bidder to carry out the aforesaid Implementation assignment (hereinafter referred to as "the Purpose").
3. The Bidder is aware and confirms that all information, data and other documents made available in the RFP/Bid Documents/Agreement /Contract or in connection with the Services rendered by the

Bidder are confidential information and are privileged and strictly confidential and or proprietary of Punjab & Sind Bank. The Bidder undertakes to safeguard and protect such confidential information as may be received from Punjab & Sind Bank.

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

4. Confidential Information:

- (i) "Confidential Information" means all information disclosed/furnished by Punjab & Sind Bank to the Bidder whether orally, in writing or in electronic, magnetic or other form for the limited purpose of enabling the Bidder to carry out the proposed Implementation assignment, and shall mean and include data, documents and information or any copy, abstract, extract, sample, note or module thereof, explicitly designated as "Confidential"; Provided the oral information is set forth in writing and marked "Confidential" within seven (7) days of such oral disclosure.
- (ii) The Bidder may use the Confidential Information solely for and in connection with the Purpose and shall not use the Confidential Information or any part thereof for any reason other than the Purpose stated above.

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

- (a) is or subsequently becomes legally and publicly available without breach of this Agreement by either party,
- (b) was rightfully in the possession of the Bidder without any obligation of confidentiality prior to receiving it from Punjab & Sind Bank,
- (c) was rightfully obtained by the Bidder from a source other than Punjab & Sind Bank without any obligation of confidentiality,
- (d) was developed by for the Bidder independently and without reference to any Confidential Information and such independent development can be shown by documentary evidence, or is/was disclosed pursuant to an order of a court or governmental agency as so required by such order, provided that the Bidder shall, unless prohibited by law or regulation, promptly notify Punjab & Sind Bank of such order and afford Punjab & Sind Bank the opportunity to seek appropriate protective order relating to such disclosure.
- (e) the recipient knew or had in its possession, prior to disclosure, without limitation on its confidentiality.
- (f) is released from confidentiality with the prior written consent of the other party.

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

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

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

The obligations of this clause shall survive the expiration, cancellation or termination of this Agreement

5. Non-disclosure: The Bidder shall not commercially use or disclose any Confidential Information, or any materials derived there from to any other person or entity other than persons in the direct employment of the Bidder who have a need to have access to and knowledge of the Confidential Information solely for the Purpose authorized above. The Bidder shall take appropriate measures by instruction and written agreement prior to disclosure to such employees to assure against unauthorized use or disclosure. The Bidder may disclose Confidential Information to others only if the Bidder has executed a Non-Disclosure Agreement with the other party to whom it is disclosed that contains terms and conditions that are no less restrictive than these presents, and the Bidder agrees to notify Punjab & Sind Bank immediately if it learns of any use or disclosure of the Confidential Information in violation of terms of this Agreement.

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

- a) Information regarding Punjab & Sind Bank and any of its Affiliates, customers and their accounts ("Customer Information"). For purposes of this Agreement, Affiliate means a business entity now or hereafter controlled by, controlling or under common control. Control exists when an entity owns or controls more than 10% of the outstanding shares or securities representing the right to vote for the election of directors or other managing authority of another entity; or
 - b) any aspect of Punjab & Sind Bank's business that is protected by patent, copyright, trademark, trade secret or other similar intellectual property right; or
 - c) business processes and procedures; or
 - d) current and future business plans; or
 - e) personnel information; or
 - f) Financial information.
6. Publications: The Bidder shall not make news releases, public announcements, give interviews, issue or publish advertisements or publicize in any other manner whatsoever in connection with this Agreement, the contents / provisions thereof, other information relating to this Agreement, the Purpose, the Confidential Information or other matter of this Agreement, without the prior written approval of Punjab & Sind Bank.
7. Term: This Agreement shall be effective from the date hereof and shall continue till expiration of the Purpose or termination of this Agreement by Punjab & Sind Bank, whichever is earlier. The Bidder hereby agrees and undertakes to Punjab & Sind Bank that immediately on termination of this Agreement it would forthwith cease using the Confidential Information and further promptly return or destroy, under information to Punjab & Sind Bank, all information received by it from Punjab & Sind Bank for the Purpose, whether marked Confidential or otherwise, and whether in written,

graphic or other tangible form and all copies, abstracts, extracts, samples, notes or modules thereof. The Bidder further agree and undertake to Punjab & Sind Bank to certify in writing upon request of Punjab & Sind Bank that the obligations set forth in this Agreement have been complied with.

