



Ministry of Public Security and Parliamentary Affairs

Department of Immigration and Emigration

Volume II

Supplementary Document

Section V

Schedule of Requirement

Procurement of Supply, Delivery, Installation, Integration, Data Migration, Commissioning and Maintenance of 04 No's of Database Servers, 02 No's of Storages, 02 No's of Tape Library and 02 No's of Racks for the Department of Immigration and Emigration.

**Department of Immigration and Emigration
5thFloor, "Suhurupaya",
Sri Subhuthipura Road,
Battaramulla.**

Section V
Schedule of Requirements

Contents

Note:

**Refer Supplementary issued with this procurement and fill schedule and
Attached with the technical Proposal**

1. Delivery Schedule.....	03
2. List of Installation and Services Maintenance Completion Schedule	04-05
3. Scope of Work.....	06-64
3.1 Technical Specification	

1. List of Goods and Related Services Delivery Schedule

(The Purchaser shall fill in this table, with the exception of the column "Bidder's offered Delivery date" to be filled by the Bidder and attached with the bid)

Following components of Supply, Delivery, Installation, Integration, Data Migration, Commissioning and Maintenance of 04

Line item No	Description of Goods	Quantity	Unit	Final (Project Site) Destination as specified in BDS	Completion Date from date of awarding the contract		
					Earliest Completion Date	Latest Completion Date	Bidder's offered Completion date (to be provided by the bidder)
01	Database Servers	04	Units	Department of Emigration and Immigration, Shurupaya, Battaramulla/BIA	30 Days	90 days	
02	Storages	02	Units		30 Days	90 days	
03	Tape Library	02	Units		30 Days	90 days	
03	Racks	02	Units		30 Days	90 days	
04	Related Services (Installation, configuration, migration, Oracle licenses, Support & maintenance ...etc)	01	Units				

No's of Database Servers, 02 No's of Storages, 02 No's of Tape Library and 02 No's of Racks

Name of Signature

Signature

Date

Company Seal

2. List of Installation and Related Services Maintenance Head office

(This table shall be completed by the bidder and attached with the bid. The annual service agreement shall be attached with the bid)

Center/Location of Installation, Commissioning and Maintaining	Machine	Quantity	Bidder shall description about the (a) Schedule of Installation and Commissioning. (b) Testing Method (c) Work plan (d) Regular Maintenance
Department of Emigration and Immigration 5th Floor, Shurupaya, Battaramulla	Database Servers	02	
Department of Emigration and Immigration 5th Floor, Shurupaya, Battaramulla	Storages	01	
Department of Emigration and Immigration 5th Floor, Shurupaya, Battaramulla	Rack	01	
Department of Emigration and Immigration 5th Floor, Shurupaya, Battaramulla	Tape Library	01	
Department of Emigration and Immigration 5th Floor, Shurupaya, Battaramulla	Related Services	01	

Name of Signature

Signature

Date

Company Seal

List of Installation and Related Services Maintenance BIA

(This table shall be completed by the bidder and attached with the bid. The annual service agreement shall be attached with the bid)

Center/Location of Installation, Commissioning and Maintaining	Machine	Quantity	Bidder shall description about the (a) Schedule of Installation and Commissioning. (b) Testing Method (c) Work plan (d) Regular Maintenance
Bandaranaike International Airport - Katunayaka	Database Servers	02	
Bandaranaike International Airport - Katunayaka	Storages	01	
Bandaranaike International Airport - Katunayaka	Rack	01	
Bandaranaike International Airport - Katunayaka	Tape Library	01	
Bandaranaike International Airport - Katunayaka	Related Services	01	

Name of Signature

Signature

Date

Company Seal

Scope of Work and Technical Specifications - Bidder’s compliance for the Technical Specification.

TECHNICAL, FUNCTIONAL AND NON FUNCTIONAL REQUIREMENTS

To be completed by the bidder and submitted with the Procurement documents.

(The Technical specifications are provided in the following format. The bidder shall fill the columns 3 and 4. Bidder’s failure to provide the information requested in the columns 3 and 4 may be a reason for the rejection of the Bid. If any discrepancy is observed between the information by the bidder in the column 3 and 4 and the other technical information attached to the bid, the information provided herein shall take precedence.)

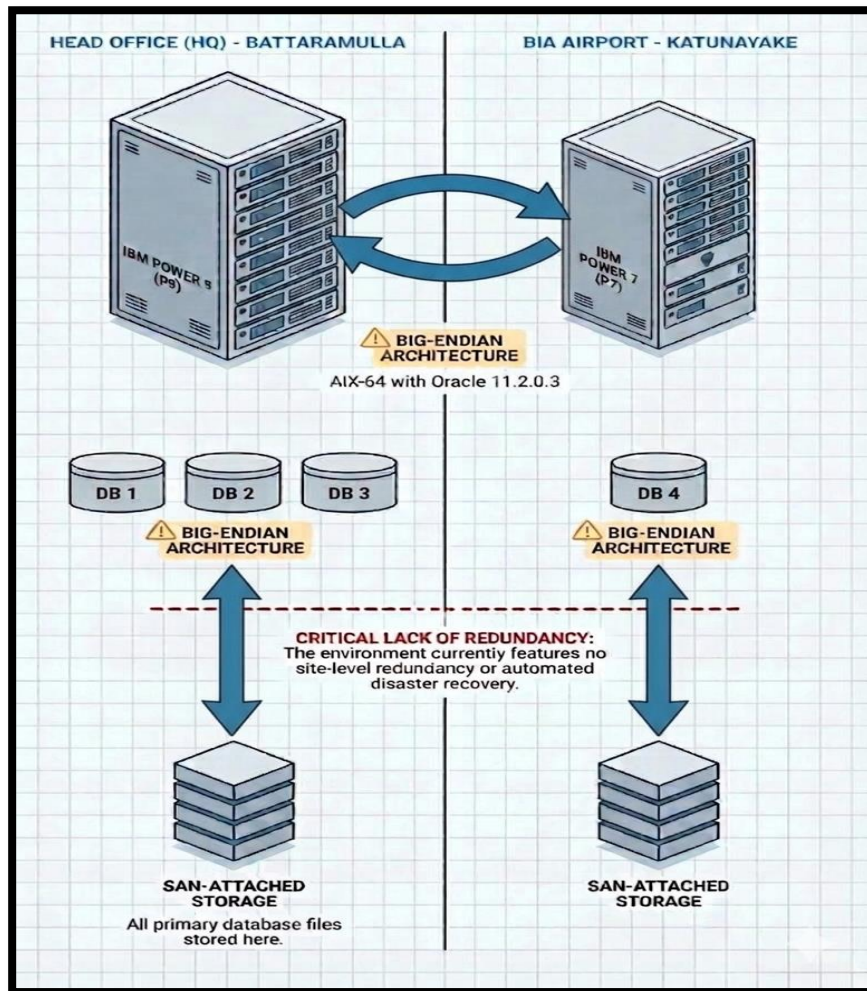
*** Bidders may respond to ONE option only. Dual-option bids are not permitted as per Procurement Manual 2024 Chapter 12 and ITB Section 13. Clearly mark the chosen option on Form 1 (Volume I, Section IV).**

1. IBM- AIX Architecture – Option 1
2. X86 Architecture (Intel/AMD) – Option 2

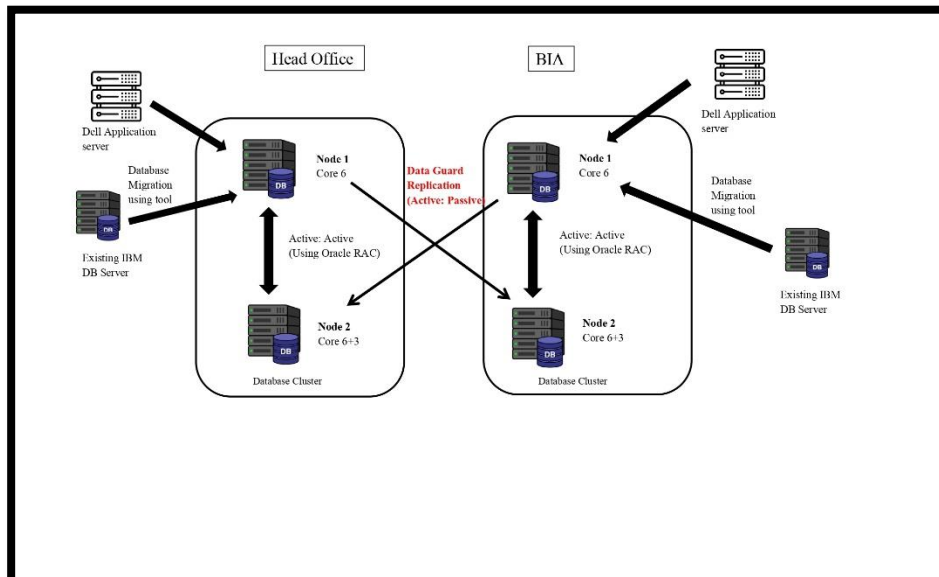
NOTE: Existing platform is IBM AIX (Big-Endian, Oracle 11.2.0.3). Bidder must confirm Option 1 (IBM Power/AIX — same-endian) or Option 2 (x86/Linux — cross-endian) and demonstrate Oracle 19c/23ai certification for the chosen target platform.

Place	DB Name	Hardware Platform	Oracle version	Processor	Cores	Total of DB size without Backups and other logs	Total of DB size with Backups and other logs
HQ	DB 1	AIX-64	11.2.0.3	IBM Power 9	7	3 TB	6.5 TB
	DB 2	AIX-64	11.2.0.3	IBM Power 9			
	DB 3	AIX-64	11.2.0.3	IBM Power 9			
BIA	DB4	AIX-64	11.2.0.3	IBM Power 7	11	1.5 TB	3.5 TB

Current AS-IS Database Architecture of the Department of Immigration and Emigration



Proposed Database Architecture of the Department of Immigration and Emigration



TEC-8****Available Oracle License**

Ten (10) Oracle Enterprise Licenses are currently available (Customer Service Numbers (CSI) will be provided upon purchase of the Bid Document). These existing licenses are valid until 31.12.2026 and shall be continued. Any additional licenses required for this implementation shall be proposed by the bidder. Accordingly, the bidder shall include in the quoted price both the renewal of the existing licenses and the cost of any new/additional licenses required.

Licenses BOM is attached herewith.

