TMO — Traffic Management Operation

Lebanon — Vehicle Registration & Driver Licensing RFP

OFFICIAL CLARIFICATIONS AND RESPONSES — Batch 4

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.

Section 1 — Existing System

Clarification Q-0001

Question: *The RFP implies the winning contractor must maintain the legacy system in Break/Fix mode from contract start until Go-Live of the new system, at the contractor's own cost. Can the Authority confirm the exact scope and duration of this obligation? Is it limited to critical bug fixes only, or does it include feature enhancements?*

Authority's response:

Per the issued Addendum No. 1, that obligation has been removed: during the transition (until Go-Live) the contractor has no responsibility to operate or maintain the legacy system in Break/Fix or any other mode, and the Authority ensures legacy continuity by the means it deems appropriate.

Clarification Q-0002

Question: *What is the name of the current production system, who developed it, in what year was it installed, what programming languages and frameworks are used, and what database engine and version is it running on?*

Authority's response: The current production system is a custom application developed by the current operator, built on C# and Angular on the Microsoft .NET Framework, with Microsoft SQL Server as its database engine. Specific version, patch, configuration, and schema-level detail is reserved for the awarded contractor at the post-signature discovery phase. As the new platform is a Greenfield build, bidders size and price against the RFP and Annex 1 specifications, targets, and migration acceptance criteria.

Clarification Q-0003

Question: *Does the Authority own the full source code of the existing system, or does it belong to the incumbent contractor? Will the new contractor receive complete source code, database schemas, data dictionary, and all technical documentation at contract start - or only after full migration is complete?*

Authority's response:

The existing source code is still held by the current operator, and it will be delivered to the Authority. As the new platform is a Greenfield build, the existing source code is not required to develop it. From the discovery phase, under confidentiality undertakings, the awarded contractor receives the information required for migration (database schemas, data dictionary, sample data, business rules, integration specifications).

Clarification Q-0004

Question: *Is there an active maintenance contract with the incumbent contractor? What is its exact expiry date? What are the incumbent contractor's contractual obligations for handover and knowledge transfer to the new contractor?*

Authority's response:

Please refer to Q-001. The Authority will provide the awarded contractor with all information required to perform the required tasks, with the Authority acting as single point of coordination.

Clarification Q-0005

Question: *What is the total database size in GB/TB? Please provide exact record counts for: total registered vehicles, active driver licenses, violations on record, historical transactions, and all other major entities.*

Authority's response:

(i) Data at rest, as published with Addendum No. 2: the current registry holds 2,400,193 registered vehicles and 2,131,056 valid driving licences, and the fingerprint database covers 978,447 persons. (ii) Full-year 2025 transaction throughput by category — driving licences 301,927; vehicle-registration certificates 244,009; registration plates 152,678; mechanical inspections 1,308,255; transport licences 15,518 — with per-branch breakdowns, has been released to all bidders in the Authority's statistical publication issued with Addendum No. 2. (iii) The existing fingerprint database size is 141 GB; bidders size migration against these published figures and the Annex 1 acceptance criteria.

Clarification Q-0006

Question: *Are scanned documents, photos, signatures, and other files stored in the system? If yes, what is the total volume of these files in GB/TB?*

Authority's response:

The current platform has not maintained a general document-management archive; scanning into the DMS is under deployment and not yet in general operation. The licence/registration application images bearing the applicant's photograph and signature are retained for card production as binary objects within the databases, and are therefore part of the overall data to be migrated — a total of approximately 1.6 TB as indicated to bidders. Bidders size and price the migration against that volume and the RFP's migration acceptance criteria.

Clarification Q-0007

Question: *What external system integrations are currently live and functional - Ministry of Finance, AFIS, ISF, insurance companies, inspection centers, customs, notaries? For each, please state: integration type (API/file/manual), protocol, and whether it needs to be redeveloped.*

Authority's response:

The current platform's integration scope is summarised in the published Third-Party Integrations workflow document; detailed specifications (protocols, endpoints, authentication, payload schemas) are reserved for the awarded contractor at discovery. Current operational status, for sizing only:

Integration partner	Current status
Lebanese Customs	Live
Ministry of Finance (MoF)	Live
Fingerprint matching	Existing system live; the new platform supplies its OWN new matcher and migrates the data (Addendum No. 2)
ISF (Internal Security Forces)	Live
Insurance Companies	Manual today (clerk entry); electronic integration to be built under the new platform
Vehicle Inspection Centres	Separate Authority procurement; integration-only for the new platform
Notaries (Kuttab al-Adl)	Non-electronic for transfer deeds today
Postal service	Live (DL, VR, RFID delivery, payments)
Park Meter Operators	Separate operation; integration-only for the new platform
Driving Schools	Live (basic channel — see Q-018)
POS Payment Processors	Live

The new platform is Greenfield; the contractor designs, builds, and maintains the integration layer end-to-end, integrating with each partner's then-current interface as confirmed at discovery.

Clarification Q-0008

Question: *Is the current system deployed centrally at one data center, or distributed across branch sites? Please provide the current deployment topology.*

Authority's response:

The current platform is centralised — a single central database at the Dekweneh primary data centre, with regional branches connecting to deliver services (centralised data, decentralised service delivery), consistent with the architecture mandated for the new platform. The new platform is a Greenfield build on new, separate hardware: the contractor supplies and installs all new IT infrastructure for both the primary data centre and a separate disaster-recovery site and does not reuse the legacy system's data-centre equipment, while the Authority provides the physical primary facility (building, base power, physical security) and designates the DR facility, which may be a government secondary site (see Q-075 and Q-085–Q-089). Current-system topology, diagrams, and server inventories are reserved for the awarded contractor at discovery; bidders size their own DC and DR infrastructure to the centralised architecture and the published targets.