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

8. Title and Proprietary Rights: Notwithstanding the disclosure of any Confidential Information by Punjab & Sind Bank to the Bidder, the title and all intellectual property and proprietary rights in the Confidential Information shall remain with Punjab & Sind Bank.
9. Remedies: The Bidder acknowledges the confidential nature of Confidential Information and that damage could result to Punjab & Sind Bank if the Bidder breaches any provision of this Agreement and agrees that, if it or any of its directors, officers or employees should engage or cause or permit any other person to engage in any act in violation of any provision hereof, Punjab & Sind Bank may suffer immediate irreparable loss for which monetary compensation may not be adequate. Punjab & Sind Bank shall be entitled, in addition to other remedies for damages & relief as may be available to it, to an injunction or similar relief prohibiting the
10. Bidder, its directors, officers etc. from engaging in any such act which constitutes or results in breach of any of the covenants of this Agreement.
11. Any claim for relief to Punjab & Sind Bank shall include Punjab & Sind Bank's costs and expenses of enforcement (including the attorney's fees).
12. Entire Agreement, Amendment and Assignment: This Agreement constitutes the entire agreement between the Parties relating to the matters discussed herein and supersedes any and all prior oral discussions and / or written correspondence or agreements between the Parties. This Agreement may be amended or modified only with the mutual written consent of the Parties. Neither this Agreement nor any right granted hereunder shall be assignable or otherwise transferable.
13. Dispute Resolution: If any dispute, difference or claim arises between the parties hereto in connection with the validity, interpretation, implementation or alleged breach of the terms of this Agreement or anything done or omitted to be done pursuant to this Agreement, the Parties shall attempt in the first instance to resolve the same through negotiation. If the dispute is not resolved through negotiation within 30 (thirty) days after commencement of discussions, then, the parties shall be at liberty to approach competent court of law at Delhi for adjudication of the disputes.
14. Governing Law: Governing Law: The laws of India shall govern this Agreement
15. Jurisdiction: It is hereby agreed between the parties that any suit or legal proceedings to enforce the rights of either party under this Agreement shall be instituted and tried by a competent court in the city of Delhi only.
16. Authorized Signatory: The selected Bidder shall indicate the authorized signatories who can discuss and correspond with the bank about the obligations under the contract. The selected Bidder shall submit at the time of signing the contract a certified copy of the resolution of their board, authenticated by the company secretary, authorizing an official or officials of the Bidder to discuss, sign agreements/contracts with The Bank, raise invoice and accept payments and also to correspond. The Bidder shall provide proof of signature identification for the above purposes as required by the bank

17. Force Majeure: Force Majeure is herein defined as any cause, which is beyond the control of the selected Bidder or The Bank as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:-
 - Natural phenomenon, including but not limited to floods, droughts, earthquakes, epidemics and pandemics
 - Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos
 - Terrorist attack, public unrest in work area
 - Provided either party shall within 10 days from occurrence of such a cause, notify the other in writing of such causes. The Bidder or The Bank shall not be liable for delay in performing his/her obligations resulting from any force Majeure cause as referred to and/or defined above. Any delay beyond 30 days shall lead to termination of contract by parties and all obligations expressed quantitatively shall be calculated as on date of termination. Notwithstanding this, provisions related to indemnity, confidentiality survive termination of the contract.
 - Unless otherwise directed by the bank in writing, the Bidder affected by force majeure shall continue to perform the obligations under this agreement, which are not affected by the force majeure event and shall take such steps as are reasonably necessary to remove the causes resulting in force majeure and to mitigate the effect thereof.
 - As soon as the cause of force majeure has been removed, the Bidder shall notify the Bank and resume the affected activity without delay.
 - Notwithstanding the above, the decision of the bank shall be final and binding on the Bidder in the event of force majeure.
18. Intellectual Property Indemnity: In the event of any claim asserted by a third party of infringement of copyright, patent, trademark, industrial design rights, etc., arising from the use of the Goods or any part thereof in India, the Vendor(s) shall act expeditiously to extinguish such claim. If the Vendor(s) fails to comply and the Bank is required to pay compensation to a third party resulting from such infringement, the Vendor(s) shall be responsible for the compensation to the claimant including all expenses, court costs and lawyer fees. The Bank will give notice to the Vendor(s) of such a claim, if it is made, without delay. The Vendor(s) shall indemnify the Bank against all third-party claims.
19. General: The Bidder shall not reverse - engineer, decompile, disassemble or otherwise interfere with any software disclosed hereunder.
20. All Confidential Information is provided “as is”. In no event shall the Punjab & Sind Bank be liable for the inaccuracy or incompleteness of the Confidential Information. None of the Confidential Information disclosed by Punjab & Sind Bank constitutes any representation, warranty, assurance, guarantee or inducement with respect to the fitness of such Confidential Information for any particular purpose.
21. Punjab & Sind Bank discloses the Confidential Information without any representation or warranty, whether express, implied or otherwise, on truthfulness, accuracy, completeness, lawfulness, merchant ability, fitness for a particular purpose, title, non-infringement, or anything else.
22. Waiver: A waiver (whether express or implied) by Punjab & Sind Bank of any of the provisions of this Agreement, or of any breach or default by the Bidder in performing any of the provisions hereof, shall not constitute a continuing waiver and such waiver shall not prevent Punjab & Sind Bank from subsequently enforcing any of the subsequent breach or default by the Bidder under any of the provisions of this Agreement.



Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services

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

For and on behalf of _____	For and on behalf of Punjab & Sind Bank

15.14 Annexure 14: Commercial Proposal Submission Checklist

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

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

1. Bill of Material as per Appendix 2.

15.15 Annexure 15: Bank Guarantee Format for Earnest Money Deposit

Performa for the Bank Guarantee for Earnest Money Deposit

(To be stamped in accordance with stamp act)

Ref: Bank Guarantee #

Date: _____

To,

Assistant General Manager (Cyber Security)

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

Dear Sir,

In accordance with your bid reference No. _____ Dated _____ M/s _____ having its registered office at _____ herein after Called „bidder”) wish to participate in the said bid for Selection of Bidder(s) Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services An irrevocable Financial Bank Guarantee (issued by a nationalized /scheduled commercial Bank) against Earnest Money Deposit amounting to Rs.) valid up to _____ is required to be submitted by the bidder, as a condition for participation in the said bid, which amount is liable to be forfeited on happening of any contingencies mentioned in the bid document. M/s _____ having its registered office at _____ has undertaken in pursuance of their offer to Punjab & Sind Bank (hereinafter called as the beneficiary) dated _____ has expressed its intention to participate in the said bid and in terms thereof has approached us and requested us _____ (Name of Bank) _____ (Address of Bank) to issue an irrevocable financial Bank Guarantee against Earnest Money Deposit (EMD) amounting to Rs _____ (Rupees _____) valid up to _____. We, the _____ (Name of Bank) _____ (Address of Bank) having our Head office at _____ therefore Guarantee and undertake to pay immediately on first written demand by Punjab & Sind, the amount Rs. _____ (Rupees _____) without any reservation, protest, demur and recourse in case the bidder fails to Comply with any condition of the bid or any violation against the terms of the bid, Without the beneficiary needing to prove or demonstrate reasons for its such demand. Any Such demand made by said beneficiary shall be conclusive and binding on us irrespective of any dispute or difference raised by the bidder. This guarantee shall be irrevocable and shall remain valid up to _____. If any further extension of this Guarantee is required, the same shall be extended to such required period on receiving instructions in writing, from Punjab & Sind Bank, on whose behalf



Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services

guarantee is issued. "Notwithstanding anything contained herein above Our liability under this bank guarantee shall not exceed Rs. _____ (Rupees _____).

This bank guarantee shall be valid up to _____. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only if you serve upon us a written claim or demand, on or before _____ before 14.30 hours (Indian Standard Time) or within Bank official working hours where after it ceases to be in effect in all respects whether or not the original bank guarantee is returned to us." In witness whereof the Bank, through its authorized officer has set its hand stamped on this _____ Day of _____ 2025 at _____

Name of signatory

Bank Common Seal

Designation

15.16 Annexure 16: Format of Performance Guarantee

(Issued by any Scheduled Commercial Bank & to be executed on stamp paper of requisite value as per stamp duty payable at place of execution.)

Tender Reference No: _____

Date _____

To,

Assistant General Manager (Cyber Security)

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

Dear Sir,

1. WHEREAS pursuant to a Request for Proposal dated..... (hereinafter referred to as RFP, issued by Punjab & Sind Bank, Staff Training Centre Punjab & Sind Bank, B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B, Rohini, Delhi, 110085 in response of (Bidder(s) / Service Provider), a Company registered under the Companies Act, 1956 and having its Registered / Corporate Office athas awarded the Contract valued Rs.....and appointed.....as Bidder(s) / Service Provider for procurement of IT Service and Operation Management Solution vide Appointment letter / Purchase Order No.....dated.....on the terms and conditions as set out inter-alia in the said RFP and in the Appointment Letter / Purchase Order.
2. WHEREAS you have in terms of the said Appointment letter / Purchase Order called upon (Bidder(s) / Service Provider to furnish a Performance Guarantee, for Rs.....Rupees only), equivalent to.....of the Contract value, to be issued by a Bank in your favour towards due performance of the Contract in accordance with the specifications, terms and conditions of the said Appointment letter / Purchase Order and an Agreement entered / to be entered into in this behalf.
3. WHEREAS (Bidder(s) / Service Provider) has approached us for issuing in your favour a performance Guarantee for the sum of Rs..... (Rupees.....).

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

terms and conditions relating thereto including non-execution of the Agreement as may be claimed by you on account of breach on the part ofof their obligations or default in terms of the said Appointment letter / Purchase Order.