No	Licenses name	Status of the License existing or new	Remark
1	Database Enterprise Edition	Currently the Department owned 10 licenses	The number of new licenses required according to the given minimum specification. BIA- 6 CORES per node * 2 (Total 12 CORES for Production) & 3 COREs for HQ replication with 50% performance degradation. Total CORES= 15 HQ - 6 CORES per node * 2 (Total 12 CORES for Production) & 3 COREs for HQ replication with 50% performance degradation. Total CORES= 15
2	Oracle Real Application Clusters (RAC)	New	These licenses are required to maintain active-active within node1 and node 2 in same site. .

Scope of Work

No	Scope Area	Detailed Requirements and Obligations
1	Main Scope	<p>The selected bidder is responsible for the complete end-to-end deployment and migration of the Department of Immigration and Emigration's Oracle database infrastructure across two sites — Head Office (5th Floor, Suhurupaya, Battaramulla) and BIA (Bandaranaike International Airport, Katunayaka).</p> <p>The engagement covers four core deliverables:</p> <ul style="list-style-type: none"> - Supply, delivery, installation, and commissioning of Database Servers (04 units), Storages (02 units), Tape Libraries (02 units), and Racks (02 units) at both sites — Delivered Duty Paid (DDP). - Migration of all four Oracle database instances (DB1, DB2, DB3 at HQ; DB4 at BIA) from Oracle 11.2.0.3 on IBM AIX (Power 9 / Power 7) to Oracle 19c on the new target platform, with a maximum permitted production downtime of two (02) hours. - Integration of the migrated Oracle database environment with the Oracle 12C application layer, covering passport issuance, border control, and all dependent departmental systems. - Implementation of a robust backup and disaster recovery solution, including tape-based archival, cross-site Oracle Data Guard replication, and regular restore verification. <p>The bidder is responsible for the entire project lifecycle — from pre-migration assessment through hardware delivery, installation,</p>

		<p>database migration, testing, user acceptance, go-live, stabilization, training, documentation, and post-implementation maintenance throughout the warranty and post-warranty periods.</p> <p>All work shall be carried out by the OEM, an Oracle-certified partner, or an OEM-authorized implementation partner. Relevant certifications must be submitted with the bid.</p>
2 — Hardware Supply, Installation, Warranty and Support		
<p>2.1</p>	<p>Supply and Delivery</p>	<p>The bidder shall supply and deliver (DDP — Delivered Duty Paid, both sites) the following hardware, and physically install it at the designated server rooms at Head Office and BIA:</p> <ul style="list-style-type: none"> - 04 No. Database Servers (02 at HQ, 02 at BIA) — as per Technical Specification, Option 1 (IBM/AIX) or Option 2 (x86) - 02 No. Enterprise Storage Systems (01 at HQ, 01 at BIA) — NVMe-based Active-Active architecture, minimum 40 TiB usable capacity each. - 02 No. SAN Switches (01 at HQ, 01 at BIA) — 24-port 32 Gbps with 8 ports active per switch, including 5m LC-LC fibre cables - 02 No. Tape Libraries (01 at HQ, 01 at BIA) — 2x LTO8 drives per site, scalable to 3 drives; 2x24 tape cartridges and 2x5 cleaning cartridges per site - 02 No. 42U Free-Standing Racks (01 at HQ, 01 at BIA) — same OEM as server; 2x horizontal PDU 10-way IEC; 4 caster wheels - All required power cables, SFP modules, fibre patch cables, interconnects, and accessories for full operational readiness at both sites <p>All hardware must be brand new, in original OEM packaging, and must not reach End-of-Sale (EOS) or End-of-Life (EOL) within</p>

		five (05) years of bid submission.
2.2	Ex-Stock Requirement	<p>All hardware listed in Clause 2.1 must be physically available as Ex-Stock in Sri Lanka at the time of bid submission.</p> <p>For this purpose, 'Ex-Stock' means all the hardware is physically present and unencumbered in the bidder's or their authorized agent's warehouse within Sri Lanka, and is immediately available for delivery upon contract award.</p> <ul style="list-style-type: none"> - The bidder shall declare the make, model, and serial number of each hardware unit in the Technical Proposal, along with the storage location address. - The Department reserves the right to physically inspect the declared stock during evaluation. Hardware must be made available for inspection within two (02) working days of request, at no cost to the Department. - Any discrepancy between declared serial numbers and hardware physically present at inspection will result in disqualification of the bid. - Substitution of declared serial numbers after bid submission is not permitted without prior written approval from the Purchaser.
2.3	Installation and Commissioning	<p>The bidder shall perform complete physical installation and commissioning at both sites, including:</p> <ul style="list-style-type: none"> - Physical racking and mounting of all servers, storage units, tape libraries, and SAN switches - Power cabling, redundant PDU connection, and power-on verification for all equipment - SAN fabric configuration — zoning, alias configuration, and multipath verification between servers and storage - Storage system configuration — DRaid-6 pool creation,

		<p>volume allocation, NVMe-oF host connectivity, and controller failover testing</p> <ul style="list-style-type: none"> - Network interface configuration — client network, RAC private interconnect, and management networks - Tape library configuration — LTFS setup, drive assignment, partitioning, and media initialization - Rack cable management, labelling, and documentation of all physical connections <p>Installation at both sites shall be coordinated to minimize disruption to active immigration operations. Proposed installation windows must be agreed with the Department's ICT Division at least fourteen (14) calendar days before any on-site work begins.</p>
<p>2.4</p>	<p>Operating System and Middleware</p>	<p>The bidder shall install, configure, and harden the operating system on all four (04) database servers:</p> <ul style="list-style-type: none"> - Option 1 (IBM Architecture): 64-bit Unix OS optimized for Oracle workloads — OEM-supplied and OEM-certified - Option 2 (x86 Architecture): Oracle Linux 8+ or RHEL 8+ (x86_64) — Oracle 19c/23ai certified or similar - OS hardening must follow the CIS Benchmark or equivalent, with unnecessary services disabled and root access restricted - Oracle Grid Infrastructure (GI) for Oracle RAC shall be installed on two (02) mirrored NVMe SSDs (960 GB each) per server - All OS licenses, media, and patch entitlements for the full warranty and post-warranty period must be included in the bid price
<p>2.5</p>	<p>Warranty</p>	<p>All hardware supplied under this contract shall carry the following minimum warranty coverage:</p> <p><u>Database Servers</u></p> <ul style="list-style-type: none"> - 5 years comprehensive on-site warranty (24×7×365) covering parts, labor, and OEM TAC support

		<ul style="list-style-type: none"> - 2 years post-warranty comprehensive support (24×7×365) — on-site parts and labor - Hardware replacement and TAC support directly from OEM or OEM-authorized partner - monthly health reports by OEM or authorized partner during the warranty period <p><u>Storage Systems</u></p> <ul style="list-style-type: none"> - 5 years comprehensive on-site warranty (24×7, 2-hour on-site response) — parts and labor and 02 years post comprehensive on-site warrantywith on-site parts and labor (24×7, 2-hour on-site response) - Defective hard disk retention — failed drives shall not be returned to the vendor after replacement <p><u>SAN Switches</u></p> <ul style="list-style-type: none"> - 5 years comprehensive + 2 years post-warranty (24×7, 2-hour response) —with on-site parts and labour <p><u>Tape Libraries and Racks</u></p> <p>5 years comprehensive + 2 years post-warranty (24×7, 2-hour response)with on-site parts and labour.</p> <p>Same-day or next-day critical component replacement at both HQ and BIA must be guaranteed. The bidder must demonstrate that a local spare parts inventory is maintained in Sri Lanka.</p>
2.6	24×7 Support and Maintenance	<p>The bidder shall provide round-the-clock operational support for all supplied hardware and software throughout the contract period:</p> <ul style="list-style-type: none"> - 24×7×365 support covering database servers, storage systems, tape libraries, SAN switches, operating systems, Oracle database, and the virtualization layer - Support shall be provided by the OEM, an Oracle-authorized partner, or OEM-authorized technical personnel holding relevant certifications - A local support centre with qualified engineers and adequate

		<p>spare parts must be maintained in Sri Lanka</p> <ul style="list-style-type: none"> - A dedicated technical account manager shall be assigned to the Department, reachable on an emergency basis at all hours - A formal escalation matrix (Level 1 through to OEM) must be submitted within 30 days of contract signing and kept current at all times. - Complete incident logs, escalation records, and corrective action records must be maintained and made available to the Department on request
2.7	Patching and Firmware	<ul style="list-style-type: none"> - Database and OS patch management shall be carried out by an Oracle-authorized partner or OEM-certified partner throughout the warranty and post-warranty periods - Critical security patches must be applied within an agreed timeframe following Employer approval of the maintenance window - Firmware updates for storage, SAN switches, and server components shall be managed by the OEM or authorized partner - All patching activities must be accompanied by a pre-patch risk assessment and a post-patch validation report
3 — Oracle License Renewal and Supply, Database Migration, Upgrade, Support and Maintenance		
3.1	Oracle License Renewal and New Licenses	<p>The Department currently holds ten (10) Oracle Enterprise Edition licenses, valid until 31 December 2026. Customer Support Identifier (CSI) numbers will be provided to the successful bidder upon contract award.</p> <p>The bidder's scope includes:</p> <ul style="list-style-type: none"> - Renewal of all ten (10) existing Oracle Enterprise Edition licenses for the full contract period (warranty and post-

		<p>warranty — up to 8 years from go-live)</p> <ul style="list-style-type: none"> - Procurement and supply of all additional Oracle licenses required for the target architecture, as detailed in the attached License BOM - Oracle Real Application Clusters (RAC) licenses for all nodes at both HQ and BIA - Oracle GoldenGate or equivalent CDC tool licenses, if applicable to the chosen migration method - Any other Oracle options required by the proposed architecture — Data Guard, Partitioning, Advanced Compression, Diagnostics/Tuning Pack, etc. <p>Minimum core requirements (derived from the License BOM):</p> <ul style="list-style-type: none"> - BIA: 6 cores per node × 2 nodes = 12 production cores + 3 cores for HQ replication (50% degradation factor) = 15 total licensed cores - HQ: 6 cores per node × 2 nodes = 12 production cores + 3 cores for BIA replication = 15 total licensed cores <p>The cost of all license renewals and new licenses must be included in the bid price. VAT shall be shown separately. All Oracle CSI number transfers, renewals, and support contract maintenance are the bidder's sole responsibility.</p>
<p>3.2</p>	<p>Pre-Migration Assessment</p>	<p>Before any migration work begins, the bidder shall conduct and document a comprehensive pre-migration assessment. This must be formally approved by the Department's ICT Division before Phase 2 (migration execution) commences.</p> <p>The assessment shall cover:</p> <ul style="list-style-type: none"> - Full source database inventory: schema analysis, object counts, data volume (HQ — approximately 3 TB raw / 6.5 TB

