

TMO — Traffic Management Operation

Lebanon — Vehicle Registration & Driver Licensing RFP

OFFICIAL CLARIFICATIONS AND RESPONSES — Batch 5

The following clarifications are published in response to questions received from prospective bidders during the RFP clarification period, and are read together with the RFP and its issued Addenda Nos. 1, 2 and 3. These responses do not modify the RFP except where they reflect an issued Addendum; in case of discrepancy, the RFP and its issued Addenda prevail.

Q-01 — Offline operation

RFP Section / Page: As per Verbal Communication

Question: Please clarify the requirement for offline operation.

Does this mean that each decentralized site will process and store data independently?
Or does it mean that operations at the decentralized sites must continue uninterrupted when the network connection between the main site and branch locations is unavailable?

Authority's response: The binding requirements are those set out in the written RFP; there is no separate "offline operation" requirement beyond it. Continuity during a link interruption is assured by the contractor's connectivity design — in particular the independent redundant link path the contractor must provide and maintain for the full contract term at its own cost (Addendum No. 3, Article 2) — together with the platform's high-availability and disaster-recovery provisions. The architecture is centralized-with-resilience, with the central platform as the single system of record, not a set of independently operating per-branch databases. Where useful, the contractor may propose local continuity for essential counter functions during a transient outage (e.g., queued transactions reconciled on reconnection), within the all-inclusive scope.

Q-02 — Performance targets during disconnection

RFP Section / Page: Main Topic 17 — Performance Requirements · Page 134 · Subtopic 1.85 Performance (interactive)

Question:

Please note that achieving these performance targets may not be feasible during offline operation. Please share your thoughts.

Kindly clarify whether these performance requirements are expected to apply during periods of network disconnection as well.

Authority's response: The stated performance targets apply to the platform's normal operation at the stated peak loads, when the service is available. Because the contractor is responsible for establishing and maintaining connectivity — including an independent redundant link path for the full contract term (Addendum No. 3, Article 2) — ordinary link disruptions do not suspend the targets. Any suspension is limited to events outside the contractor's responsibility (force majeure under Article 25, or Authority-caused conditions), for the affected scope and duration,



with restoration within the DR/continuity objectives. The contractor shall design for graceful degradation (e.g., queued transactions during dependency outages, per the RFP).

Q-03 — AFIS — current-system details

RFP Section / Page: Main Topic 4 — General System Requirements and Architecture · Page 97 · Subtopic 1.12.2
Automated Fingerprint Identification System (AFIS)

Question: Could you please provide details regarding the current AFIS system, including:

The approximate data volume/database size; and

The type of database currently in use?

Authority's response: Per Addendum No. 2, the successful contractor supplies a new, in-platform fingerprint-matching subsystem; the existing fingerprint data is migrated into it, de-duplicated, and used for 1:many identification of new applicants.

Type of database. The current subsystem stores its biometric data as standard fingerprint templates held in a store that is integrated within, and managed internally by, the matching engine's own software-development kit (SDK). It is not a separately accessible or relational database, and its internal schema is proprietary to the engine's supplier (withheld as security-sensitive). A conventional database-engine name is therefore neither applicable nor necessary to prepare the bid.

Data volume (as published in Addendum No. 2). 978,447 person records; 13,205,948 fingerprints; approximately 141 GB of biometric data.

Migration approach. Because the existing store is proprietary, bidders are not required to interface with it directly. The Authority will make the existing biometric data available to the awarded contractor in standard interchange formats — ISO/IEC 19794-2 minutiae templates, together with the record identifiers linking each template to its registration record, and fingerprint images in WSQ format where these are available — for import and de-duplication into the new subsystem. Bidders shall include in their methodology a template-import and de-duplication process and, for any template-only records, a re-extraction / phased re-verification approach to preserve matching accuracy in the new engine.

Q-04 — Interface specifications / API documentation

RFP Section / Page: Main Topic 4 — General System Requirements and Architecture · Page 95 · Subtopic 1.3.1
Applicable Technical Standards

Question: Please confirm our understanding that TMO will provide all interface specifications and API documentation required for integration with both existing and future third-party systems.

Authority's response: The contractor is responsible for designing and building the API/middleware integration layer as part of the all-inclusive scope. The Authority will make the interface specifications necessary for integration available to the awarded contractor at the discovery phase; the technical specifications of existing integrations are security-sensitive and are released post-award, not at the bidding stage. Where a third party owns its own interface,



the Authority facilitates coordination, but the integration effort and any adapters remain the contractor's responsibility at no additional cost.

Q-05 — Implementation period & 5-year contract duration

RFP Section / Page: Part I — Award Procedure · Page 31 · Subtopic 1a Implementation period and Contract duration

Question: We would like to clarify the timeline for the "Schedule of activities/procedures related to the contract" clause. Our understanding is as follows:

The contract enters into force immediately upon the bid award.

Year 1 (Months 1–12): System implementation and Go-Live preparation.

Years 2–5: Four years of live system operations.

Could you please confirm if this breakdown accurately reflects the total five-year contract duration?

Authority's response: Confirmed as to the five-year total and the overall phasing (Year 1 for system implementation through Go-Live, then live years), with one correction: the contract does not enter into force at the bid award — it enters into force on signature by the awarded bidder and the competent authority, after the standstill period and ratification (RFP Award Procedure), and the five years run from that entry into force. System delivery is within one year of entry into force, with Go-Live = provisional acceptance (Addendum No. 1).

Q-06 — Disaster Recovery (DR) site architecture

RFP Section / Page: Main Topic 18 — Data Center and Infrastructure Requirements · Page 135 · Subtopic 1.98 Disaster Recovery (DR) Site

Question: We would like to clarify the architecture requirements for the "Failover to DR" clause. Could you please confirm the expected scope and configuration of the DR site:

Infrastructure Scope: Do you require a full, identical replica of the primary production environment, or a scaled-down environment designed to support only critical functions?

Data and Compute State: Should all machines and applications be fully installed and kept Active/Backup at the DR site for immediate failover, or is data summarization and replication sufficient?

Authority's response: The RFP specifies the DR configuration, so both points are answered by the dossier. The DR site is a warm-standby environment at a separate on-premises facility (public cloud is not permitted), with database asynchronous replication targeting RPO ≤ 15 minutes (application artifacts and object stores ≤ 30 minutes) and end-to-end RTO ≤ 4 hours, able to bring at least critical functions online on failover, validated by semi-annual live switchover drills (RFP Annex 1 — DR Site and Service-Level Targets). Accordingly: (a) a full, identical hot replica is not required — a warm standby sized to restore critical functions within RTO ≤ 4 hours is what is specified; and (b) data is continuously replicated (not summarized) to meet RPO ≤ 15 minutes, with systems recoverable within the RTO rather than kept fully active for instantaneous failover. Routine high availability ($\geq 99.9\%$ uptime) is delivered at the primary site through redundant components and the redundant link path; the DR site addresses site-level disaster. All primary and DR infrastructure is the contractor's under all-inclusive pricing.