4. Notwithstanding anything to the contrary contained herein or elsewhere, we agree that your decision as to whether thehas committed any such breach / default or defaults and the amount or amounts to which you are entitled by reasons thereof will be binding on us and we shall not be entitled to ask you to establish its claim or claims under this Guarantee, but will pay the same forthwith on demand without any protest or demur. Any such demand made by you shall be conclusive as regards the amount due and payable by us to you.
5. This Guarantee shall be valid up to plus 12 months of the Claim period from the expiry of said guarantee period. Without prejudice to your claim or claims arisen and demanded from or otherwise notified to us in writing before the expiry of the said date which will be enforceable against us notwithstanding that the same is or are enforced after the said date.
6. You will have the fullest liberty without our consent and without affecting our liabilities under this Guarantee from time to time to vary any of the terms and conditions of the said appointment letter or the Contract to be made pursuant thereto or extend the time of performance of the Contract or to postpone for any time or from time to time any of your rights or powers against theand either to enforce or forbear to enforce any of the terms and conditions of the said appointment letter or the Contract and we shall not be released from our liability under Guarantee by exercise of your liberty with reference to matters aforesaid or by reason of any time being given to or any other forbearance, act or omission on your part or any indulgence by you or any other act, matter or things whatsoever which under law relating to sureties, would but for the provisions hereof have the effect of releasing us from our liability hereunder provided always that nothing herein contained will enlarge our liability hereunder beyond the limit of Rs..... (Rupees.....only) as aforesaid or extend the period of the guarantee beyond(date) unless expressly agreed to by us in writing.
7. This Guarantee shall not in any way be affected by you are taking or giving up any securities fromor any other person, firm or company on its behalf or by the winding up, dissolution, insolvency as the case may be of
8. In order to give full effect to the Guarantee herein contained, you shall be entitled to act as if we were your principal debtors in respect of all your claims againsthereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of surety ship and other rights, if any, which are in any way inconsistent with any of the provisions of Guarantee.
9. Subject to the maximum limit of our liability as aforesaid, this Guarantee will cover all your claim or claims againstfrom time to time arising out of or in relation to the said appointment letter / Contract and in respect of which your claim in writing is lodged on us before expiry of Guarantee.
10. Any Notice by way of demand or otherwise hereunder may be sent by special courier, telex, fax, e-mail or registered post to our Head Office / Local address as aforesaid and if sent accordingly it shall be deemed to have been given when the same has been posted.
11. This Guarantee shall not be affected by any change in the constitution of _____or nor shall it be affected by any change in your constitution or by any amalgamation or absorption thereof or therewith but will ensure to the benefit of and be available to and be enforceable by the absorbing or amalgamated company or concern.
12. This Guarantee shall come into force from the date of its execution and shall not be revoked by us any time during its currency without your previous consent in writing.

13. We further agree and undertake to pay you the amount demanded in writing irrespective of any dispute or controversy between you and _____ in any suit or proceeding pending before any court, Tribunal or Arbitrator relating thereto, our liability under these presents being absolute and unequivocal. The payments so made by us shall be a valid discharge of our liability for payment hereunder and _____ shall have no claim against us for making such payment.
14. We have the power to issue this Bank Guarantee in your bank's favour as the undersigned has full power to execute this Bank Guarantee under the Power of Attorney issued by our Bank.
15. Our authority to issue this guarantee may be verified with our Controlling Office situated at _____ (full details of persons to be contacted address and phone Numbers etc).
16. Notwithstanding anything contained herein above;
 - i. Our liability under this Guarantee shall not exceed
Rs _____ (Rupees _____ only)
 - ii. This Guarantee shall be valid and remain in force up to _____ plus the Claim period of 12(Twelve) months and including the date _____ and
 - iii. We are liable to pay the guaranteed amount or any part thereof under this Guarantee only and only if you serves upon us a written claim or demand for payment on or before the expiry of this Guarantee. ss

Dated this the _____ day of _____ 2025

Signature and Seal of Guarantors

Bidder(s)'s Bank

15.17 Annexure 17 : Pre-contract integrity pact

(To be stamped in accordance with stamp act)

PRE-CONTRACT INTEGRITY PACT

Between

Punjab & Sind Bank (PSB) hereinafter referred to as "The Principal",

And

_____ hereinafter referred to as "The Bidder/ Contractor"

Preamble

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

In order to achieve these goals, the Principal has appointed 1. Sh. Asha Ram Sihag and 2. Aditya Prakash Mishra as Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Section 4 - Compensation for Damages

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

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

Section 5 - Previous transgression

(1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

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

(1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.

(3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

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

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption,

or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 - Independent External Monitor

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

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

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

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

(5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

(6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

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

(8) If the Monitor has reported to the MD & CEO of Punjab & Sind Bank, a substantiated suspicion of an offence under relevant IPC/ PC Act, and the MD & CEO of Punjab & Sind Bank has not, within the

reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

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

Section 9 - Pact Duration

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

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

Section 10 - Other provisions

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

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

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

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

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

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

 (For & On behalf of the Principal)

 (For & On behalf of Bidder / Contractor)

Place -----

Date -----

Witness 1:

(Name & Address)

Witness 2:

(Name & Address)

15.18 Annexure 18: Compliance with FRS, TRS, SoW & SBOM (on respective OEM letterhead)

RFP No:

(Letter to be submitted by the OEM's on their letter head)

To,

Assistant General Manager (Cyber Security)

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

Dear Sir,

Sub: Request for proposal for selection of bidder(s) for procurement of Selection of bidder for supply installation, implementation, maintenance & management of NextGen SOC & related services vide RFP No: _____

We, who are established and reputable manufacturers / producers of _____ having factories / development facilities at _____ (address of factory / facility) confirms the following:

S.No.	Product name as per RFP	Product name as per OEM

1. We confirm that we comply with the FRS & TRS requirement **(with at least 75% of the requirement being met through our standard features available in our product)** stated in the RFP and are attaching the Excel/PDF of compliance
2. We confirm that we comply with the SoW requirement stated in the RFP for our product.
3. Attached is the S-BOM & C-BOM (Public) of our solution in the format Annexure 20: S-BOM & CBOM. We shall share private S-BOM & C-BOM (Version that includes sensitive or confidential information, such as vulnerabilities, that should be accessed only by authorized parties) post the issuance of PO. We confirm that we will facilitate through various channels and formats allowing the automated and secure exchange of SBOM data between different systems or platforms