		<p>with backups; BIA — approximately 1.5 TB / 3.5 TB), character set (NLS_CHARACTERSET), data types, and performance baseline</p> <ul style="list-style-type: none"> - Platform analysis: IBM Power 9 (HQ — DB1, DB2, DB3) and IBM Power 7 (BIA — DB4), Oracle 11.2.0.3 on AIX-64 (Big-Endian) - Endian conversion impact assessment — all Oracle data types affected by the conversion must be identified and documented with a mitigation plan - Application compatibility assessment — all applications connected to the database (passport issuance, border control, and related systems) must be confirmed compatible with Oracle 19c/23ai - Oracle 12C application integration assessment — impact of the database upgrade on the Oracle 12C layer, with a remediation plan for any compatibility gaps - License strategy — mapping of existing CSI numbers to the target architecture; identification of all new licenses required; renewal timeline to ensure zero lapse - Risk register — all identified migration risks with probability, impact rating, and mitigation measures
<p>3.3</p>	<p>Migration Method and Endian Conversion</p>	<p>The bidder must select and declare one migration option at the time of bid submission. Dual-option bids are not permitted.</p> <p><u>Option 1 — IBM/AIX Architecture (Same-Endian)</u></p> <ul style="list-style-type: none"> - Source: AIX-64 Big-Endian. Target: AIX-64 Big-Endian. No endian conversion is required for the primary data transfer. - If any x86 components are introduced in the target environment, endian conversion must be explicitly addressed. - The bidder must confirm Oracle 19c/23ai certification on the proposed IBM Power target platform.

		<p><u>Option 2 — x86 Architecture (Cross-Endian Migration — Mandatory Endian Conversion)</u></p> <ul style="list-style-type: none"> - Source: IBM AIX Big-Endian (Oracle 11.2.0.3). Target: x86_64 Little-Endian (Oracle 19c/23ai on Oracle Linux or RHEL). - Full endian conversion is mandatory. Oracle GoldenGate or an equivalent CDC tool is required for cross-endian replication. - The bidder must provide proof of prior successful cross-platform, cross-endian Oracle migration using the proposed tool. - Endian Data Type Risk Register: every Oracle data type affected by big-to-little conversion must be listed, with RMAN CONVERT or GoldenGate mitigation documented for each. - NLS/Character Set compatibility — AIX source character set (AL32UTF8) must be verified and confirmed compatible with the x86 target. <p>Regardless of option, the bidder shall follow the Oracle-recommended migration methodology, with all steps logged and auditable.</p>
<p>3.4 Migration Execution</p>		<p>Migration execution shall follow a structured three-phase plan:</p> <p><u>Phase 1 — Staging and Test Migration</u></p> <ul style="list-style-type: none"> - At least one (01) full end-to-end test migration in a staging environment using production-equivalent data volumes - Test migration must include row count validation, checksum verification, LOB integrity check, and application-level smoke testing - All migration scripts, tools, and automation must be tested and validated in staging before production use - GoldenGate or equivalent CDC tool must be configured and the replication lag managed and verified in staging <p><u>Phase 2 — Production Cutover</u></p> <ul style="list-style-type: none"> - Cutover must be executed within a pre-approved maintenance window outside peak immigration hours (see Clause 4.7 for cutover window constraints)

		<ul style="list-style-type: none"> - Maximum permitted service downtime during production cutover: two (02) hours — non-negotiable - Data loss tolerance: near-zero (RPO at cutover). Any residual risk must be documented and approved by the Department before the cutover proceeds - Cutover Runbook (minimum 10 pages): step-by-step, minute-by-minute procedure with go/no-go checkpoints, rollback triggers, and named persons responsible for each action - A formal go/no-go decision point must be established no less than two (02) hours before scheduled cutover start. If pre-cutover validation checks are not fully passed, the cutover is deferred to the next approved window - The full technical team — Oracle DBA, migration engineer, and OEM support on standby — must be on-site or remotely available throughout the cutover window <p><u>Phase 3 — Post-Migration Validation and Stabilisation</u></p> <ul style="list-style-type: none"> - Minimum four (04) weeks of stabilization monitoring at each site, during which the bidder remains on-call for immediate response - AWR-based performance benchmarking to confirm that IOPS, latency, and throughput meet or exceed the pre-migration baseline - All applications — passport issuance, border control, and related systems — must be fully verified on the target platform during stabilization - A tested and documented rollback plan must be ready and executable within the two-hour downtime window, if needed during any stage of the cutover
<p>3.5</p>	<p>High Availability Architecture</p>	<p>The proposed architecture must incorporate the following high availability components as a mandatory requirement:</p> <p><u>Intra-Site High Availability (at both HQ and BIA)</u></p> <ul style="list-style-type: none"> - Oracle Real Application Clusters (RAC) — active-active

		<p>configuration across the two database nodes at each site</p> <ul style="list-style-type: none"> - RAC private interconnect using dedicated 10/25 Gbps network interfaces, separate from the client network - Shared storage via SAN (32 Gbps FC) with NVMe-oF connectivity - Oracle ASM (Automatic Storage Management) for shared disk management <p><u>Inter-Site Disaster Recovery (HQ ↔ BIA)</u></p> <ul style="list-style-type: none"> - Oracle Data Guard — physical standby database at the secondary site (Primary: HQ; Standby: BIA, with the capability to reverse roles for DR failover) - Data Guard replication lag must not exceed 15 minutes under normal operations; any sustained breach is treated as a P2 incident - Maximum Availability Architecture (MAA) principles shall be followed in the design - Failover and switchover procedures must be fully documented, tested, and signed off by the Department during the stabilization period <p>The bidder must supply all Oracle licenses (Database enterprise, RAC, and any other required options) to support the proposed HA architecture. These costs must be included in the bid price.</p>
3.6	Backup Solution	<p>The bidder shall design, implement, and manage a multi-tiered backup solution across both sites, covering both Oracle database backups and operating system / full-server backups.</p> <p>Tier 1 — Oracle Database Backup (RMAN)</p> <ul style="list-style-type: none"> - Daily Oracle RMAN full or incremental backups with transaction log archival; fully automated with monitoring and alerting - Weekly full backup retained for four (04) weeks - Monthly full database backup retained for one (01) month - Cross-site backup metadata replication; DR copy of critical

		<p>backups at the secondary site</p> <p>Tier 2 — Operating System and Full-Server Backup</p> <ul style="list-style-type: none"> - Monthly full OS-level backup for all database servers at both sites, retained for one (01) month. - Monthly tape-based archival backups via the Tape Library (LTFS), covering both database and OS backup data, stored in accordance with the Department’s data retention policy - The backup solution shall support immutable or write-protected backup copies to guard against ransomware or accidental deletion - Backup data shall be encrypted both in transit and at rest - Role-based access control shall restrict backup administration functions to authorized personnel only - Centralized monitoring, alerting, and reporting shall be provided covering all backup job status, failures, and repository capacity across both tiers <p>Backup SLA Targets (apply to both tiers)</p> <ul style="list-style-type: none"> - Backup success rate: minimum 99% monthly - Recovery Point Objective (RPO): near-zero — not to exceed 15 minutes for production databases - Recovery Time Objective (RTO): not more than 2 hours for any unplanned production outage at either site - Quarterly restore test at each site; results submitted to the Department within five (05) working days of the test - Backup failures to be investigated, documented, and corrected within two (02) hours of detection <p>The bidder shall supply 2×24 tape cartridges per site plus 2×5 cleaning cartridges per site. The proposal must clearly demonstrate that the cartridge quantities provided are adequate to cover all retention tiers across both backup tiers.</p>
3.7	Oracle Database	Throughout the warranty and post-warranty periods, the bidder

	<p>Support and Ongoing Maintenance</p>	<p>shall provide the following Oracle database support and maintenance services:</p> <ul style="list-style-type: none"> - Continuous Oracle database monitoring using Oracle AWR, ASH, Oracle Enterprise Manager, or an approved equivalent - Proactive database tuning: SQL query optimization, execution plan analysis, index review, statistics gathering, SGA and PGA tuning, wait-event analysis, and bottleneck resolution - Capacity review and growth forecasting every six (06) months, with written recommendations - Oracle patch management — quarterly Oracle CPU (Critical Patch Update) assessment; patches applied within agreed maintenance windows - Oracle license compliance management — annual license reconciliation report; CSI number management throughout the contract - Database parameter review and optimization — not less than once per quarter - Oracle Audit function maintained and operational on all database instances throughout the contract - Database performance issues resolved in accordance with SLA priority tiers: P1 within 2 hours, P2 within 4 hours, P3 within 1 working day <p>The bidder shall not attribute database performance issues solely to application design or data volume without providing supporting technical evidence and specific recommendations.</p>
<p>4 — Testing</p>		
<p>4</p>	<p>Testing Requirements</p>	<p>The bidder shall carry out a comprehensive, structured testing program of not less than two (02) weeks immediately prior to production go-live. All testing must be formally reviewed and signed off by the Department's Acceptance Committee before the production cutover is authorized.</p>

4.1 Hardware Acceptance Testing

- Physical verification of all hardware serial numbers against declared bid values
- Power-on self-test (POST) and OEM diagnostic tests for all servers, storage units, SAN switches, and tape libraries
- Storage performance benchmark test — IOPS, throughput, and latency verified against RFP specification
- SAN fabric redundancy test — single path failure simulation and automatic multipath failover verification
- Rack PDU and power redundancy verification
- Tape library media load, read/write, and cleaning cycle verification

4.2 Database and Platform Testing

- Oracle RAC intra-site failover test — simulate node failure at both HQ and BIA; verify automatic client reconnection and continued service
- Oracle Data Guard inter-site switchover and failover test — simulate HQ primary failure; verify BIA standby promotion; confirm RPO and RTO targets are met
- Database performance benchmarking — AWR workload comparison between pre- and post-migration environments
- Tablespace, ASM diskgroup, and storage capacity validation
- RMAN backup and restore test — full restore of each database instance; data integrity verified

4.3 Application Integration Testing

- Full end-to-end functional testing of all applications integrated with the Oracle database — passport issuance, border control at BIA, and all dependent departmental systems
- Oracle 12C application compatibility verification on the target Oracle 19c/23ai database
- Regression testing — all business-critical transaction types

		<p>must be tested and validated</p> <ul style="list-style-type: none"> - Data integrity validation — row counts, checksums, LOB content, and referential integrity verified across all four database instances (DB1, DB2, DB3 at HQ; DB4 at BIA) <p><u>4.4 Security and Audit Testing</u></p> <ul style="list-style-type: none"> - Oracle Audit function confirmed enabled and operational on all database instances - User access control and RBAC verification — all access rights confirmed to match the pre-migration configuration - OS-level security hardening check (CIS Benchmark or equivalent compliance verification) <p><u>4.5 Disaster Recovery Drill</u></p> <ul style="list-style-type: none"> - Full DR drill simulating primary site failure — failover from primary to standby, with verification that all applications reconnect to the standby within the 2-hour RTO - DR drill results documented and submitted to the Department within five (05) working days <p>User Acceptance Testing (UAT) shall be conducted by the Department's designated staff for a minimum of two (02) weeks following completion of the above test phases. The bidder shall provide on-site technical support throughout the full UAT period.</p> <p>No production cutover will be authorised until the Department's Acceptance Committee has reviewed and formally signed off on all test results.</p>
5 — Documentation		
5	Documentation Deliverables	The bidder shall prepare, submit, and maintain the following documentation. All documents shall be delivered in electronic format (PDF and editable source file) and printed hardcopy (two

sets), in English. Documents must be submitted no later than the issuance of the Completion and Acceptance Certificate, unless an earlier deadline is specified.

