REQUEST FOR PROPOSAL (RFP) – (Amendment 1)

Core Banking System Infrastructure and Cloud-Native Platform Upgrade

Generic, vendor-neutral technical specification, evaluation and bill of quantities

Document control

Issue	Date	Amendment Description
2.0	**25 November 2026**	**Page 4: section 2.1 – Application server / Application storage sizing** **Page 5: S3 Object storage specifications** **Page 7: G-12, SV-01** **Page 9: NW-01**

Last Date of Submission	**06-December-2026**

2.1 Environments and minimum servers [Applications, Database and Storage]

The Bank will operate the proposed solutions across two sites: the Data Center (DC) and Disaster Recovery (DR). The UAT environment shall be hosted at the DC, and DR failover shall be manually initiated by authorized personnel, without automatic site-level failover.

Application Servers Sizing:

Environment	Minimum servers	Physical cores (Usable)	Platform Topology
DC (primary, active)	5	480	The proposed solution shall comprise a minimum of five (5) nodes or equivalent infrastructure capacity, ensuring full production workload availability under N+1 redundancy during a single-node failure or maintenance. The architecture shall support virtual machines (VMs) or containerized workloads or combining both through an integrated, scalable, and highly available infrastructure platform, without mandating any specific technology or OEM.
DR (passive)	3	288	The architecture shall support virtual machines (VMs) or containerized workloads or combining both through an integrated, scalable, and highly available infrastructure platform, without mandating any specific technology or OEM.
Test / UAT	1	96	Single-node, no HA.
Total	**9**	**864**	Each server: 2 sockets,1 TB memory. (Minimum)

The server counts above are minimums. A Bidder shall offer more servers wherever its sizing, the CBS vendor's guide or the N+1 requirement needs them, at no extra cost to the Bank. A Bidder proposing a different architecture may offer

equivalent capacity if it meets the same performance, resilience and failure-tolerance targets and attaches the OEM sizing report.

Applications/Others Storage Sizing:

Description	DC	DR
Usable (High Performance) NVMe (Unified) per site (Minimum) *Note : The high-performance storage tier shall use enterprise-grade NVMe SSDs. Bidders shall specify usable capacity, sustained IOPS, throughput, read/write latency and drive endurance under the proposed protection configuration.*	45 TB	45 TB
Usable storage (S3, Hybrid) (Minimum) ***Note** : Follow the below specifications under **"S3 Object Storage & Persistent Volume Specification"**	30 TB	30 TB

The proposed solution shall provide a minimum aggregate capacity storage across both DC and DR sites, deployable through dedicated storage systems, integrated cluster-node storage or equivalent enterprise-grade storage architecture, ensuring high availability, performance and redundancy.

Bidders size every tier from the volumetrics, state their assumptions and confirm that the offered capacity meets the CBS vendor's sizing guide. Capacity needed beyond the minimums to meet it is supplied at no extra cost to the Bank.

S3 Object Storage Specification

1. S3 Object Storage Requirements (Multi-Node 10GbE, ≤ 15-Min RPO)

Item	Requirement
Architecture	Multi-node S3 object-storage gateway over redundant 10GbE links at DC, with asynchronous replication to a counterpart S3 instance at DR (≤ 15-minute RPO). Minimum **30 TB usable capacity** per site backed by hybrid storage with at least **20% high-performance SSD tiering/cache** (minimum 6 TB usable SSD) for metadata, small-object acceleration, and write buffering. Performance is governed by HTTP request latency and object operations per second (OPS), not raw disk IOPS; acceptance is validated against the figures below.
Latency, objects < 1 MB	GET TTFB p95 < 40 ms, p99 < 85 ms; PUT p95 < 75 ms, p99 < 150 ms
GET rate	800/s sustained, 1,500/s peak
PUT rate	300/s sustained, 750/s peak
Throughput	≥ 800 MB/s read, ≥ 500 MB/s write
Concurrent connections	≥ 1,500 active connections
API	S3-compatible REST API: multipart upload, presigned URLs, bucket policies, ACLs, object tagging, lifecycle policies
Protection	Multi-node S3 compute/gateway with redundant LACP NIC bonds and dual PSUs; backed by dual-controller SAN/NAS dual-parity protection (RAID-6 or equivalent) surviving 2 simultaneous drive failures locally plus full DR site redundancy.
Compliance	Bucket versioning; S3 Object Lock (Governance & Compliance modes) and Legal Hold for statements, KYC, HR, tax, AML, and legal documents
Security	TLS 1.2+ (TLS 1.3 preferred); AES-256 encryption at rest integrated with external key management (KMIP); per-application access/secret keys; S3 access and host audit logs exportable to the Bank SIEM
DR	**Bidirectional asynchronous bucket-level replication (DC ↔ DR)** meeting ≤ 15-minute RPO for seamless failback without re-seeding; immutable Object Lock on replicated buckets for logical air-gap ransomware protection
Operations	Automated lifecycle policies, standard metrics endpoint (OpenMetrics/Prometheus), and non-disruptive online scale-out path to a multi-node high-availability cluster without data migration

2. S3 Usage by Bucket (Sample)

Bucket	Content	Used by	Object Lock	DC → DR Replication (RPO ≤ 15m)
customer-kyc	Customer photos, signatures, KYC/NID documents	Client Profile, Deposit, Loan Origination; teller signature verification	Compliance mode	Enabled
statements	Account and loan statements	Deposit, Loan Ledger	Compliance mode	Enabled
hr-documents	Employee photos, signatures, payslips, NDAs, certificates, licences, tax documents	Employee Profile and payroll	Compliance mode	Enabled
attachments	General & regulated application attachments	Litigation, AML, Trade, SWIFT and other modules	Compliance mode + Legal Hold	Enabled
files	All general files, documents and batch files	Batch and integration services	Governance mode (per Bank policy)	Enabled
training-data	Staff training material	All modules (help and training)	None	Optional / Excluded

- **RTO target** (e.g., 1 hour or 4 hours) to add to the DR row
- **Usable storage capacity** (in TB) to include in the Architecture row

3. General Requirements

ID	Requirement	Type
G-12	The vendor shall propose a locally developed or customized report generation tool, such as a Business Intelligence (BI) solution.	M

4.2 Compute servers and storage (cloud-native platform nodes)

The configuration is the minimum per node; Bidders may offer more or equivalent.

ID	Requirement	Type
SV-01	Minimum 2U rack-mount enterprise server equipped with two (2) Intel Xeon (latest) processors or equivalent AMD EPYC processors (Latest), align with clause under section 2.1 : "**Application Servers Sizing**", a base clock speed of 2.5 GHz or higher and a minimum L3 cache of 144 MB per processor.	M

4.5 Network

***Note: Bidders may propose an alternative port configuration based on their proposed solution, technical architecture, and compatibility with the Bank's existing network infrastructure, provided that the overall performance and connectivity**

Tor Switch

ID	Requirement	Type
NW-01	48 x 1/10 GbE Copper (RJ45) and at least 4 x 40 GbE QSFP uplinks, non-blocking (Bidder to justify the uplink count from the offered design (Including necessary cables & other accessories)	M