Yours faithfully

Authorized Signatory

(Name of manufacturers):

Place:

Name:

Date:

Phone No.:

Fax:

E-mail:

15.19 Annexure 19: Stack Confirmation Sheet

Solution:

S.No	Solution Name	Make of the Product	Model of the Product
1	SIEM		
2	S-BDL		
3	SOAR		
4	UEBA		
5	Threat Intelligence Platform		
6	XDR		
7	Decoy/Honeypot		
8	Vulnerability assessment & Lifecycle management		
9	Application Security testing Tool		
10	Cloud Security Posture Management		

Services:

S.No	Service Name	Make of the Service Provider
1	Breach Attack & Simulation	
2	Red teaming services	
3	Attack Surface management	
4	Phishing Simulation	
5	Anti-Phishing Services	
6	Dark web Monitoring	
7	Threat Intelligence Feed	
8	Threat Hunting services	
9	Brand Protection and Monitoring	

IT Infrastructure:

S.No	Component Name	Make of the Service Provider
1	Server	
2	Storage	
3	SAN Switch	
4	ToR Switch	
5	Racks	
6	
7	
8	
9	
10	

The details should be in conformity with the **Masked Bill of Material (Appendix 3: Bill of Quantity)** submitted.

Bidders are advised to propose the firm make/model of the products or services. Submission of bids containing alternate options or substitutions in any component is not permitted and bids are liable for rejection.

15.20 Annexure 20: S-BOM & C-BOM DETAILS of all the proposed Tool/solutions

a. S-BOM

On OEM Letterhead

S.No.	Component	Component Name	Component Name	Component Name	Component Name	Component Name	Component Name
1.	Version						
2.	Description						
3.	Supplier						
4.	License						
5.	Origin						
6.	Dependencies						
7.	Vulnerabilities						
8.	Patch Status						
9.	Release Date						
10.	End of Life Date						
11.	Usage Restrictions						
12.	Checksums						
13.	Hashes						
14.	Executable Property						
15.	Archive Property						
16.	Structured Property						
17.	Unique Identifier						

b. C-BOM

On OEM Letterhead

S.No.	Component	Component Name	Component Name	Component Name	Component Name	Component Name	Component Name
1.	Version						
2.	Description						
3.	Supplier						
4.	License						
5.	Origin						
6.	Dependencies						
7.	Vulnerabilities						
8.	Patch Status						
9.	Release Date						
10.	End of Life Date						
11.	Usage Restrictions						
12.	Checksums						
13.	Hashes						
14.	Executable Property						
15.	Archive Property						
16.	Structured Property						
17.	Unique Identifier						

15.21 Annexure 21: Sizing/Volumetrics

#	Solution Name	Volumetrics
1.	SIEM	<p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components (like Data collectors, ingestion pipelines, processing engines, correlation engines, log storage etc.) of the solution must operate in high availability mode. In the event of any component failure, the system should automatically initiate failover within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p> <p>Total 50,000 sustainable EPS/ 2.06 TB per day (Whichever is higher) of data ingestion from the outset scalable to Total 100,000 sustainable EPS/ 4.32 TB per day (Whichever is higher) at DC & DR.</p> <p>All hardware and software components should be architected for seamless scalability (without any change in the hardware/software) up to Total 100,000 sustainable EPS/ 4.32 TB per day (Whichever is higher) at DC & DR, ensuring long-term capacity.</p> <p>If additional capacity is required in the future, the Bank will procure licenses based on the submitted rate card without the infrastructure changes.</p> <p>Each node/environment must be individually provisioned for full peak load</p> <p>The bank will procure additional Licenses in the tranches of 10000 EPS/ 420 Gb per day based on the rate provided in the BOM.</p> <p>Note: Average Event Size considered is 500 Bytes per Event</p> <p>Logs (Normalized Logs & Data) should be stored for 6 months on primary storage (SSD/NVME) and 9 months on object storage.</p>
2.	SOC Big Data Lake (Bank's DC and DR each)	<p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components of the solution must operate in high availability mode. In the event of any component failure, the system should automatically initiate failover within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p>

#	Solution Name	Volumetrics
		<p>All hardware and software components should be built for seamless scalability at DC & DR (on-premises), ensuring long-term capacity.</p> <p>In the case, Cloud is being proposed for Analytics solution, bidder to ensure all hardware and software components should be architected for seamless scalability at primary site & secondary site, ensuring long-term capacity.</p> <p>If additional capacity is required in the future, the Bank will procure licenses based on the submitted rate card without the infrastructure changes.</p> <p>Each node/environment must be individually provisioned for full peak load</p> <p>Logs should be stored for 3 months on primary storage (SSD/NVME) and 18 months on object storage at on-premises storage.</p>
3.	SOAR	<p>5 Concurrent users/Analyst</p> <p>There should be no limitation / restriction on SOAR licenses based on the number of events coming to the SOAR or the number of playbooks or actions performed by SOAR</p> <p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components of the solution must operate in high availability mode. In the event of any component failure, the system should automatically initiate failover within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p> <p>All hardware and software components should be architected for seamless scalability at DC & DR, ensuring long-term capacity.</p> <p>Logs should be stored for 6 months on primary storage (SSD/NVME).</p>
4.	XDR	<p>XDR (Extended Detection and Response) solution for 12,000 users with a throughput requirement of 10 Gbps</p> <p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components of the solution must operate in high availability mode. In the event of any component failure, the system</p>