Clarification Q-0009

Question: *What is the exact expiry date of the current incumbent's contract? Will there be any gap period between the current contract end and the new contract start where the Authority is uncovered, and how should bidders account for this?*

Authority's response:

The incumbent contract end and the transitional model are addressed in Q-001; bidders reflect that transitional model in their implementation plan and are not responsible for any period preceding contract award. The Authority manages the timing of the award and its alignment with the incumbent contract end, which create no obligations on the awarded contractor beyond the transitional model in Q-001.

Clarification Q-0010

Question: *The RFP states all new equipment and software become property of the Authority upon delivery/acceptance. Does this also include third-party COTS software licenses? If so, will the Authority assume ongoing license renewal costs post-contract?*

Authority's response:

All software licences, including third-party COTS, are within the contractor's all-inclusive supply scope, with all entitlements vesting in the Authority on delivery and acceptance. Per the Annex 1 licence term, the contractor provides six (6) years of continuous coverage from Go-Live (perpetual/lifetime preferred where commercially available) with all renewals in that period at its cost; thereafter the Authority renews using the entitlements it owns, and licences are structured so the Authority can take up direct licensor relationships at any time. Bidders state the licensing model (perpetual or subscription) and cost for each material COTS component.

Section 2 — New System Requirements

Clarification Q-0011

Question: *What is the required duration for the implementation phase before Go-Live?*

Authority's response:

Per the amended Special Conditions (Addendum No. 1), the contractor delivers the system within one year of contract entry-into-force.

Clarification Q-0012

Question: *What are the expected concurrent users?*

Authority's response:

The RFP sets 99.9% availability with 30% headroom for an installed base of approximately 5 million persons and 2.5 million vehicles, with 2025 transaction statistics as reference; the Authority does not prescribe a fixed concurrent-user count.

Clarification Q-0013

Question: *What is the expected daily transaction volume?*

Authority's response:

The Authority does not prescribe a fixed daily volume. Full-year 2025 transaction statistics, with per-branch breakdowns, are published in the Authority's statistical publication issued with Addendum No. 2; bidders derive average daily volumes from them and make their own peak assumptions.

Clarification Q-0014

Question: *Is biometric enrollment required via mobile devices in the field?*

Authority's response:

Biometric enrolment via mobile devices in the field is not required. Signature capture is performed on signature pads at the point of service — at the driving-licence counter; at vehicle sale/transfer where the parties attend in person rather than acting through a power of attorney; and at the notary, physician, and driving-school touchpoints, where the pads are procured by the using entity. Signature pads for driving-licence enrolment at Authority counters are supplied by the contractor. (see Q-052).

Clarification Q-0015

Question: *Is the new system required to perform biometric enrollment directly, or only to integrate with the existing AFIS/ABIS? If enrollment is required -is it for new applicants only, or must all existing records be re-enrolled into the new system?*

Authority's response:

Per the issued Addendum No. 2, the new platform shall include its own new fingerprint-matching system; it does not integrate with or rely upon any existing system. The existing fingerprint database is fully migrated into the new system (including de-duplication), and the new matcher performs 1:many identification of new driving-licence applicants. At the counter the platform captures the fingerprint, the facial photograph (for the card), and the handwritten signature on a pad, with full audit logging.

Clarification Q-0016

Question: *For the Insurance Companies integration: Are insurance policies currently pushed to the TMO system electronically, or is this a manual/paper process today? How many insurance companies need to be onboarded?*

Authority's response:

Insurance data is handled manually today (clerk entry); under the new platform it moves to electronic, real-time policy verification before registration renewal, on an open-architecture basis able to onboard any licensed Lebanese insurer. The Authority does not fix a number of insurers; the companies and onboarding sequence are set at discovery, with no per-company onboarding charge. Bidders describe their onboarding methodology in the technical offer.

Clarification Q-0017

Question: *For the Notary integration: Is the electronic notary signature legally recognized in Lebanon today for vehicle transfer deeds, or is this a future legislative requirement anticipated during the contract period?*

Authority's response:

Electronic notary signature is not currently recognised in Lebanon for vehicle transfer deeds, and the notary process today is paper-based. The new platform shall support a dual-mode notary integration: a current mode — signature-pad capture at the notary counter (pads procured by the using entity); and the capability for a future mode — PKI-based qualified electronic signature on PDF deeds via a notary portal — which the platform shall be built to support and which is activated only by Authority decision if and when the legal framework recognises it. The platform switches between modes by configuration, without code changes.

Clarification Q-0018

Question: *For the Driving Schools integration: Are driving schools currently connected to any government IT system, or will the new system be the first electronic channel for issuing training certificates?*

Authority's response:

Driving schools currently connect through a basic electronic channel for exam-application submission; under the new platform this expands into the Driving Schools / Exam Management scope in the RFP and Annex 1, on an open-architecture basis able to onboard any licensed school with no per-school charge. Bidders describe their integration and onboarding approach in the technical offer.

Clarification Q-0019

Question: *For the Vehicle Inspection Centers integration: Is the vehicle inspection program currently active or suspended? What is the Authority's anticipated policy direction during the 5-year contract period?*

Authority's response:

Vehicle inspection is a separate Authority procurement; this RFP does not include supplying or operating inspection centres. The new platform provides an integration interface to retrieve inspection results as a precondition to registration renewal where Authority policy requires, on an open-architecture basis with no per-centre charge. Bidders describe their integration approach.

Clarification Q-0020

Question: *The RFP mentions integration with the General Directorate of General Security (DGGS). Is this integration for identity verification of applicants? What data elements are exchanged, and is an API already available?*

Authority's response:

There is no current integration with the Directorate of General Security (DGGS); it is a forward-looking requirement of the new platform per the RFP and Annex 1 (validation of foreign nationals' identity and status, with configurable controls). The DGGS-side interface is not pre-defined; the awarded contractor establishes it through Authority-coordinated engagement at discovery.