5a Architecture and Design Documentation

- Proposed system architecture diagrams for HQ, BIA, and the inter-site replication topology
- Logical and physical network diagrams — SAN fabric, LAN, management networks
- Storage architecture diagram — volume layout, ASM disk group configuration, multipathing
- Oracle RAC cluster architecture — node interconnect, VIP, SCAN listener, and ASM configuration
- Oracle Data Guard configuration — primary/standby role assignment, redo apply configuration, and failover/switchover topology
- Backup architecture diagram — RMAN backup paths, tape library connections, and retention flow

5b Hardware Resource Documentation

For each server (all four units), a detailed hardware resource specification covering:

- CPU: total number of physical cores, processor architecture, threads per core, clock speed (base and boost), L3 cache size
- Memory: total RAM capacity (GB), memory technology (DDR5 or higher), speed (MHz), number of DIMMs, maximum scalability
- Internal storage: drive type (NVMe SSD), capacity per drive, number of drives, RAID/mirror configuration (e.g., RAID-1 for OS and GI), IOPS capability
- SAN-attached storage: volume allocation per database instance, IOPS targets per volume, throughput (GB/s), latency

		<p>targets (ms)</p> <ul style="list-style-type: none"> - Network interfaces: number of ports, interface types (FC, 1GbE, 10GbE, 25GbE), throughput (Gbps), redundancy configuration - FC HBA: number of ports, speed (32 Gbps), redundancy, SAN zoning details - PCIe: number of slots, PCIe generation (4.0/5.0), expansion capacity - Power supply: wattage, redundancy configuration, efficiency rating - Energy consumption: watts at full operational load; Energy Star or equivalent certification details <p><u>5c Deployment and Configuration Documentation</u></p> <ul style="list-style-type: none"> - Step-by-step OS installation and hardening procedure for the chosen platform (AIX or Oracle Linux/RHEL) - Oracle Grid Infrastructure installation and RAC cluster configuration steps - Oracle Database 19c installation, upgrade, and parameter configuration steps - Storage configuration: RAID pool creation, volume allocation, multipath configuration, ASM disk group setup - SAN switch configuration: zoning, aliases, port assignment - Backup solution configuration: RMAN policy scripts, LTFS tape library integration, schedule and retention settings - Network configuration: IP allocations, VLAN assignments for client, interconnect, management, and storage networks - Oracle RAC and Data Guard configuration parameters — as-built document
--	--	--

5d Migration and Rollback Plans

- Pre-migration assessment report — must be approved by the Department before Phase 2 begins
- Detailed migration runbook (minimum 10 pages): step-by-step cutover procedure, go/no-go checkpoints, responsible persons for each action, escalation contacts
- Endian conversion methodology document — tool used, data type risk register, and mitigation steps (applicable to Option 2 / cross-endian migrations)
- Rollback plan: step-by-step rollback procedure executable within the 2-hour downtime window; decision criteria for triggering a rollback
- Post-migration validation checklist — row count, checksum, LOB integrity, and application smoke test results

5e Backup and Recovery Procedures

- Oracle RMAN backup policy documentation — full, incremental, and differential backup schedules with retention periods
- Step-by-step database restore procedure for each recovery scenario: full restore, tablespace restore, datafile restore, and point-in-time recovery (PITR)
- Tape library backup and restore procedure — LTFS, media management, and cartridge rotation schedule
- Backup monitoring and alerting setup — how failures are detected, escalated, and resolved
- Quarterly restore test procedure and result reporting template

5f Operations and Maintenance Procedures

- Day-to-day operations manual for ICT staff: startup/shutdown procedures, daily health check routine, alert log monitoring

- Routine database maintenance procedures: tablespace management, archive log management, AWR report generation
- Patch application procedure: OS and Oracle patch assessment, staging, approval workflow, and rollout steps
- User access and role management procedures
- Capacity planning procedure: storage growth monitoring, CPU and memory trending, proactive expansion planning
- Incident reporting and escalation procedure: how to log an incident, severity classification guide, escalation contacts and timeframes

5g High Availability and Disaster Recovery Plan

- Oracle RAC failover and recovery procedure — node failure steps, automatic failover, and client reconnection verification
- Oracle Data Guard switchover and failover procedures — role transition steps, lag monitoring, and re-synchronization after failover
- DR drill plan: frequency (minimum once per year), scope, success criteria, and reporting template
- Business continuity procedures: roles and responsibilities during a DR event, communication plan, and escalation hierarchy
- RTO (not more than 2 hours) and RPO (near-zero) validation procedures

5h As-Built Documentation (to be submitted post-implementation)

- Final as-built architecture diagrams reflecting the actual deployed configuration at both sites
- Inventory list: all hardware serial numbers, software license keys, CSI numbers, and firmware versions as deployed

		<ul style="list-style-type: none"> - Administrator handover pack: all system credentials (in encrypted format), SSH keys, service accounts, and access procedures - Warranty and support contract summary: coverage periods, support contact details, and OEM escalation contacts <p>All documentation must be reviewed and accepted by the Department's ICT Division. Final as-built documentation must be submitted within thirty (30) calendar days of the Completion and Acceptance Certificate being issued.</p>
--	--	---

6 — Oracle Licence Bill of Materials (BOM)

<p>6</p>	<p>Oracle Licence BOM</p>	<p>The Oracle License Bill of Materials (BOM) is attached to this document. The bidder shall review the BOM, confirm compliance, and include an updated BOM in the Technical Proposal. The BOM covers:</p> <ul style="list-style-type: none"> - Oracle Database Enterprise Edition — the existing 10 licenses (renewal required) plus any additional licenses required by the target architecture - Oracle Real Application Clusters (RAC) — new licenses for all nodes at HQ and BIA - Oracle GoldenGate or equivalent — if selected as the migration and CDC tool - Any additional Oracle options required: Data Guard, Advanced Compression, Diagnostics Pack, Tuning Pack, and others as applicable <p>The updated BOM submitted with the Technical Proposal must confirm, for each license:</p> <ul style="list-style-type: none"> - License name - Status — existing (renewal) or new - Quantity (number of Named User Plus or Processor licenses)
-----------------	----------------------------------	---

		<ul style="list-style-type: none"> - Applicable core factor (per Oracle's Processor Core Factor Table) - USD unit price and USD/LKR rate used — for alignment with the financial proposal - Remarks explaining the architectural rationale for each license type <p>All Oracle licensing costs must be included in the financial proposal. VAT shall be shown separately. Oracle CSI number continuity is the bidder's sole responsibility. Any lapse in Oracle license coverage during the contract period will be treated as an SLA breach attributable to the bidder.</p>
--	--	---

7 — Training

<p>7</p>	<p>Training Program</p>	<p>The bidder shall design and deliver a structured training program for the Department's ICT staff, covering all components and services provided under this contract. All training shall be conducted on-site at the Department's premises and must be completed before the Completion and Acceptance Certificate is issued.</p> <p><u>7a Hardware Administration Training</u></p> <p>Minimum duration: 2 days. Minimum participants: 10 ICT staff.</p> <ul style="list-style-type: none"> - Server administration: hardware health checks, OEM management console, LED indicators, and field-replaceable unit (FRU) replacement procedures - Storage system management: volume management, drive replacement, controller failover, and capacity expansion - SAN switch management: port monitoring, zoning, and fault isolation - Tape library operations: media loading, cartridge rotation, LTFS management, and cleaning procedures - Rack and PDU management: power monitoring and cable
-----------------	--------------------------------	---

management

- Firmware update and OEM patching procedures

7b Oracle Database Administration Training

Minimum duration: 3 days. Minimum participants: 6 ICT staff, including at least 2 designated DBAs.

- Oracle 19c/23ai database administration fundamentals
- Oracle RAC cluster administration: node management, network configuration, and resource management
- Oracle Data Guard administration: monitoring, switchover, failover, and re-synchronization
- Oracle RMAN backup and recovery: backup policies, restore procedures, point-in-time recovery (PITR), and RMAN scripting
- Oracle AWR, ASH, and OEM monitoring: generating and interpreting AWR reports and performance alerts
- Oracle patch application procedures
- Oracle license management and CSI number administration

7c System Operations and Monitoring Training

Minimum duration: 1 day. Minimum participants: 10 ICT staff.