#	Solution Name	Volumetrics
		<p>should automatically initiate failover within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p> <p>All hardware and software components should be architected for seamless scalability at DC & DR, ensuring long-term capacity.</p> <p>If additional capacity is required in the future, the Bank will procure licenses based on the submitted rate card without the infrastructure changes.</p> <p>Each node/environment must be individually provisioned for full peak load</p> <p>Logs should be stored for 6 months on primary storage(SSD/NVME).</p>
5.	UEBA	<p>Total 50,000 sustainable EPS/ 2.06 TB per day (Whichever is higher) of data ingestion from the outset scalable to Total 100,000 sustainable EPS/ 4.32 TB per day (Whichever is higher) at DC & DR</p> <p>12000 Endpoint Users Scalable to 14000</p> <p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components of the solution must operate in high availability mode. In the event of any component failure, the system should automatically initiate failover within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p> <p>All hardware and software components should be architected for seamless scalability at DC & DR, ensuring long-term capacity.</p> <p>All hardware and software components should be architected for seamless scalability (without any change in the hardware/software) up to Total 100,000 sustainable EPS/ 4.32 TB per day (Whichever is higher) at DC & DR, ensuring long-term capacity.</p> <p>If additional capacity is required in the future, the Bank will procure licenses based on the submitted rate card without the infrastructure changes.</p> <p>Each node/environment must be individually provisioned for full peak load</p> <p>Logs should be stored for 6 months on primary storage (SSD/NVME).</p>

#	Solution Name	Volumetrics
6.	Decoy	<p>Proposed Solution must cover complete scope of min of 200 applications, networks, devices with 50 segments across DC-DR, with min. 10 decoy per segment and capability to add additional decoy connector through decoy customization as per requirement of PSB.</p> <p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components of the solution must operate in high availability mode. In the event of any component failure, the system should automatically initiate failovers within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p> <p>Logs should be stored for 6 months on primary storage(SSD/NVME).</p>
7.	Threat Intelligence platform	<p>At least 5 user licenses</p> <p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components of the solution must operate in high availability mode. In the event of any component failure, the system should automatically initiate failovers within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p> <p>Each node/environment must be individually provisioned for full peak load</p> <p>Logs should be stored for 6 months on primary storage(SSD/NVME).</p>
8.	VA&LM	<p>Minimum Numbers of IPs: 2500</p> <p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components of the solution must operate in high availability mode. In the event of any component failure, the system should automatically initiate failovers within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p> <p>Each node/environment must be individually provisioned for full peak load</p> <p>Logs should be stored for 6 months on primary storage(SSD/NVME).</p>

#	Solution Name	Volumetrics
9.	Application security testing tool	<p>SAST – 1 Enterprise License (unlimited number of Applications/unlimited numbers of scans or lines of code analyzed and 30 Users)</p> <p>DAST - 1 Enterprise license (Number of applications (WEB Facing) with at least 25 applications</p> <p>(However, there should be no restriction on the number of users who can log in and view the console)</p> <p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components of the solution must operate in high availability mode. In the event of any component failure, the system should automatically initiate failovers within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p> <p>Each node/environment must be individually provisioned for full peak load</p> <p>Logs should be stored for 6 months on primary storage(SSD/NVME).</p>
10.	CSPM	<p>At least 20 VMs (VPCs)</p> <p>HA (Active/Active – N+N redundant Deployment) at DC and HA (Active/Active – N+N redundant Deployment) at DR</p> <p>All the inline components of the solution must operate in high availability mode. In the event of any component failure, the system should automatically initiate failovers within seconds, ensuring uninterrupted functionality without requiring manual intervention.</p> <p>Each node/environment must be individually provisioned for full peak load</p> <p>Logs should be stored for 6 months on primary storage(SSD/NVME).</p>
11.	BAS	<ul style="list-style-type: none"> • Tool Uptime availability – 99.9% • Report – Weekly & Monthly basis • Services to be provided – Monthly or Quarterly basis throughout the contract period. • Manpower deployment on monthly or quarterly basis onsite at bank's premise for performing the simulation activity
12.	Red Teaming	<ul style="list-style-type: none"> • Tool Uptime availability – 99.9% • Report – Weekly & Monthly basis