Section 3 — Data Migration

Clarification Q-0021

Question: *Will the Authority provide the full database schema, data dictionary, and a sanitized sample dataset to bidders before proposal submission? Or only to the awarded contractor post-contract?*

Authority's response:

The legacy schema, data dictionary, and any sanitised sample datasets are provided exclusively to the awarded contractor at discovery, under confidentiality undertakings.

Clarification Q-0022

Question: *Are all historical records required to be migrated, or only active records? What is the cutoff date or criterion for determining which records must be migrated?*

Authority's response:

Migration covers all records — all historical records are required to be migrated — for the operational, legal, audit, and reporting continuity of the new platform from Go-Live, per the RFP, Annex 1, the Authority's retention policy, and applicable law. Bidders shall plan on full migration; a phased approach is permitted only insofar as all records are present at final acceptance with continuity preserved.

Clarification Q-0023

Question: *Are scanned documents and file attachments included in the migration scope? If yes, what is the total file volume in GB/TB?*

Authority's response:

There is no general document-scan archive to migrate at this stage: document scanning into the DMS (Laserfiche) is under deployment. The scanned licence/registration application images (photograph + signature), retained for card production and stored as binary objects, are migrated to the new platform (see Q-006).

Clarification Q-0024

Question: *Will the Authority provide a dedicated staging environment with a production copy of the database for migration rehearsals? Or must the contractor provision this environment independently?*

Authority's response:

All environments (Development, Test, UAT, Security, Production) are contractor-provisioned under the all-inclusive pricing and deployed on the Authority's premises in Lebanon, per the on-premises and data-residency requirements. Migration is performed on-site: data is loaded by the Authority into the relevant on-premises environment and does not leave Authority premises, and the contractor has no direct access to the production database of either platform — all production-data operations are coordinated and supervised by the Authority (consistent with Q-001). Bidders propose the rehearsal-run and cut-over methodology and demonstrate the acceptance criteria.

Clarification Q-0025

Question: *What is the approved maximum downtime window during the final cut-over from the old system to the new one?*

Authority's response:

The Authority has not fixed a maximum cut-over downtime window; cut-over shall minimise operational and citizen-service disruption per the RFP continuity provisions and the RFP's acceptance criteria. Bidders propose the cut-over methodology — the window (typically outside core hours), the rollback plan and decision points, and continuity measures — for Authority approval at the cut-over planning stage; downtime shall be the minimum required, not open-ended.

Clarification Q-0026

Question: *Is a parallel-run period required where both systems operate simultaneously? If yes, what is the minimum required parallel-run duration and who bears the cost?*

Authority's response:

No. The two systems shall not operate simultaneously: the transition follows a single cut-over model, with migration rehearsals and reconciliation completed before Go-Live and a tested rollback plan. There is no parallel-run period in which both systems process live transactions, and no associated cost arises.

Clarification Q-0027

Question: *Who within the Authority is responsible for data validation, reconciliation sign-off, and formal migration approval at each rehearsal stage and at the final cut-over?*

Authority's response:

The Authority will appoint a migration governance structure: an Authority technical team for data validation and operational acceptance; a steering committee for milestone go/no-go decisions (rehearsal progression and final cut-over); and the Director General (or delegate) for formal sign-off. Named individuals and the detailed RACI are confirmed at project initiation. Bidders propose the contractor-to-Authority RACI, governance cadence, and validation methodology.

Clarification Q-0028

Question: *Does the Authority have an existing Document Management System (DMS) that archived documents must be integrated with? If yes, please provide the DMS name, version, and available integration APIs.*

Authority's response:

The Authority's DMS is Laserfiche, still under deployment; bidders may propose an alternative only where specific gaps are technically justified. The new platform integrates with Laserfiche for document archival, retrieval, and lifecycle workflows; standard Laserfiche capabilities are publicly documented, while Authority-specific configuration is reserved for the awarded contractor at discovery.

Section 4 — Cards, Chips, Printers, HSM and RFID

Clarification Q-0029

Question: *What is the required chip type for the DL and VR cards - contact, contactless, or dual-interface?*

Authority's response:

Per Annex 8 (VR card) and Annex 9 (DL), the chip is a contactless integrated circuit at 13.56 MHz, ISO/IEC 14443 (Type A or B, including 14443-4), with the command set per ISO/IEC 7816-4; the card conforms to ISO/IEC 7810 (ID-1) and 7816-1. The current chip and card design are retained; the chip data model and cryptography are withheld per the Annex 8/9 Confidentiality Notes and provided to the awarded contractor post-award. Bidders propose the personalization workflow, chip-encoding subsystem, and PKI integration (see Q-033).

Clarification Q-0030

Question: *What is the required substrate for the DL and VR cards - PVC or polycarbonate?*

Authority's response:

Per Annex 8 and Annex 9, the substrate is polycarbonate, multi-layer, laser-engravable, ID-1 (85.60 × 53.98 × 0.76 mm), conforming to ISO/IEC 7810 and 7816-1; the current substrate and design are retained and changes to the card body are not permitted. Detailed manufacturing parameters are withheld per the Annex 8/9 Confidentiality Notes and provided post-award. Bidders propose the personalization workflow and pre-issuance QA consistent with the retained design.

Clarification Q-0031

Question: *What security features are mandatory on the cards - hologram, guilloché, UV ink, microtext, laser engraving?*

Authority's response:

Per Annex 8 and Annex 9, the card carries a layered, multi-level security-feature set — overt, covert, forensic, and personalization-layer features — and the current feature set is retained; changes are not permitted. The exact implementations are withheld per the Annex 8/9 Confidentiality Notes and provided post-award. Bidders propose the personalization workflow and multi-level QA approach.