- Use of monitoring tools and dashboards for daily health checks
- Incident identification, severity classification, and the escalation procedure
- SLA reporting: understanding monthly availability and incident reports
- Backup monitoring: verifying backup success and reading backup logs
- Escalation matrix: when and how to contact L1, L2, L3, and OEM support

		A training completion report including attendance records must be submitted within two (02) working days of the final training session. All training materials — printed and digital — become the property of the Department upon delivery.
--	--	---

Option 1 - Technical Specification of Servers – IBM Architecture			
Category	Specification	Bidder Response Yes/No * (3)	Remarks (4)
Make	(Specify)		
Model	(Specify)		
Country of Origin	(Specify)		
Country of Manufacture	(Specify)		
Number of Units	4		
Form Factor	2U rack-mount chassis with tool-less access to major components; front-to-back airflow.		
Core Architecture	RISC Based Processor Architecture CPU Architecture should support Oracle 19c/23ai and future oracle versions.		
Processor Type	Latest generation of simultaneous Multi-Threading (SMT) enabled enterprise class processor		
Process Technology	7nm process or above		
Processor Speed	2.9 to 4 GHz or above		
Processor Cores	Minimum 16 cores or above (single or dual sockets)		
Minimum cores required for DB	6 cores per node		
Threads per core	8 threads per core or above		
Memory Size	1024 GB or above		
Memory Support	DDR5 or above		
Memory Support	Up to 8 TB per socket or above		
Memory scalability	To be scalable till 4 TB		
L3 cache	Minimum 8 MB L3 cache per core or		

	above		
Internal Hard Disk	Two (2) x 960 GB NV Me SSDs (mirrored) for Operating System and Oracle Grid Infrastructure (GI) Software		
Ethernet NICs	2 x LP 4-Port 1GbE Adapter 2 x 2-Port 10GbE SFP28 Adapter (SR Connectivity)		
FC HBA	3 x 32Gb 2-port Fiber Adapter (FC HBA)		
PCIe slots	8 PCIe slots		
Interface standard	PCIe 4.0/5.0		
Virtualization	Supports advanced virtualization features. Enterprise virtualization licenses should be included for all the cores. Should Support Trusted Partition Virtualization technology which support Oracle 19C /23ai		
Management Interface	Management interface enabled with System Manager web interface, standalone CLI, SMI-S Provider, email, and syslog alerts		
Supported Operating Systems	64-bit Unix Operating System (Optimized for Oracle workloads)		
High availability	The vendor must supply all Oracle licenses required to support the proposed High Availability architecture. The solution must mandatorily incorporate Oracle Real Application Clusters (RAC) for intra-site high availability and Oracle Data Guard for inter-site disaster recovery, deployed across both the Head Office (HQ — Battaramulla) and BIA (Bandaranaike International Airport) sites		
Warranty	5 years comprehensive warranty (24 x 7 support) – On Site Part Replacements and Labor Should be Provided within the warranty period.		
	2 years comprehensive postwarranty(24 x 7 support) – On Site Part Replacements and Labor Should be Provided		
	Hardware replacement warranty and TAC support should be directly from OEM.		
	Device needs to be provided with all software license from day-1 as per RFP specification		
Support & Maintenance	24 x 7 Support to be provided by OEM or		

	OEM Authorized Support partner to Hardware, OS, DB, Virtualization software		
	Need to provide health report every six month during the warranty period by OEM		
Patching	Database and OS patching by Oracle partner or OEM-certified partner		
Implementation	Implementation should be carried out by the OEM or OEM Authorized Support partner		
Server EOS / EOL	The proposed server should not reach its EOS /EOL within next 5 years from the bid submission date.		
DB support	Server quoted should support Oracle and DB2		
Energy Efficiency	Energy consumption at full load (specify watts); Energy Star / equivalent certification		
Power Supply	Redundant hot-plug PSUs, 80 PLUS Platinum or higher efficiency; auto-ranging 100–240		
CROSS-ENDIAN MIGRATION (x86→AIX MANDATORY)			
Endian Conversion Direction	SourceX86_64 (Little-Endian)target :IBM AIX (Big-Endian). Full endian conversion required.		
Cross-Endian Migration Tool	Oracle GoldenGate (endian conversion) or similar tool Transportable Tablespace with RMAN CONVERT . Use of GoldenGate or similar is mandatory. Proof of prior successful use on cross platformwith proposed tool.		
Endian Data Type Risk Register	Every Oracle data type affected by little-to-big conversion listed with RMAN CONVERT mitigation		

Name of Signature

Signature

Date

Company Seal

Option 2 - Technical Specification of Servers – X86 Architecture

Category	Specification	Bidder Response Yes/No * (3)	Remarks (4)
Make	(Specify)		
Model	(Specify)		
Country of Origin	(Specify)		
Country of Manufacture	(Specify)		
Number of Units	4		
Form Factor	2U rack-mount chassis with tool-less access to major components; front-to-back airflow.		
Core Architecture	x86_64 architecture (Intel/AMD) Oracle 19c/23ai certified		
Processor Type	32-core x86_64 processor and 3.0 Ghz, 32 core/64 threads, 128 Cache and DDR5-6400 memory Latest generation AMD EPYC / intel processor; 2-socket enterprise class		
Process Technology	X86		
Processor Cores	Minimum 32 cores per socket; 2 CPU sockets per server (64 cores total)		
Core Required for Oracle Databases	6 Cores per DB node		
Threads per core	2 threads per core or above		
Memory Size	1024 GB or above		
Memory Support	DDR5 or above		
Memory scalability	4 TB per DB node		
L3 cache	64 MB L3 cache per processor or above		
Internal Hard Disks	Two (2) x 960 GB NV Me SSDs (mirrored) for Operating System and Oracle Grid Infrastructure (GI) Software		
Drive Bays	Minimum 12x front hot-plug bays supporting SAS/SATA/NVMe;		
Ethernet NICs	4x 10/25 Gbps or above per DB node for Client Network 2 x 10/25 Gbps per DB node for interconnect		
HBA	3x 32GB 2 – port Fiber Adapter (FC HBA) or SAS / FC / QSFP28 Ports		
PCIe slots	4 PCIe slots or above		

Interface standard	PCIe 4.0/5.0		
Virtualization	Hard partitioning or Trusted Partition virtualization technology which support Oracle 19C/23ai		
Management Interface	Management interface enabled with System Manager web interface, standalone CLI,		
Supported Operating Systems	Oracle Linux / RHEL 8+ or equivalent x86_64; Oracle 19c/23ai certified		
Power Supply	Redundant hot-plug PSUs, 80 PLUS Platinum or higher efficiency; auto-ranging 100–240		
CROSS-ENDIAN MIGRATION (AIX→x86 MANDATORY)			
Endian Conversion Direction	Source: IBM AIX (Big-Endian). Target: x86_64 (Little-Endian). Full endian conversion required.		
Cross-Endian Migration Tool	Oracle GoldenGate (Big-Endian to Little-Endian replication) or similar tool Transportable Tablespaces with RMAN CONVERT . Use of GoldenGate or similar is mandatory. Proof of prior successful use on cross platform with proposed tool.		
Endian Data Type Risk Register	Every Oracle data type affected by big-to-little conversion listed with RMAN CONVERT mitigation		
NLS/Character Set	NLS_CHARACTERSET compatibility verified: AIX source (AL32UTF8) → x86 target		
Support Database Architectures High availability Warranty	Oracle 19c/23ai certified on x86_64; Oracle RAC supported for HA		
	The vendor must supply all Oracle licenses required to support the proposed High Availability architecture. The solution must mandatorily incorporate Oracle Real Application Clusters (RAC) for intra-site high availability and Oracle Data Guard for inter-site disaster recovery, deployed across both the Head Office (HQ — Battaramulla) and BIA (Bandaranaike International Airport) sites		
	5 years comprehensive warranty (24 x 7) On Site Part Replacements and Labor Should be Provided within the warranty period. 2 years comprehensivepost warranty (24 x		

	7) On Site Part Replacements and Labor Should be Provided		
	Hardware replacement warranty and OEM support should be directly from OEM or Authorized Support partner		
Server EOS / EOL	The proposed server should not reach its EOS /EOL within next 5 years from the bid submission date.		
Response and Resolution time	Device needs to be provided with all software license from day-1 as per RFP specification		
Support & Maintenance	24 x 7 Support for Hardware, Operating system, Database software, Virtualization software to be provided by OEM or authorized partner		
	Need to provide health report every six month during the warranty period		
	Patching including Database layer shall be carried out by Oracle Partner or Oracle certified partner		
Implementation	Implementation should be carried out by the OEM or OEM Certified Partner		
Energy Efficiency	Energy consumption at full load; Energy Star / equivalent certification		
e-Waste	e-waste disposal plan for decommissioned equipment		

Name of Signature

Signature

Date

Company Seal

Technical Specifications - Bidder's compliance for the Technical Specification.

TECHNICAL, FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

To be completed by the bidder and submitted with the Procurement documents.

(The Technical specifications may be provided in the following format. The bidder shall fill the columns 3 and 4. Bidder's failure to provide the information requested in the columns 3 and 4 may be a reason for the rejection of the Bid. If any discrepancy is observed between the information by the bidder in the column 3 and 4 and the other technical information attached to the bid, the information provided herein shall take precedence.)

Storage, SAN, Tape Library, and Rack specifications are identical regardless of chosen server option. All items delivered DDP to both HO Baththaramulla and BIA Katunayaka

Technical Specifications of Storage			
Category	Specification	Bidder Response Yes/No * (3)	Remarks (4)
Make	(Specify)		
Model	(Specify)		
Country of Origin	(Specify)		
Country of Manufacture	(Specify)		
Manufacturer Authorization	(Specify)		
Form Factor	2U		
Number of Units	2 (01 HO + 01 BIA) — DDP both sites		
System Architecture	The proposed solution must be NVMe based scale up and scale-out Active-Active architecture with native functionality/intelligence to provide workload placement and load balancing recommendation. Proposed array should support mixing of different storage models in the single scale-out cluster, with support for different drive configuration and capacity pools per controller pair (in the same cluster).		
	The proposed solution must support end-to-end NVMe multi-controller architecture		

	from host to fabric to storage. The Storage should be capable of supporting both NVMe over TCP and NVMe over FC protocols to provide more flexibility. The NVMe should work seamlessly on standard IO modules, without requiring any additional specialized HW adapters		
Number of ESM	2		
Controller Cache	32G Per Controller (64G Per System) and scalable to 128 GB or more with scale out clustering or grid architecture.		
Drive Slots per Enclosure	Up to 24 slots		
Performance	Sub milliseconds service time and low latency		
Key features	Must support sync/async and native multipathing without any additional hardware		
High Availability	Dual Active-Active Controllers (min 40 cores and 1.5TB Cache across dual controllers) and Redundant paths		
Storage Capacity	40TiB usable capacity or higher with recommended RAID Technology		
Storage Expandability	Proposed storage system should be expandable 75TiB		
Internal Storage	NVMe Flash drives with in built hardware compression		
Maximum Drives Supported	24 or Higher		
Drive Connectivity	NVMe over Fabrics (NVMe-oF)		
Host Connectivity	8 x 32G FC ports for the system (4 x 32 G FC ports per controller)		
Network Interfaces	Onboard 10 Gb RJ45 Ethernet / Dedicated 2x RJ-45 1Gb Ethernet systems management port per ESM		
Power Supply	Two redundant hot-swap 580W AC power supplies built into PCMs		
Warranty	5 years comprehensive warranty (24 x 7 x 2Hrs response time) – On Site Part Replacements and Labor Should be Provided within the warranty period. 2years comprehensive post		