#	Solution Name	Volumetrics
		<ul style="list-style-type: none"> Services to be provided – Continuous basis (24x7)
13.	ASM	<ul style="list-style-type: none"> Tool Uptime availability – 99.9% Report – Weekly & Monthly basis Services to be provided – Continuous basis (24x7)
14.	Phishing Simulation	<ul style="list-style-type: none"> Tool Uptime availability – 99.9% Report – Weekly & Monthly basis Services to be provided – Monthly or Quarterly basis throughout the contract period Manpower deployment on monthly or quarterly basis onsite at bank's premise for performing the simulation activity
15.	Anti-phishing	<ul style="list-style-type: none"> Tool Uptime availability – 99.9% Report – Weekly & Monthly basis Services to be provided – Continuous basis (24x7)
16.	Dark Web monitoring	<ul style="list-style-type: none"> Tool Uptime availability – 99.9% Report – Weekly & Monthly basis Services to be provided – Continuous basis (24x7) Unlimited Takedowns
17.	Brand protection	<ul style="list-style-type: none"> Tool Uptime availability – 99.9% Report – Weekly & Monthly basis Services to be provided – Continuous basis (24x7)
18.	Threat Intelligence feed	<ul style="list-style-type: none"> Tool Uptime availability – 99.9% Report – Weekly & Monthly basis Services to be provided – Continuous basis (24x7) Minimum 10 Portal Login Accounts Commercial Intel Threat Feed in machine readable format – Minimum 1 Open-Source Intel Threat Feed in machine readable format – Minimum 4 Vulnerability Intel, Malware & ransomware Intel, Adversary intel, dark web, Band & leak intel feed etc. in machine readable format
19.	Threat Hunting Services	<ul style="list-style-type: none"> Tool Uptime availability – 99.9% Report – Weekly & Monthly basis Services to be provided – Continuous basis (24x7)
20.	Primary Storage (NVME/SSD)	Bidder is required to right size the storage (Primary Storage (On-premises) & primary storage (on-cloud)) and accordingly design the IT Infrastructure, Backup & other components at each location DC, DR, primary site & secondary site.
21.	Object Storage for application/solution	<p>Bidder is required to propose the storage at each site (DC & DR) with minimum 1.5 PB (Usable RAID 6) of Storage.</p> <p>Bidder is required to right size the storage (Object) and accordingly design the IT Infrastructure, Backup & other components at each location DC, DR, primary site & secondary site.</p>

#	Solution Name	Volumetrics
		<p>The storage solution shall provide either the capacity as right sized by the bidder or a minimum of 1.5 PB (usable), whichever is higher.</p> <p>The size of the backup solution, storage and backup appliance should be sized, designed and proposed by the bidder.</p>
22.	Long term backup storage at both DC & DR	<ul style="list-style-type: none"> Bidder to right size the storage for long retention of Backup data for the duration of the contract. Data, logs etc. on the backup should be open readable format. Enterprise/Full License Bidder to factor the required solution/services to restore the archived data/logs as and when required during the contract period. <p>Proposed solution & appliance should be sized appropriately for backup of Filesystem, Database & VM Data as per below backup policies: -</p> <ul style="list-style-type: none"> Daily Incremental Backup – retained for 4 weeks in disk-based appliance Weekly Full Backup for all data types – Retained for 1 month in disk-based appliance Monthly Full Backups – Retained for 12 Months in the same appliance Yearly Full Backups - Retained for 18 months in the same appliance. After this period, the full backups will be archived to long-term storage for the remaining duration of the contract Database backup going to be full for all the retentions in the same appliance. <p>Any additional capacity required as per above mentioned retention policy sizing needs to be provided by the bidder/OEM free of cost for an entire contract period of the disk appliance.</p>
23.	Non-Production Environment	<ul style="list-style-type: none"> The non-production Environment should be 15% of the DC-Primary (whether proposed on-premises or on-cloud) in terms of Compute and Storage
24.	Backup & Retrieval Solution (On-premise)	<p>Data shall follow a tiered storage approach: initially written to high-speed SSD storage, then staged to D2D (Disk-to-Disk) systems, and finally archived on long term retention storage for long-term retention.</p> <p>The proposed disk-based backup device shall also support encryption functionality.</p> <p>Data Retrieval from cold tier (Long term Storage) to Hot (Primary) accessed storage tier should be factored as a part of the overall solution from day 1.</p>

#	Solution Name	Volumetrics
		<i>For on-cloud, Bidder is required to factor the required backup & restoration solution from the CSP.</i>
25.	egress / data transfer out from CSP storage (Any/all --> Primary/Object/Long term Storage) tier to bank's DC/DR in the open readable format	If the solution is hosted on the cloud, the bidder must ensure that all raw and processed logs, data, and related information are made available to the Bank for storage on on-premises infrastructure throughout the contract. There should be no additional ingress/data transfer charges

Archived data / logs need to be restored in the respective technology for forensic purpose etc.

The bidder is responsible to provide the correct sizing of compute, network, and storage, IOPS, servers etc. in collaboration with Infrastructure OEM and proposed solution/service OEM whose solution/technologies are proposed for NextGEN SOC for successful deployment.

Bidder and OEM should also account for scalability and future growth of the Bank to arrive at sizing for the Contract period.

S.No.	Current assets description	Current assets
	Centralized IT Infrastructure	
1	Servers deployed with OS, DB, Web/app component, middleware's, agents and other applications / software, private & public cloud setups, emerging technologies etc.	2500
2	Database	300
3	Intranet and internet facing business & non-business applications like CBS, Internet Banking, Mobile Banking, HRMS, O365 etc.	200
	Branches	
8	Desktops with various agents like AV, DLP, NAC, ITAM etc.	12000
9	Routers & Switches	7200

Note: The count of IT & Security Infra as listed above is tentative.