Clarification Q-0032

Question: *Must biometric data be stored on the DL chip - fingerprint template, facial image, or both*

Authority's response:

Per Annex 9, the DL chip conforms to ISO/IEC 18013-1/-2/-3 with secure messaging and mutual authentication. The current chip data model is retained — the same specifications as the existing cards apply — and the details (including which biometric elements are stored on the chip) are withheld per the Annex 9 Confidentiality Note and provided to the awarded contractor post-award. Fingerprint matching is performed by the new fingerprint-matching system the contractor supplies under Addendum No. 2; the facial photograph is for the card, not for matching.

Clarification Q-0033

Question: *Must PKI certificates be stored on the DL or VR cards. If yes, shall the bidder propose a PKI as part of the proposed solution*

Authority's response:

The chip data model — including whether and how PKI certificates are stored on the card — is retained and withheld per the Annex 8/9 Confidentiality Notes, provided to the awarded contractor post-award. Separately, the new platform's PKI is Authority-owned, with the contractor designing, building, and operating it; bidders propose the PKI architecture, HSM topology, and certificate lifecycle in the technical offer (see Q-046).

Clarification Q-0034

Question: *How many new printers must the contractor supply in total*

Authority's response:

The RFP makes redundancy mandatory — at least two personalization units at main centres so issuance continues if one fails, with maintenance kits and spares; the same applies to VR-card equipment. Beyond this minimum the Authority has not fixed a total: the contractor proposes and supplies the total across all sites (Dekweneh HQ + 7 regional branches + up to 2 additional; Decree 11244/2003, Art. 4), sized to the published annual volumes. Equipment minimums published with Addendum No. 2, under the all-inclusive pricing.

Clarification Q-0035

Question: *What card printer technology is required - direct-to-card or retransfer*

Authority's response:

Per Annex 8 and Annex 9, the substrate is polycarbonate and all variable data (Arabic and Latin names, licence number, dates, vehicle data) is applied by laser engraving; direct-to-card and retransfer printing apply to PVC and are not applicable to the retained polycarbonate design — the same specifications as the existing cards apply. Bidders propose a laser-engraving system suitable for polycarbonate, with the optical quality, depth control, ghost-image capability, and durability required by Annexes 8 and 9, supplied and maintained under the all-inclusive pricing.

Clarification Q-0036

Question: *Is a lamination module required on the printer*

Authority's response:

No. The cards are polycarbonate with security features integrated into the card body during manufacture, and personalization is by laser engraving inside the body, so no post-personalization overlay or lamination module is required (a lamination module is a PVC-workflow feature). Bidders propose laser-engraving personalization equipment consistent with the retained design, under the all-inclusive pricing.

Clarification Q-0037

Question: *What type of laminate is required - standard protective overlay or holographic security overlay*

Authority's response:

Neither. The cards are monolithic multi-layer polycarbonate with security features integrated during manufacture and personalization exclusively by laser engraving, with no laminate film or overlay; the current design is retained. Proposals based on PVC stock with applied laminate films do not meet the specification and will not be accepted.

Clarification Q-0038

Question: *Is a custom-designed holographic laminate required, or is a standard off-the-shelf security laminate acceptable*

Authority's response:

Both the DL and the VR card are built to the same construction — polycarbonate, multi-layer, laser-engravable, ID-1, conforming to ISO 7810 and 7816-1 (and, for the DL, ISO 18013), harmonised with the Vienna Convention (1968) and EU Directive 2006/126/EC. Production is two-phase: card-body manufacture (static security features integrated into the body) and personalization by laser engraving on the blanks; there is no separate post-print laminate film. The retained design is fixed with specifics withheld per the Annex 8/9 Confidentiality Notes; PVC-with-laminate proposals are not accepted.

Clarification Q-0039

Question: *What is the required minimum print throughput in cards per hour*

Authority's response:

The Authority has not fixed a minimum throughput; bidders state, in the technical offer, the personalization throughput (cards/hour) of each laser-engraving unit and the number of units per site, sized to the annual volumes, the sites in scope (HQ + 7 + up to 2), and the per-branch 2025 throughput published with Addendum No. 2. Equipment is supplied and maintained under the all-inclusive pricing.

Clarification Q-0040

Question: *Is printing centralized at headquarters or distributed at each branch*

Authority's response:

DL and VR personalization is performed at each issuance site — Dekweneh HQ and the seven regional branches (Tripoli, Saida, Zahle, Jounieh, Nabatieh, Ouzai, Aley), plus up to two additional branches (Decree 11244/2003, Art. 4); site-visit attendees observed the active equipment. The contractor supplies and deploys equipment at each site (sized per Q-034/Q-039), with integration, training, consumables, maintenance, and end-of-contract handover under the all-inclusive pricing.

Clarification Q-0041

Question: *What RFID technology standard is required (UHF, HF)?*

Authority's response:

Per Annex 10, the e-sticker RFID is UHF; the current sticker design is retained and detailed layouts are withheld per the Annex 10 Confidentiality Note, provided post-award. The E-Sticker Module is optional (RFP §1.28.2): no procurement, encoding, payment, or run-rate occurs unless the Authority issues a written Activation Notice; until then the contractor maintains background readiness only. Bidders include the sticker-media logistics and the encoders/verification readers in the all-inclusive pricing subject to this activation framework; the contractor supplies a test quantity of handhelds, with field-enforcement handhelds in ISF's separate procurement.

Clarification Q-0042

Question: *How many RFID tags must the contractor supply in total*

Authority's response:

The e-sticker stream is optional and subject to written activation (RFP §1.28.2; see Q-041); no supply, encoding, payment, or run-rate occurs until an Activation Notice issues. For sizing: up to 200,000 units per year, with an initial batch of 200,000; the 1,000,000-unit Goods Basket reference applies only to Reference-Value computation.

Clarification Q-0043

Question: *What is the expected yearly quantity of RFID tags?*

Authority's response:

Please refer to Q-042.

Clarification Q-0044

Question: *What is the expected reading distance?*

Authority's response:

Per Annex 10 §3 (UHF), the minimum required read range is six (6) metres or more.

Clarification Q-0045

Question: *Are RFID tags used for enforcement or inspection purposes?*

Authority's response:

Per Annex 10 and RFP §1.28, the e-sticker is designed for enforcement and inspection purposes, and the proposed system shall support both; it remains within the Authority's discretion to decide, at any stage, to use it for enforcement only. The contractor's scope covers sticker supply, encoding, and issuance; the platform (lifecycle, anti-tamper validation, inventory, roadside-verification APIs, analytics); and a test quantity of handhelds, with field-enforcement handhelds under ISF's separate procurement — all subject to the e-sticker activation framework (Q-041) and the all-inclusive pricing.

Clarification Q-0046

Question: *How many HSMs are required? Network (LAN) based HSMs? FIPS 140-2 L3 Certified?*

Authority's response:

The new platform's PKI is an Authority-owned subsystem the contractor designs, builds, and operates, with FIPS-validated HSMs protecting the Issuing CAs and production cryptographic operations; FIPS 140-2 Level 3 (or its FIPS 140-3 successor) is preferred for production signing — bidders state and justify the FIPS level per HSM role. The Authority has not fixed an HSM count or topology; the contractor proposes these to meet the 99.9% / 30% targets, the 90-day rotation and certificate pinning, and DC+DR redundancy. All HSM supply, integration, key ceremonies, operation, and maintenance are under the all-inclusive pricing.

Clarification Q-0047

Question: *Where must the HSM be installed — at the data center, DR site, or both?*

Authority's response:

The Authority has not fixed an HSM site-deployment architecture; on-premises hosting is mandatory and public cloud is prohibited for both production and DR, and cloud HSM services or off-premises hosting of HSMs or cryptographic operations are not permitted. The contractor proposes the on-premises HSM topology and the replication/clustering approach between the main data centre and the DR site to meet the 99.9% / 30% targets, DR continuity, the 90-day rotation and pinning, and cryptographic throughput, justified in the technical offer.

Clarification Q-0048

Question: *Are PKI certificates required to be stored on the DL or VR cards?*

Authority's response:

Addressed in Q-033: the chip data model (including whether and how PKI certificates are stored on the card) is retained, with details withheld per the Annex 8/9 Confidentiality Notes and provided to the awarded contractor post-award.

Clarification Q-0049

Question: *Which authority is responsible for defining and issuing the cryptographic keys for the card chips - the Authority, a national CA, or the contractor?*

Authority's response:

The cryptographic keys and certificates for the card chips are owned by the Authority, which acts as the certification authority for the card ecosystem; no external national or third-party CA is involved. The contractor designs, builds, and operates the Authority's PKI on its behalf but does not own the keys or certificates; all entitlements vest in the Authority from day one.

Clarification Q-0050

Question: *Is biometric data (fingerprint template and/or facial image) required to be stored on the DL chip?*

Authority's response:

Addressed in Q-032: the chip data model is retained — the same specifications as the existing cards apply — with the stored biometric elements withheld per the Annex 9 Confidentiality Note and provided to the awarded contractor post-award. Fingerprint matching is performed by the new fingerprint-matching system supplied under Addendum No. 2; the facial photograph is for the card, not for matching.

Clarification Q-0051

Question: *Who is responsible for supplying printer consumables?*

Authority's response:

The awarded contractor. All printer and personalization consumables for the contract period are supplied by the contractor under the all-inclusive pricing.

Clarification Q-0052

Question: *Is the contractor required to supply fingerprint devices, facial recognition cameras, and signature pad? If Yes, How many? and what are the minimum specs?*

Authority's response:

(i) Fingerprint scanners, biometric-capture devices, and facial-photo cameras for enrolment are within the contractor's supply scope. Per Addendum No. 2, live fingerprint scanners are deployed at the 1:many enrolment workstations in all branches at no fewer than the published minimum quantities (twenty-five (25) in total: Dekwaneh 10; Ouzai 3; Jounieh, Aley, Zahle, Tripoli, Sidon, Nabatieh 2 each), and may scale up with the workstation count; the facial photograph is captured for the card. (ii) Signature pads for DL/VR enrolment at Authority counters are supplied by the contractor as part of the enrolment stations; pads at third-party touchpoints (notary, physician, driving school) are procured by the respective using entity. (iii) All contractor-supplied equipment is installed, integrated, and maintained under the all-inclusive pricing, sized to support the new fingerprint-matching system's performance targets.

Clarification Q-0053

Question: *Is the contractor required to supply card readers? If yes how many card readers are required in total? What card types must the readers support — contact chip, contactless, magnetic stripe, or all three?*

Authority's response:

Card readers for the platform's verification and operational workflows are within the contractor's supply scope; per Annexes 8 and 9 the chip is contactless at 13.56 MHz (ISO/IEC 14443 Type A/B), so readers shall be contactless-capable and 14443-compliant (contact-chip and magnetic-stripe interfaces are not applicable to the retained design — see Q-029/Q-032). The Authority has not fixed a quantity; the contractor proposes quantity, per-site distribution, and specifications (widely available, non-contractor-exclusive models), with supply, integration, and maintenance under the all-inclusive pricing.

Section 6a — Branch Infrastructure (Workstations and Scanners)

Clarification Q-0054

Question: *Are workstations currently installed at branch counters?*

Authority's response:

Workstations are installed at Authority service counters across Dekweneh HQ and the regional branches for the current DL/VR workflows; the per-branch workstation distribution (service and administrative) has been released to all bidders in the equipment information published with Addendum No. 2. Workstations for the new platform are within the contractor's supply scope under the all-inclusive pricing (see Q-060–Q-063).

Clarification Q-0055

Question: *How many workstations are installed per branch?*

Authority's response:

Per-branch workstation counts are set out in the equipment information published with Addendum No. 2. The new platform's per-site workstation requirement is proposed by the contractor (Q-061/Q-062), sized to operational need and no fewer than the published counts.

Clarification Q-0056

Question: *What is the make and model of the existing workstations?*

Authority's response:

For the new platform — a Greenfield build per Addendum No. 1 — bidders size and price new workstations meeting the RFP/Annex 1 requirements; the existing units' make and model are not needed to prepare a bid.

Clarification Q-0057

Question: *What CPU, RAM, and storage do the existing workstations have?*

Authority's response:

For the Greenfield platform (Addendum No. 1), bidders size and price new workstations to the RFP/Annex 1 requirements; the existing units' CPU, RAM, and storage are not needed to prepare a bid.

Clarification Q-0058

Question: *What operating system and version are the existing workstations running?*

Authority's response:

For the Greenfield platform (Addendum No. 1), the operating system and lifecycle are proposed by the contractor (Q-061–Q-063; Q-010); the existing OS versions are not needed to prepare a bid.

Clarification Q-0059

Question: *What is the age of the existing workstations?*

Authority's response:

For the Greenfield platform (Addendum No. 1), bidders size and price new workstations to the RFP/Annex 1 requirements; the age of the existing units is not needed to prepare a bid.

Clarification Q-0060

Question: *Are the existing workstations within scope for reuse or must the contractor replace them?*

Authority's response:

The new platform is a Greenfield solution (Addendum No. 1): the contractor supplies, installs, integrates, configures, and maintains a new workstation fleet under the all-inclusive pricing. Existing workstations are not reused for the new platform; day-to-day operation is by the Authority's staff.

Clarification Q-0061

Question: *How many new workstations must the contractor supply in total across all branches?*

Authority's response:

The contractor proposes the quantity and per-site distribution needed to support the new platform's workflows across all sites (HQ + 7 + up to 2; Decree 11244/2003, Art. 4), informed by the per-branch workstation distribution published with Addendum No. 2, sized to the 99.9% / 30% targets and the RFP's security and authentication requirements, and no fewer than the published counts, under the all-inclusive pricing.

Clarification Q-0062

Question: *How many new workstations are required per branch?*

Authority's response:

Addressed in Q-061: the per-branch workstation distribution is published with Addendum No. 2; the contractor proposes the per-site distribution to support the workflows, sized to operational need and no fewer than the published counts.

Clarification Q-0063

Question: *Must the workstations be supplied with a keyboard and mouse, or are these already available?*

Authority's response:

Yes. The new platform is a Greenfield solution: workstations are supplied new by the contractor with all necessary peripherals, including keyboard and mouse, under the all-inclusive pricing.

Clarification Q-0064

Question: *Are document scanners currently installed at branches?*

Authority's response:

Two scanning contexts apply, and the new platform serves both: (i) operational capture for licence production — scanning the paper application bearing the photograph and signature, which continues under the new platform; and (ii) document scanning into the DMS (Laserfiche) for archival and retrieval (e.g. the bill-of-sale deed), with the DMS under deployment. The contractor supplies and integrates the scanners used by the new platform with the Laserfiche solution (see Q-065).

Clarification Q-0065

Question: *How many scanners are installed per branch?*

Authority's response:

The contractor supplies the document scanners for the new platform, integrated with the DMS (Laserfiche). The per-branch scanner distribution has been released to all bidders in the equipment information published with Addendum No. 2; the number of scanners supplied shall be no fewer than the published counts and shall match operational need.

Clarification Q-0066

Question: *What is the make and model of the existing scanners?*

Authority's response:

For the Greenfield platform (Addendum No. 1), bidders size and price new document scanners against the workflow and DMS-integration requirements (Q-064), proposed to meet or exceed the functional characteristics of the current production units (see Q-067).

Clarification Q-0067

Question: *Are the existing scanners flatbed, sheetfed, or both?*

Authority's response:

For the Greenfield platform (Addendum No. 1), the contractor proposes the scanner types and per-site distribution against the workflow and DMS-integration requirements. Proposed scanners shall meet or exceed the functional characteristics of the Authority's current production scanners (HP ScanJet N4600 fnw1).

Clarification Q-0068

Question: *What is the age of the existing scanners?*

Authority's response:

For the Greenfield platform (Addendum No. 1), bidders size and price new scanners (Q-064; Q-070–Q-073); the age of the existing scanners is not needed to prepare a bid.

Clarification Q-0069

Question: *Are the existing scanners within scope for reuse or must the contractor replace them?*

Authority's response:

No. The new platform is a Greenfield solution (Addendum No. 1): the contractor supplies, installs, integrates, and maintains a new document-scanner fleet, integrated with the DMS (Q-064), under the all-inclusive pricing. Existing scanners are not reused for the new platform.

Clarification Q-0070

Question: *How many new scanners must the contractor supply in total?*

Authority's response:

The contractor proposes the quantity and per-site distribution across all sites (HQ + 7 + up to 2; Decree 11244/2003, Art. 4), against the DMS-integration requirements (Q-064) and the document-handling needs, no fewer than the per-branch counts published with Addendum No. 2, under the all-inclusive pricing.

Clarification Q-0071

Question: *How many new scanners are required per branch?*

Authority's response:

Addressed in Q-070: the per-branch scanner distribution has been released in the equipment information published with Addendum No. 2; the contractor proposes the per-site distribution to support the workflows, no fewer than the published counts.

Clarification Q-0072

Question: *Is color scanning required or black and white only*

Authority's response:

Colour scanning is required. The scanners shall support the document-scanning needs of the workflows (application documents, identification papers, stamps, signed forms), meeting at least the functional characteristics of the Authority's current production scanners (see Q-067); resolution and form-factor specifications are proposed by the contractor against the workflow and DMS-integration requirements (Q-064 — the DMS is under deployment and not yet operational).

Clarification Q-0073

Question: *What document sizes must the scanner support A4, A3, passport, ID card?*

Authority's response:

The scanners shall support the document types handled in the workflows: standard application documents (A4); identification documents (passport and ID-1/CR80 card format); and the larger bill-of-sale deed, currently A3 — which may be captured on A4-class scanners by scanning in two passes (two halves), or on A3-capable units at the contractor's option. Exact specifications are proposed by the contractor against the workflow and DMS-integration requirements (Q-064), under the all-inclusive pricing.

Clarification Q-0074

Question: *Can the Authority provide a complete and official list of all branch locations and service centers where the system will be deployed, including for each location: the full address, number of active service counters, daily transaction volume, and whether card issuance (printing) is performed* *on-site or centrally? This information is essential to accurately size and price the hardware components including printers, workstations, scanners, biometric devices, and card readers.*

Authority's response:

(i) Branches: Dekweneh HQ + seven regional branches (Tripoli, Saida, Zahle, Jounieh, Nabatieh, Ouzai, Aley), plus up to two additional (Decree 11244/2003, Art. 4), with addresses published on the Authority's portal (tmo.gov.lb).

(ii) Per-site equipment counts and per-branch 2025 transaction volumes have been released in the statistical and equipment publication issued with Addendum No. 2; personalization is performed at each issuance site (Q-040).

Bidders propose the equipment and resource distribution across the branches under the all-inclusive pricing.

Section 6b — Infrastructure (High Availability and Disaster Recovery)

Clarification Q-0075

Question: *Is the contractor responsible for providing all infrastructure — data center facility, servers, storage, network equipment, branch hardware, and all peripherals — or will the Authority provide any part of it?*

Authority's response:

The contractor provides the full IT infrastructure for the new platform: servers, storage, databases, operating systems; network and security equipment; branch; personalization equipment; and on-premises hosting at both the main data centre and the DR site. Responsibility split: the Authority provides electricity and the primary Ogero telecommunication line it funds; the contractor provides all equipment and its installation and — per Addendum No. 3 (Article 2) — must establish, equip and secure the electronic linkage for the full contract term and provide and maintain an independent redundant link path at its full infrastructure and monthly operational cost, ensuring continuity of connectivity; All contractor responsibility is under the all-inclusive pricing; no separate infrastructure billing is permitted.

Clarification Q-0076

Question: *Is high availability required for the new system?*

Authority's response:

High availability is required: 99.9% availability with 30% headroom, across both the main data centre and the DR site. The specific HA architecture is proposed by the contractor (see Q-077–Q-084); all HA supply, configuration, operation, and maintenance are under the all-inclusive pricing.

Clarification Q-0077

Question: *Is an active-active or active-passive high availability architecture required?*

Authority's response:

The RFP does not prescribe a specific HA topology; bidders propose an architecture (active-active, active-passive, or hybrid) that meets the published targets — ≥ 99.90% monthly core-service availability (excluding approved maintenance not exceeding 4 hours/month announced at least 7 days ahead), ≥ 30% peak headroom, and failover-under-load and rollback exercised at the acceptance gates. The topology, with its load-balancing, replication, failover, and capacity evidence, is described and evaluated in the technical proposal. On-premises per the RFP.

Clarification Q-0078

Question: *Is load balancing required across multiple application servers?*

Authority's response:

The RFP does not prescribe a load-balancing mechanism; bidders propose load-balancing and traffic distribution sufficient to meet the published targets — ≥ 99.90% availability, P95 interactive response ≤ 2.0 s, sustained ≥ 200 TPS, ≥ 30% headroom, and graceful behaviour under failover and throttling at the acceptance gates. The approach is described and evaluated in the technical proposal. On-premises per the RFP.

Clarification Q-0079

Question: *Is database clustering required — primary and secondary nodes?*

Authority's response:

The RFP does not prescribe a database HA mechanism; bidders propose the clustering, replication, and node topology sufficient to meet the published targets — ≥ 99.90% availability, RPO ≤ 15 minutes, RTO ≤ 4 hours, graceful failover/failback under load at the acceptance gates, and the data-integrity thresholds. The approach is described and evaluated in the technical proposal. On-premises per the RFP.

Clarification Q-0080

Question: *Is automatic failover required or manual failover acceptable?*

Authority's response:

The RFP does not mandate a specific failover mode; bidders describe how failover and failback are managed (automatic, manual, or hybrid across layers) — detection triggers, decision authority, runbook governance, and the operations team's role — sufficient to meet ≥ 99.90% availability, RTO ≤ 4 hours, and RPO ≤ 15 minutes, exercised under load at the acceptance gates. On-premises per the RFP.

Clarification Q-0081

Question: *What is the maximum acceptable failover time between nodes?*

Authority's response:

The RFP does not stipulate a node-level failover-time figure; the binding constraints are ≥ 99.90% availability, RTO ≤ 4 hours, and RPO ≤ 15 minutes, with failover exercised under load at acceptance. Bidders propose node-level failover times consistent with these targets and demonstrate them in testing, describing detection intervals, health checks, quorum behaviour, and runbook automation. On-premises per the RFP.

Clarification Q-0082

Question: *Is high availability required at the application layer only, or also at the database and network layers?*

Authority's response:

HA requirements apply to the system as delivered: the design shall avoid single points of failure, with redundancy across the application, database, storage, network, and connectivity layers, sufficient to meet ≥ 99.90% availability, RTO ≤ 4 hours, RPO ≤ 15 minutes, ≥ 30% headroom, and graceful failover under load at acceptance. Bidders propose the specific mechanisms in the technical proposal. On-premises per the RFP.

Clarification Q-0083

Question: *Is high availability required at branch level or only at the central data center?*

Authority's response:

The RFP mandates a centralised architecture, so the multi-layer HA requirements apply principally to the central system; at branch level the RFP requires connectivity redundancy sufficient to sustain operations (dual providers/links at the central site, backup links at key large branches) plus support arrangements that keep branch counter equipment operational within the service targets. Bidders propose the branch-level resilience approach. On-premises per the RFP.

Clarification Q-0084

Question: *What is the maximum acceptable planned downtime per month for maintenance windows?*

Authority's response:

The RFP allows a maximum of 4 hours per calendar month of approved maintenance, announced at least 7 days in advance and excluded from the ≥ 99.90% availability calculation. Bidders operate within this envelope; the maintenance methodology (window scheduling, change governance, rollback, post-window verification) is described and evaluated in the technical proposal. On-premises per the RFP.

Clarification Q-0085

Question: *What type of DR site is required - hot, warm, or cold standby?*

Authority's response:

The RFP stipulates a warm-standby DR environment in a facility separate from the primary data centre, fully on-premises in Lebanon: asynchronous database replication (RPO ≤ 15 minutes), application/object-store replication (RPO ≤ 30 minutes), end-to-end RTO ≤ 4 hours with documented runbooks, semi-annual switchover drills, and no public cloud. Bidders propose the warm-standby implementation (replication, runbooks, drills, failover/failback automation) sufficient to meet these targets.

Clarification Q-0086

Question: *Is an active-active DR architecture required between primary and DR sites?*

Authority's response:

No. The RFP specifies warm-standby DR, not active-active between primary and DR: asynchronous database replication (RPO ≤ 15 minutes), application/object-store replication (RPO ≤ 30 minutes), end-to-end RTO ≤ 4 hours with documented runbooks and semi-annual drills. Bidders may propose enhancements above the warm-standby baseline where this does not change the contractual obligations and is reflected in the commercial proposal.

Clarification Q-0087

Question: *Is real-time synchronous replication required between primary and DR sites?*

Authority's response:

No. The RFP specifies asynchronous replication between primary and DR for the databases (RPO ≤ 15 minutes), with application/object-store replication on an RPO ≤ 30 minutes schedule; synchronous replication is not required. Bidders may propose synchronous replication where it does not change the published RPO/RTO obligations and is reflected in the commercial proposal.

Clarification Q-0088

Question: *Must the DR site be in a separate geographic location from the primary data center - if yes how far apart?*

Authority's response:

Yes. The DR site shall be in a separate geographic location from the primary data centre; the Authority will designate the location applying best-practice geographic separation while supporting the published RPO/RTO/availability targets, on-premises in Lebanon (public cloud is not permitted). Bidders design the DR IT solution (replication, runbooks, failover/failback automation, drills, inter-site connectivity readiness) to meet the targets; the specific location is disclosed to the awarded contractor post-signature.

Clarification Q-0089

Question: *Does the Authority own and operate the DR facility, or must the contractor identify and provision it?*

Authority's response:

The Authority designates and is responsible for the DR facility (which the RFP allows to be a government-provided secondary data centre); the contractor is not required or permitted to identify or provision the facility itself. The contractor remains responsible for the IT infrastructure inside it — racks, in-rack power/UPS, servers, storage, network/security equipment, cabling, monitoring, replication, runbooks, and failover/failback automation — to best-practice standards meeting the published targets. On-premises in Lebanon; public cloud is not permitted for DR.

Section 7 — Commercial and Financial Model (PSF/CGAM/CARC)

Clarification Q-0090

Question: *The transaction statistics provided cover only 01/01/2025 to 30/09/2025 (~9 months). Can the Authority provide a full 12-month baseline for all 10 eligible PSF transaction types to allow accurate CGAM and CARC modeling?*

Authority's response:

The supplementary transaction statistics covering a full twelve-month baseline, with per-branch breakdowns, have been published to all bidders in the statistical publication issued with Addendum No. 2.

Clarification Q-0091

Question: *The contract is denominated in USD, but payments will be settled in Lebanese Pounds (LBP) at the Banque du Liban rate on the settlement date. Given Lebanon's currency volatility, will there be any exchange rate protection mechanism, floor rate, or indexation clause to safeguard the contractor's revenues?*

Authority's response:

The Contract is denominated in USD; the Contractor's dues are settled in Lebanese Pounds at the official Banque du Liban exchange rate prevailing on the settlement date (currently 89,500 LBP/USD), in accordance with the RFP (Currency clause, Article 25). The PSF, CGAM, CARC, and Goods Basket pricing are denominated and evaluated in USD.

Clarification Q-0092

Question: *If actual annual transaction volume falls below the CGAM threshold, what is the payment mechanism and timeline for the Authority to top up the difference to the contractor? Will this be monthly, quarterly, or annually?*

Authority's response:

PSF is invoiced monthly on the actual eligible transactions completed in the month. At each contractual year-end the Authority compares annual PSF revenue against the CGAM and reconciles any shortfall on an annual basis (there is no monthly or quarterly interim top-up). Settlement of the Contractor's verified invoice follows the RFP payment terms (Article 14 / Special Conditions): payment within the stated period (sixty (60) days from a correct invoice), subject to the Authority's standard verification.

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