	warranty (24 x 7 x 2Hrs response time) – On Site Part Replacements and Labor Should be Provided		
	Hardware replacement warranty and TAC support should be directly from OEM or OEM authorized partner		
	Device needs to be provided with all software license from day-1 as per RFP specification		
Support & Maintenance	24 x 7 Support to be provided by OEM and authorized partner		
	Need to provide health report every six month during the warranty period by OEM or OEM authorized partner		
Resolution time	Resolution time should be within 4 hrs.		
Hard Disk Retention (Optional)	Defective drives will not return to vendor after replacement with new drive		
Implementation	Implementation should be carried out by the OEM or authorized partner		
Management Interfaces Available	System Manager web interface, standalone CLI, SMI-S Provider, email, and syslog alerts		
Common Management Interface	Single console to monitor servers and storage		
Security Features	Secure Socket Layer (SSL), SSH, user-level security, RBAC, LDAP authentication		
Data Assurance	Ensures industry-standard end-to-end data integrity (from host ports to the storage)		
SPP Energy	Energy consumption (watts) at full load — specify. Energy Star certification or equivalent — specify.		
SAN Switches			
SAN Switches	2 x 24 Ports 32 Gbps SAN Switch with 16 Ports activation (8 ports activation per switch)		
SAN Switch Ports and Cables	Minimum 8x 32Gb/s FC ports per switch with 5m LC-LC cables		
SAN switches Warranty	5 years comprehensive warranty and 2 years post warranty (24 x 7 x 2Hrs response time) – On Site Part Replacements and Labor Should be Provided within the warranty period.		

	2 years comprehensive post warranty and 2 years post warranty (24 x 7 x 2Hrs response time) – On Site Part Replacements and Labor Should be Provided		
	Hardware replacement warranty and TAC support should be directly from OEM or OEM authorized partner		
	Device needs to be provided with all software license from day-1 as per RFP specification		
SAN switches Support & Maintenance	24 x 7 Support to be provided by OEM and OEM authorized partner		
SAN Switch Resolution time	Resolution time should be within 8 hrs.		
Implementation and Configuration	Implementation should be carried out by the OEM		
Tape Library			
Tape Library quantity	2 (01 HO Battaramulla + 01 BIA Katunayaka) — DDP both sites		
Tape Library	2x LTO8 Tape Drives in each site		
Tape Library scalability	Proposed tape library should be scalable to at least 3 drives		
Tape Drive Interface	Fiber Channel 8Gbps or 16 Gbps		
Number of Cartridges	<p>The vendor must supply a minimum of 2x24 tape cartridges sufficient to fulfil the following backup retention strategy:</p> <p>Daily Backups: 7-day rolling retention (one full or incremental backup per day) Weekly Backups: 4-week retention (one backup per week retained for four weeks) Monthly Backups: 1-month retention (one full database backup retained per month) for databases & Monthly backup for OS.</p> <p>The vendor must demonstrate that the proposed cartridge quantity adequately covers all retention tiers for the full database backup scope & should provide 2 * 5 cleaning cartridges</p>		

Tape Library features	Should support logical partitioning, integration with LTFS (Linear Tape File System)		
Tape Library Warranty	5 years comprehensive warranty and 2 years post warranty (24 x 7 x 2Hrs response time) – On Site Part Replacements and Labor Should be Provided within the warranty period.		
	2 years comprehensive post warranty (24 x 7 x 2Hrs response time) – On Site Part Replacements and Labor Should be Provided		
	Hardware replacement warranty and TAC support should be directly from OEM or OEM authorized partner		
	Device needs to be provided with all software license from day-1 as per RFP specification		
Tape Library Support	24 x 7 Support to be provided by OEM and OEM authorized partner		
Tape Library Resolution time	Resolution time should be within 4 hrs.		
Backup Solution			
Enterprise backup, recovery, and monitoring from a single platform	The proposed backup software shall support enterprise backup, recovery, and monitoring for physical servers (Unix/Linux) and virtual workloads from a single management platform.		
backup strategy	The solution shall support a 3-2-1-1-0 backup strategy : three copies of data, two different media types, one offsite copy, one immutable or air-gapped copy, and zero unverified backups.		
Immutable backup repositories	The solution shall support immutable backup repositories to protect backup data from deletion, modification, or ransomware encryption.		
Encryption in transit and at rest	Backup data shall be encrypted both in transit and at rest.		
Role based access	The solution shall provide role-based access control to restrict backup administration functions.		

Centralized monitoring, alerting, and reporting	The solution shall provide centralized monitoring, alerting, and reporting for backup job status, failures, and repository capacity.		
Policies	The solution shall support flexible retention policies (daily, weekly, monthly, yearly) consistent with the retention tiers defined in the Tape Library specification.		
Audit	The solution shall support audit logging of administrative activities including job changes, restore operations, and deletion attempts.		
Licenses	Licensing shall be based on a per-workload/instance model (physical server, logical partition, or VM), not tied to data volume.		
Implementation, configuration, knowledge transfer, and documentation	The bidder shall provide implementation, configuration, knowledge transfer, and documentation for backup jobs, repository configuration, recovery testing, and operational procedures.		

Technical Specifications OF 42U Free Standing Racks			
Category	Specification	Bidder Response Yes/No * (3)	Remarks (4)
Brand	(Should be same server OEM)		
Model	(Should be same server OEM)		
Country of Origin	(Specify)		
Country of Manufacture	(Specify)		
Number of Units	2		
Made	(Specify)		
Warranty	3 Years Comprehensive Warranty		
Type	Free Standing Rack Enclosure Cabinet with Front Mesh Door		
Cable Exits	Shall have bottom cable exits		
Power Strip	2 x Horizontal PDU 10-way IEC type (Power in should be industrial connector type)		
Rack Height/form factor	42U		

Rack Width	19" Equipment Mounting Cabinet		
Dimension of rack	644mm(W) x 1098mm(H) x 2015mm(D)		
Accessories	04 Caster Wheels		
Rack Connectivity	Bidder shall include all required Power Cables and connectors.		
SPP	Confirm cooling efficiency; materials compliance (RoHS); e-waste disposal plan for decommissioned racks		

Name of Signature

Signature

Date

Company Seal

MIGRATION SERVICES TECHNICAL SPECIFICATION

Migration Services Capability / Requirement	Bidder Response Yes/No * (3)	Remarks (4)
A. PHASE 1 — Pre-Migration Assessment		
Source database assessment: schema, data volume (830 GB), performance baseline — documented		
Oracle licence strategy: renewal for 10 EE licenses + new licenses for target; CSI timeline; VAT shown separately (PM 2024 Sect. 5.13)		
Cutover runbook (minimum 10 pages): minute-by-minute 2-hour procedure with go/no-go checkpoints, rollback triggers		
B. PHASE 2 — Migration Execution		
GoldenGate or equivalent CDC tool: compatible with source Oracle 11.2.0.3 and target 19c/23ai		
Endian methodology: proof of prior use on proposed tool		

Test migration in staging: minimum 1 full test with row count, checksum, LOB integrity validation		
2-hour production cutover plan: application-level smoke tests; rollback criteria defined		
C. PHASE 3 — Post-Migration Validation and Stabilisation		
Performance benchmarking: AWR comparison; IOPS, latency, throughput targets documented		
Application compatibility verification support : Passport issuance, border control, and all dependent applications verified on target		
Documentation: As-built architecture, runbooks, DR procedures, administrator handover pack		

SECTION -X

SERVICE LEVEL AGREEMENT AND PENALTY FRAMEWORK

Procurement of Supply, Delivery, Installation, Integration, Data Migration, Commissioning and Maintenance of Database Servers, Storages, Tape Library and Racks for the Department of Immigration and Emigration

This Section defines the minimum service levels, support obligations, operational responsibilities, database performance requirements, measurement criteria, and penalty framework that apply to the Bidder throughout the full duration of the Contract, including the warranty period and the post-warranty maintenance period.

This Section shall be read together with Section VI (Conditions of Contract), Section VII (Contract Data), and Section V (Schedule of Requirements). Where there is a conflict, the Conditions of Contract shall take precedence.

1. Objective

The purpose of this Service Level Agreement (SLA) is to set out the minimum performance standards, support commitments, and operational responsibilities that the Bidder must maintain across all systems and services supplied under this Contract.

This SLA is designed to:

- Protect the uninterrupted operation of the Department of Immigration and Emigration, including the Head Office at Battaramulla and the BIA site at Bandaranaike International Airport, Katunayaka.
- Set clear, measurable obligations so that the Bidder's performance can be objectively assessed at all times.
- Establish transparent financial penalties where those obligations are not met, with the penalty stated alongside each obligation so there is no ambiguity.
- Ensure that the Oracle database environment and all associated infrastructure are kept secure, healthy, and performing optimally throughout the Contract.

2. Scope of the SLA

This SLA covers all components and services supplied and maintained under the Contract, including:

Ref.	Component / Service	Sites
1	Database Servers — 04 units	Head Office (02) and BIA (02)
2	Storage Systems — 02 units	Head Office (01) and BIA (01)
3	Tape Library — 02 units	Head Office (01) and BIA (01)
4	Racks — 02 units	Head Office (01) and BIA (01)
5	SAN Switches, where applicable	Both sites
6	Operating Systems supplied under the Contract	Both sites
7	Oracle Database Platform (19c / 23ai or the approved target version)	Both sites
8	Oracle licences supplied or renewed under the Contract	Both sites
9	Virtualisation layer, where proposed	Both sites
10	Backup and recovery systems	Both sites
11	Data migration services during implementation and cutover	Both sites
12	Post-implementation support and maintenance throughout the warranty and post-warranty periods	Both sites

3. Contract Periods Covered by this SLA

This SLA applies across all phases of the Contract as set out below. The SLA clock for each site starts independently from the date the Acceptance Committee issues the Site Acceptance Certificate for that site. Head Office and BIA are measured and reported on separately throughout the Contract.

Phase	Period	What Applies
1	Implementation and Commissioning	Delivery, installation, migration, and cutover obligations as defined in Section 10 apply from contract award.
2	Warranty Period — minimum 60 months from Site Acceptance at each site	All SLA obligations apply in full, including incident response, support, performance, backup, and reporting.
3	Post-Warranty Period — 36 months immediately following the end of the warranty period	All SLA obligations continue unchanged. Annual post-warranty maintenance fees as stated in Table PS.3 apply.

4. Penalty — General Principles

Each section below sets out the obligation and the penalty for breaching it side by side. The following general rules apply to all penalties in this SLA:

- Any breach will result in a financial penalty or service credit that the Department may deduct from any payment owed to the Bidder.
- More than one penalty can apply where a single incident causes multiple SLA breaches in the same month.
- Penalties do not limit any other right or remedy available to the Department under the Contract or applicable law.
- The Department will notify the Bidder in writing of every penalty applied, specifying the breach, the applicable clause, and the deduction amount. The Bidder has five working days

to raise a written objection, which will be resolved under the dispute resolution provisions of the Contract.

- Repeated or sustained SLA failure will be treated as chronic non-performance under Section 12, which may lead to formal warning, payment withholding, or contract termination.

5. Incident Classification, Response Times, and Penalties

All incidents must be classified and managed according to the severity levels below. The response time clock starts from the moment the incident is logged by the Department or detected by the Bidder's monitoring systems, whichever comes first. The penalty for missing a response or resolution target is shown in the same row.

Severity	What it means	Response Time	Resolution Time	Penalty if Response Time Missed	Penalty if Resolution Time Missed
P1 – Critical	Complete outage of production database services or a major system failure at either site that directly affects core immigration operations — passport issuance, border control, or any mission-critical function.	15 minutes	1 hour	LKR 25,000 per 15-minute delay beyond the response time	LKR 75,000 per hour of delay, or part thereof, beyond 1 hours. Beyond 4 hours: additional LKR 75,000 per hour continues until resolved. More than 2 P1 incidents in

					a month: LKR 150,000 additional charge per P1 from the 3rd incident onwards.
P2 – High	Significant degradation, partial outage, or a major functional failure with serious operational impact. A workaround may exist but normal operations are materially impaired.	30 minutes	4 hours	LKR 10,000 per 30-minute delay beyond the response time	LKR 35,000 per hour of delay, or part thereof, beyond 4 hours. Beyond 8 hours: additional LKR 35,000 per hour continues until resolved. More than 4 P2 incidents in a month: LKR 75,000 additional charge per P2 from the 5th incident onwards.
P3 – Medium	Moderate issue with limited operational impact. A workaround is	1 hour	8 hours	LKR 5,000 per hour of delay beyond	LKR 10,000 per hour of delay, or part thereof,

	available and the Department can continue at reduced capacity.			response time	beyond 8 hours
P4 – Low	Minor issue, informational request, or low-impact defect with no material effect on day-to-day operations.	2 hours	2 working days	LKR 2,500 per hour of delay beyond response time	LKR 10,000 per hour of delay, or part thereof, beyond 2 working days

BIA Site — Minimum Severity: Because BIA operates 24 hours a day for border control, all incidents at the BIA site must be treated as a minimum of P2 unless there is clear evidence to the contrary. The Bidder must maintain a standing arrangement to get a qualified engineer to the BIA site at any hour.

6. Support Coverage and Operational Obligations

6.1 General Support

- The Bidder must provide 24-hour, seven-day-a-week, year-round support for all production systems and services at both sites throughout the warranty and post-warranty periods.
- Support covers everything supplied under the Contract — hardware, operating systems, Oracle database software, backup systems, storage systems, and the virtualization layer.
- All support must be delivered by the OEM, an Oracle-authorized partner, or OEM-authorized technical personnel holding relevant certifications for each component.
- The Bidder must maintain a local support centre in Sri Lanka with qualified engineers and enough spare parts to deliver same-day or next-day hardware replacement for critical components at both HQ and BIA.
- Complete incident logs, escalation records, and corrective action records must be maintained and made available to the Department on request at any time.
- A Root Cause Analysis (RCA) report must be submitted for every P1 incident within 24 hours of resolution, and for every P2 incident within 48 hours of resolution.

- The Bidder must keep the Department informed throughout every incident — providing updates on status, workaround progress, and expected resolution time.

6.2 On-Site Response

- For all P1 and P2 incidents, a qualified engineer must be physically on-site at the affected location within two hours of the incident being raised — unless the issue has already been fully resolved remotely within one hour.
- For BIA incidents, the on-site requirement is extended to three hours, provided that remote triage starts within 15 minutes of the incident being raised and continues actively until the engineer is on-site.
- The Bidder must assign a dedicated technical account manager to the Department, reachable during business hours and available for emergencies at all other times.
- Within 30 calendar days of contract signing, the Bidder must submit a formal escalation matrix covering all support levels from first-line response through to OEM escalation. This must be kept current and the Department notified of any changes within five working days.

6.3 Preventive Maintenance and Penalty

Beyond responding to incidents, the Bidder must carry out structured preventive maintenance at each site

- Physical inspection of all hardware for signs of wear, overheating, or deterioration
- Firmware and OS patch status review, with application of outstanding critical patches subject to Department approval
- Storage health check — drive status, controller health, and capacity utilization
- Oracle database health check — AWR summary, table space utilization, blocking sessions, and alert log review
- Backup verification — confirm recent backups completed successfully and restore readiness is intact
- Tape library and media check
- Environmental review — temperature, power consumption, and UPS status where accessible

7. Planned Maintenance

- Any planned maintenance must be notified to the Department at least five working days in advance, with a written maintenance plan covering affected components, expected duration, and risk measures.
- Planned maintenance may only proceed within a maintenance window formally approved by the Department in writing.
- Maintenance windows must be scheduled outside business-critical hours wherever possible, and must not overlap with BIA immigration operations unless the Controller General has specifically approved this in writing.
- Emergency maintenance must be notified immediately, stating the reasons, affected services, expected impact, and estimated duration. Written confirmation must follow within four hours.
- A post-maintenance report covering what was done, any issues encountered, and the current system status must be submitted within two working days of any planned or emergency maintenance activity.

8. Service Request SLA and Penalties

The Bidder must respond to and complete all operational service requests from the Department's ICT Division. This includes user access management, resource scaling, backup and restore requests, snapshot management, patching, Oracle configuration changes, and monitoring requests. The penalty for missing the completion time is shown in the same row.

Type of Request	Response Time	Completion Time	Penalty if Completion Time Missed
Standard request — single component or routine change	30 minutes	4 hours	LKR 5,000 per hour of delay, or part thereof, per request

Complex request — multiple components, both sites, or coordinated action across teams	1 hour	1 working day	LKR 5,000 per hour of delay, or part thereof, per request
---	--------	---------------	---

9. Backup and Disaster Recovery SLA and Penalties

The table below sets out each backup and DR obligation alongside the penalty that applies if that obligation is not met.

Parameter	Requirement	Penalty if Not Met
Backup success rate	At least 99% of all scheduled backup jobs must complete successfully in any calendar month.	LKR 25,000 for each calendar month where the rate falls below 99%
Backup schedule	Daily full or incremental Oracle RMAN backups with transaction log archival. Weekly full backups retained for four weeks. Monthly full database and OS backups retained for one month.	LKR 15,000 per missed scheduled backup job
Tape Library archival	Monthly tape-based archival backups must be completed, verified, and stored per the Department's data retention policy. Bidder must supply 2×24 tape cartridges and 2×5 cleaning cartridges per site.	LKR 25,000 per month where archival backup is not completed or verified
Restore testing	A full restore test at each site at least once per quarter. Results submitted	LKR 100,000 per missed restore test per

	to the Department within five working days of the test.	site. LKR 15,000 per day for late submission of restore test report. LKR 150,000 if the restore test is conducted but fails.
Backup failure response	Any backup failure must be investigated, documented, and corrected within two hours of detection. The Department must be notified immediately.	LKR 20,000 per hour of delay beyond the two-hour correction window
Recovery Point Objective (RPO)	Near-zero data loss — data loss must never exceed 15 minutes for any production database.	LKR 75,000 per incident where data loss exceeds 15 minutes
Recovery Time Objective (RTO)	Recovery must be completed within two hours for any unplanned production outage at either site.	LKR 75,000 per incident, plus LKR 25,000 for each additional hour beyond 2 hours
Cross-site Data Guard replication	Replication lag between Head Office and BIA must not exceed 15 minutes under normal conditions. Any sustained breach must be escalated immediately as a P2 incident.	LKR 50,000 per sustained occurrence exceeding 15 minutes
DR runbook currency	DR runbooks and recovery procedures must be reviewed and reconfirmed at least once every six months.	LKR 25,000 per six-month period where review is not completed

Oracle Auditing must be enabled and operational on all four database instances — DB1, DB2, and DB3 at Head Office, and DB4 at BIA — at all times. The Department must be able to query and verify audit records on demand at any time. Failure to maintain auditing will be treated as a P2 incident.

10. System Performance SLA and Penalties

The Bidder must keep all supplied infrastructure performing stably and consistently in support of the Department's workloads. The targets below apply throughout the Contract. A formal performance baseline will be established and agreed during the initial stabilization period following commissioning and will serve as the reference point from that point forward.