Existing and Envisaged Solutions:

A. Existing Solution Stack:

Perimeter Security	Perimeter Firewall	DDoS	SSLi*	Email Security	DNS	Web Gateway Appliance	Anti-APT	Remote Access VPN
Network Security	Core Next Generation Application layer Firewall		NAC					
Endpoint Security	Data Classification	MTP	DRM	DLP	MDM	Endpoint Forensic & Behavior Analysis	Endpoint Anti Phishing	Endpoint Security
Application Security	HIPS	Application Security Testing Tool	WAF					
Data Security	DAM	SDK						
Access Management	IDAM*	MFA*	PIM					
Management and Policy Layer	SIEM	TTS*	NSPM	ITGRC	Vulnerability Management			
	Decoy	NBAD						

B. Envisaged Solution that would be part of Security transformation that would be implemented/augmented in banks cyber Transformation:

Perimeter Security	Perimeter Firewall	Third Party Firewall	DDoS	SSLi	Email Security	DNS	Web Gateway Appliance	Zero Day Attack	ZTNA
Network Security	Core Next Generation Application layer Firewall								
Endpoint Security	xDR	MTP	DRM	DLP					
Application Security	HIPS	Application Security Testing Tool	WAF	Centralized Key Management	File Upload Management	CSPM	S-BOM	Anti-deepfake Solution	
Data Security	DAM	SDK							
Access Management	IDAM	MFA	PIM						
Management and Policy Layer	SIEM	SOAR	AIMLUEBA	ITGRC	Threat Intelligence Platform	Vulnerability lifecycle & Management			
	Decoy		NSPM						

Integration and re-integration with the above solution is to be done by the bidder at no additional cost to the bank.

15.22 Annexure 22: Client References Format

Format for Submission of Client References

To whosoever it may concern

Particulars	Details
Client Information	
Client Name	
Client address	
Name of the contact person and designation	
Phone number of the contact person	
E-mail address of the contact person	
Project Details	
Name of the Project	
Start Date of the project	
End Date of the project	
Current Status (In Progress / Completed)	
Size of Project	
Value of Work Order (In Lakh) (only single work order)	
Scope of work	
Brief Scope of work relevant to the Bank's (PSB) RFP Requirement	
Cyber Security Solution Scope includes out of the below 1. SIEM 2. S-BDL 3. XDR 4. SOAR 5. UEBA 6. Decoy 7. Threat Intelligence Platform 8. Vulnerability Assessment & Lifecycle management 9. Application Security Testing 10. Cloud Security Posture Management Tool	
Services performed as a part of scope out of the below 1. Breach Attack & Simulation 2. Red Teaming services 3. Attack Surface management 4. Phishing simulation	

5. Anti-phishing	
6. Dark web monitoring	
7. Brand protection & Monitoring	
8. Threat Intelligence feed	
9. Threat hunting services	
EPS Count	
No. of Branches/offices	
Supporting Document to substantiate the Scope of work	Contract Copy/PO/Credential letter/ Email Confirmation/ Self Declaration (for OEMs)

Name & Signature of authorised signatory

Seal of Company

15.23 Annexure 23: Pre-bid Query format

Pre-Bid Query Format

(Bidders should submit the queries in excel format only)

Ref: RFP No. _____ dated _____.

Bidder's Name: _____

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

15.24 Annexure 24: Proposed Resources CV

Sr No	Parameter	Description
1	Name & Designation	
2	Proposed Position & Skillset	
4	Educational Qualification	
	Degree Obtained	University/ Institution Year Obtained
5	Cybersecurity Certification/Qualifications	
6	Professional Experience	
	Designation	Company Name Year Obtained
7	Total Years of Cyber Security Experience	
8	Cyber Security Solution and the relevant Project from the below solution <ol style="list-style-type: none"> SIEM S-BDL SOAR UEBA XDR Decoy Threat Intelligence Platform Vulnerability Assessment & Lifecycle management Application Security Testing Cloud Security Posture Management Tool 	
9	Cyber Security Services and the relevant project from the below services <ol style="list-style-type: none"> Breach Attack & Simulation Red Teaming services Attack Surface management Phishing simulation Anti-phishing Dark web monitoring Brand protection & Monitoring Threat Intelligence feed Threat hunting services 	
10	Experience relevant to the Project Wise	

15.25 Annexure 25: Minimum Local Content Certification

Format for Affidavit of Self certification regarding Local Content in line with PPP-MII order and MoP Order, if applicable, to be provided on a non-judicial stamp paper of Rs. 100/-.

TENDER REREFERENCE NUMBER: _____

Date:

To,

Assistant General Manager (Cyber Security)

STAFF TRAINING CENTRE PUNJAB AND SIND BANK

Punjab & Sind Bank, CISO cell 3rd Floor,

B-8/232, Naharpur Village Rd, Pocket 8, Sector 3B,

Rohini, Delhi, 110085

Dear Sir,

- This is to certify that proposed is having the local content of % as defined in the RFP.
- This certificate is submitted in reference to the Public Procurement (Preference to Make in India), Order 2017 – Revision vide Order No. P-45021/2/2017-PP (BE-II) dated June04, 2020.
- _____(Details of Locations where value additions are made).

Signature of Authorized Signatory

Name:

Date:

Designation:

Seal: