

Fighting the Counterfeit in Egg Market





About LIT

- Deliver authentication, verification and traceability.
- Specializing in protecting brands and supply chains
- Include cryptographically signed QR authentication, secure ID provisioning, and tamper-proof tracking
- Trusted partner in combating counterfeit safeguarding farmers, protecting products, and strengthening food security.



LIT Strategic Partners





Sample of LIT Customers Countries





Israeli Government Customers



רשות שדות התעופה בישראל
ISRAEL AIRPORTS AUTHORITY

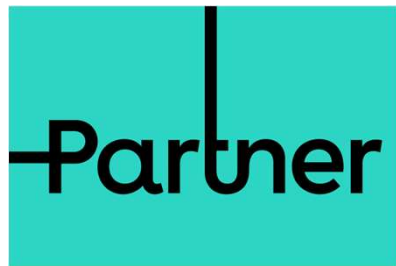


משרד הביטחון
MINISTRY OF DEFENSE





Israeli Commercial Customers



motorola





Resent Counterfeit in the Egg Market

01

Italy (2025) – Fraud of source of eggs (under Investigation)

- 3 million eggs seized in Cremona.
- Fraudulent country-of-origin labeling.

02

Spain (2024) – Relabeling Expired Eggs

- Civil Guard dismantled networks modifying expiry dates.

03

Israel (2024) - Smuggling & Fake Stamps

- 90,000 eggs seized in Beit Jala warehouse.
- Forged distributor stamps and lack of cooling.

04

UK (2025) – Expiry Date Tampering

- Several packers prosecuted for changing 'best before' dates.



What are the major risks?

Food Safety Risks Expired or re-stamped eggs:

- Tamper “best before” dates, leading to consuming bad eggs.
- Eggs are stored without cooling, increasing risk of salmonella.
- Make it impossible to trace disease outbreaks back to farms quickly.

Economic & Brand Risks

- Damage brands’ credibility.
- Undercut legitimate producers on price.
- Risk lawsuits and recalls.

Regulatory & Legal Risks

- Eggs smuggled across borders.



LIT Solutions



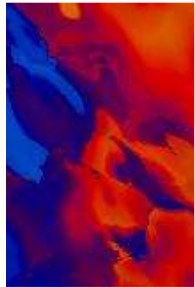
Authentication & Security:

- Seals that break when packages are opened
- Tamper evident sealing labels



Egg-shell :

- Marker / Taggant
- UV / IR inks
- Secure QR codes



Time-temperature indicators

- Temperature labels to indicate cold-chain tracking.



Consumer Engagement

- Smartphone application to verify authenticity and freshness.



Analytics:

- Analytics to flag and map counterfeit activities
- Alert when product codes appear outside expected distribution zones.



Why LIT

Capability	LIT Solutions	Typical/Other Solutions
Authentication & Security	Tamper-evident seals, multi-layer shell coding (UV/IR, taggant, QR).	Basic ink stamps on shells; easy to duplicate.
Egg-Shell Coding	Unique cryptographic QR codes per egg, verified online.	Lot codes printed at carton level only.
Time-Temperature Indicators	Smart labels for cold-chain tracking.	None, or basic temperature control.
Consumer Engagement	Mobile verification app shows authenticity, freshness, farm info.	Consumers rely only on packaging labels.
Analytics & Intelligence	AI anomaly detection, heatmaps, alerts for smuggling/expiry fraud.	Manual audits, limited visibility of fraud trends.
Supply Chain Visibility	Geo-fencing and live monitoring	No traceability



LIT Proposed Architecture (High Level)

- Seals/Labels
- UV/IR inks
- Taggant
- QR codes
- Smartphone application
- Reporting and analytics



Proposed approach

- ❖ Phase 1 (0–30d):

Requirements, threat model, SKUs, label specs; app policies; stakeholder alignment.

- ❖ Phase 2 (31–60d):

Print secure labels; onboard dealers; train inspectors; soft launch in 2 regions.

- ❖ Phase 3 (61–90d):

Expand to all units; measure scans, seizure assists, and complaint rate drop; refine.



Next Steps

- Identify target regions for the pilot.
- Share sample SKUs/packaging to propose label + app New Design.
- Invite and confirm partners and inspectors for join .
- Budgetary quotation after scoping (labels + software + onboarding/training).





Thank You



More LIT solutions

- Secure stamps with smart QR codes to ensure tax compliance and product authenticity.

LIT Tax Stamp Solution



Invisible markers enable quick detection to prevent fuel theft, dilution, and smuggling.

LIT Fuel Marking System



Smartphone-verifiable security features help brands combat counterfeits, IP theft, and gray market diversion.

LIT Product and Brand Protection



Advanced printing and covert features protect IDs, permits, and licenses from tampering and forgery.

LIT Document Protection Solution



- Ensures safe, compliant medical supply chains by preventing counterfeits and tracking products with verified serial numbers.

LIT Serial-Safe Track and Trace Solution



Tamper-evident, trackable labels ensure supply chain integrity and real-time product authentication

LIT Security Labels





More LIT solutions – cont.

GPS-enabled, explosion-proof locks for tankers ensure secure, trackable fuel delivery with real-time access and tamper logs.

LIT e-Lock System for Fuel & Liquid Transport



- Trackable prescriptions with layered security to stop fraud and support regulatory compliance.

LIT Secure Medical Prescriptions



- Mobile-verified e-seals ensure real-time tracking and tamper detection during transit.

LIT Cargo Monitoring Solution



- Secure tracking for fertilizers, pesticides, and seeds to prevent counterfeiting and protect supply chains.

LIT AgriSafe Track and Trace Solution



- Digitally signs eggs for traceability, authenticity, and tax compliance.

LIT EggSign Solution



- Encrypted QR codes and serials protect promotional vouchers from fraud and duplication.

LIT Secure Voucher Solutions