10.1 Oracle Database Performance Targets and Penalties

Parameter	Target	Penalty if Target Missed
Critical query response time	Within the agreed stabilization baseline. Sustained degradation beyond the baseline must be investigated and a remediation plan produced.	LKR 35,000 per incident where degradation materially affects operations and is not resolved within the applicable SLA time
Sustained CPU utilization	Not to exceed 75% under normal load. Any spike must be jointly reviewed and a remediation plan accepted within 48 hours.	LKR 25,000 per instance where sustained breach is not addressed within 48 hours
Average storage I/O latency	Not to exceed 10 ms, unless jointly agreed otherwise in writing.	LKR 25,000 per incident where latency breach materially affects operations
Blocking and lock	Must not exceed the agreed threshold. Persistent blocking that	Treated as a P2 incident — P2 resolution penalties

contention	materially affects operations must be escalated immediately as a P2 incident.	apply
Tablespace utilisation	Alert the Department before any tablespace reaches 80% capacity. Initiate auto-extend or manual expansion without delay.	LKR 25,000 per tablespace that reaches 85% without prior alert or action
Data Guard replication lag	Not to exceed 15 minutes under normal conditions. Any sustained breach must be treated as a P2 incident immediately.	LKR 50,000 per sustained occurrence exceeding 15 minutes (in addition to P2 incident penalties if applicable)

10.2 Database Performance Issue Resolution Times and Penalties

Severity	Example	Resolution Time	Penalty if Resolution Time Missed
P1 – Critical	Database outage or severe slowdown directly affecting immigration operations	2 hours	LKR 75,000 per hour of delay, or part thereof, beyond 2 hours. Beyond 4 hours: additional LKR 75,000 per hour continues until resolved.
P2 – High	Significant query delays, severe database degradation, or replication failure affecting operations	4 hours	LKR 35,000 per hour of delay, or part thereof, beyond 4 hours. Beyond 8 hours: additional LKR 35,000 per hour continues until resolved.
P3 – Medium	Moderate performance degradation affecting user experience while core operations continue	1 working day	LKR 10,000 per hour of delay, or part thereof, beyond 1 working day

10.3 Database Tuning and Monitoring Penalties

Obligation	Penalty for Non-Compliance
Scheduled database tuning or optimisation activity not carried out	LKR 25,000 per missed activity
Database parameter review not completed at least once per quarter	LKR 15,000 per quarter where review is not completed
Capacity review and growth forecast not submitted at least once every six months	LKR 20,000 per six-month period where submission is missed
Long-running query or bottleneck materially affecting production operations left unresolved	LKR 35,000 per incident
More than 3 P1 or P2 Oracle performance issues in a single calendar month	LKR 50,000 additional flat charge for that month
System performance breach attributable to Bidder's configuration or failure to maintain	LKR 35,000 per breach event. If more than 3 breach events in a month: additional LKR 50,000 flat charge for that month

11. Data Migration SLA and Penalties

The obligations below apply to the migration of all four Oracle database instances from the existing IBM AIX platform to the new target platform. These are non-negotiable and must be fully addressed in the Technical Proposal. The penalty for any delay or failure is shown alongside each obligation.

Requirement	Obligation	Penalty if Not Met
Maximum cutover downtime	Two hours — non-negotiable. The migration plan must show how this will be met, including go/no-go checkpoints and a tested rollback procedure.	LKR 75,000 per hour, or part thereof, of downtime beyond two hours
Data loss at cutover (RPO)	Near-zero — zero data loss is the target. Any residual risk must be formally documented and approved by the Department before the cutover proceeds.	LKR 75,000 per incident where data loss exceeds 15 minutes
Pre-migration assessment	A detailed assessment report must be submitted and approved by the Department before any migration work begins.	LKR 20,000 per day of delay in submitting the assessment after the agreed deadline
Cutover runbook	A step-by-step runbook of at least ten pages, with minute-by-minute procedures, named responsible persons, go/no-go points, and rollback triggers. Must be approved before the cutover date is confirmed.	LKR 20,000 per day of delay in delivering the approved runbook
Post-migration stabilization	Minimum four weeks of stabilization monitoring after each site's cutover. Bidder must remain on-call at all hours during this period.	LKR 30,000 per day for each day the Bidder fails to provide required on-call coverage during stabilization
Milestone delays	All delivery, implementation, migration milestones, and the agreed cutover date must be met.	LKR 30,000 per day of delay, or part thereof, per milestone

	Delays in sub-milestones not governed by the liquidated damages clause (CC 26.1) are subject to this SLA penalty.	
Overall project delay (Liquidated Damages)	The Bidder must complete the overall project within the agreed Contract period.	1% of total Contract value per week of delay, up to a maximum of 10%, as stated in CC 26.1

12. Reporting Requirements and Penalties

The Bidder must submit the following reports on the schedule shown. All reports must be submitted electronically in both PDF and editable format. The penalty for late submission is shown in each row.

Report	How Often	When It Is Due	Penalty for Late Submission
Monthly SLA compliance report	Monthly	Within 2 working days of month-end	LKR 15,000 per day of delay. Beyond 5 working days: LKR 25,000 per day
Incident summary by severity — P1, P2, P3, P4	Monthly	Within 2 working days of month-end	LKR 15,000 per day of delay. Beyond 5 working days: LKR 25,000 per day
System health report — CPU, memory, storage, and replication lag trends per site	Monthly	Within 2 working days of month-end	LKR 15,000 per day of delay. Beyond 5 working days: LKR 25,000 per day

Oracle database performance report	Monthly	Within 2 working days of month-end	LKR 15,000 per day of delay. Beyond 5 working days: LKR 25,000 per day
Root cause analysis — P1 incidents	Per incident	Within 24 hours of resolution	LKR 15,000 per hour of delay beyond 24 hours
Root cause analysis — P2 incidents	Per incident	Within 48 hours of resolution	LKR 10,000 per hour of delay beyond 48 hours
Backup restore test report	Quarterly	Within 5 working days of the test	LKR 15,000 per day of delay per report
DR readiness and Data Guard status report	Quarterly	Within 5 working days of quarter-end	LKR 15,000 per day of delay per report
Preventive maintenance and health check report	Quarterly	Within 2 working days of each visit	LKR 15,000 per day of delay per report
Post-maintenance report — planned and emergency maintenance	Per event	Within 2 working days of completion	LKR 15,000 per day of delay per report
Oracle licence compliance and CSI reconciliation report	Annual	Within 30 days of each contract anniversary	LKR 10,000 per day of delay per report

Oracle Database Performance Reports must include at a minimum: top SQL statements by resource usage, AWR summary, identified bottlenecks and root causes, tuning actions taken, and pending risks or capacity concerns.

Monthly System Health Reports must include at a minimum: per-server CPU and memory trends, storage capacity and IOPS summary, Data Guard replication lag history, backup success rate, and any open incidents or known risks.

13. Chronic Non-Performance

The following situations will be treated as chronic non-performance:

- More than three P1 incidents in a single calendar month, occurring in two or more consecutive months
- Material SLA non-compliance in any penalty category for three consecutive months
- Repeated failure to carry out Oracle database tuning obligations, including missed activities in two or more consecutive months
- Repeated failure to meet implementation or migration milestones without a formally accepted remediation plan
- Failure to submit more than three required reports in any consecutive two-month period

When chronic non-performance is identified, the Department may take one or more of the following actions:

- Issue a formal written warning setting out the nature and duration of the non-compliance.
- Require the Bidder to submit a Corrective Action Plan within ten working days, with specific and measurable targets and timelines.
- Withhold payments until a credible Corrective Action Plan has been submitted and accepted.
- Increase reporting frequency and oversight requirements at no additional cost to the Department.
- Allow the Bidder a cure period of 30 calendar days to demonstrate measurable improvement. If the non-compliance is not resolved to the Department's reasonable satisfaction, the Department may issue 30 days' written notice of termination.
- In cases of serious or repeated non-performance that puts critical immigration systems or national border control at risk, the Department reserves the right to bypass the cure period and issue termination notice directly.

14. Exclusions

The following circumstances are excluded from SLA penalty calculations, subject to the Department's written acceptance in each case:

- Force majeure events as defined in the Contract
- Planned maintenance that has been formally approved in advance by the Department
- Failures caused solely and demonstrably by third-party systems entirely outside the Bidder's contractual scope
- Issues caused directly by unauthorized changes made by the Department or other third parties without the Bidder's involvement

Claiming an Exclusion: If the Bidder intends to invoke an exclusion, written notice must be given to the Department within two hours of identifying that an exclusion may apply. The notice must state which exclusion is being claimed, what services are affected, the estimated impact, and the supporting evidence. If notice is not given within this two-hour window, the right to claim the exclusion is forfeited and the full penalty applies.

Exclusion grounds may not be used as a way to avoid penalties without clear technical evidence. Disputed exclusions will be resolved under the dispute resolution provisions of the Contract.

15. Roles and Responsibilities

15.1 Bidder's Responsibilities

- Meeting all incident response times, service levels, and performance targets in this SLA
- Providing 24-hour, year-round support, maintenance, incident response, preventive maintenance, and all required reporting
- Keeping all systems secure, healthy, and performing well at both sites throughout the Contract
- Carrying out Oracle database tuning and optimisation within the agreed scope
- Managing Oracle licence renewals, CSI numbers, and licence compliance from start to finish
- Maintaining a local support presence in Sri Lanka with qualified staff and adequate spare parts

- Keeping the escalation matrix current and responding to escalations within the required times
- Submitting all reports on time and in the required format

15.2 Department's Responsibilities

- Providing the access, approvals, and coordination the Bidder reasonably needs to deliver the service
- Reporting incidents and operational issues through the agreed channels without delay
- Not making unauthorized changes to the contracted environment
- Providing access to relevant systems and data needed for monitoring and maintenance
- Designating a technical point of contact for day-to-day coordination with the Bidder
- Reviewing and approving planned maintenance windows in a timely manner

16. SLA Review and Continuous Improvement

- SLA performance will be reviewed at an operational level every month and at a management level every quarter.
- The Bidder is expected to identify service improvement opportunities and submit written recommendations as part of the quarterly management review.
- If operational experience shows that a specific target or reporting format needs to be refined, both parties may agree to this in writing — provided that no core obligation is weakened.
- Any agreed change must be documented as a formal addendum to the Contract and does not take effect until signed by the Controller General or an authorised representative.

17. Tender Compliance Requirement

The Bidder must include a signed compliance statement with its Technical Proposal, confirming acceptance of all provisions of this Section, including:

- Incident classification, response times, resolution times, and associated penalties — Section 5
- 24-hour support obligations, on-site response, escalation matrix, and preventive maintenance — Section 6
- Planned and emergency maintenance obligations — Section 7
- Service request SLA and penalties — Section 8

- All backup and DR requirements including RPO, RTO, and associated penalties — Section 9
- Oracle database performance targets, tuning obligations, and penalties — Section 10
- Data migration obligations, cutover constraints, and penalties — Section 11
- All reporting obligations, deadlines, and late submission penalties — Section 12
- The monthly penalty cap of LKR 500,000 and general penalty principles — Section 4
- Exclusion notification obligations — Section 14

Any deviations from this SLA must be clearly identified in a separate schedule attached to the Technical Proposal. Deviations not disclosed at bid submission will not be accepted after contract award. The Department reserves the right to reject any bid that does not substantially comply with this Section.

BIDDER'S ACCEPTANCE

We, the undersigned, confirm that we have read and understood all provisions of Section X — Service Level Agreement and Penalty Framework, and commit to complying fully with all obligations stated herein throughout the Contract period.

Name of Firm: _____

Authorised Signatory: _____

Designation: _____

Signature: _____

Date: _____

Company Seal: