# DORA Data Resilience Evidence Pack

Operational resilience evidence per EU 2022/2554 (DORA). ICT risk management, data integrity, incident reporting, third-party oversight.

Report ID: FO-DORA-20260218T201630 | Generated: 2026-02-18 20:16 UTC | Signer: 0x90d8b4ED...a69b3e

| | | | |
|---|---|---|---|
| **5/5** | **43+** | **73/149** | **1** |
| Services | API Endpoints | Reports Anchored | Signing Keys |
| **90/100** | **10%** | **XRPL** | **ACTIVE** |
| Health Index | Recession Risk | Anchor Chain | Anchoring |

## DORA Article Mapping

Evidence mapped to EU 2022/2554 (Digital Operational Resilience Act) requirements. Status reflects current operational state, not regulatory certification.

| DORA Article | Requirement | Evidence | Status |
|---|---|---|---|
| Art. 6–14 | ICT Risk Management | 5/5 services monitored; systemd watchdog; Uptime Kuma health checks; failover RPC endpoints | OPERATIONAL |
| Art. 15–20 | Incident Reporting | Standardized error codes (400/429/503); structured JSON responses; Structured logging (nginx); (14062+ entries) | OPERATIONAL |
| Art. 21–25 | Resilience Testing | 73 reports generated and verified; ECDSA signature validation; SHA-256 hash chain; XRPL blockchain anchoring with independent verification | OPERATIONAL |
| Art. 26–27 | ICT Third-party Risk | 4 external data sources (FRED, DeFiLlama, DexScreener, Etherscan); freshness tracking per source; circuit breaker on timeout; no single-source dependency for scoring | MONITORED |
| Art. 28–44 | Oversight Framework | Cryptographic audit trail (ECDSA secp256k1); public JWKS endpoint for key verification; XRPL immutable anchoring; all evidence independently reproducible | OPERATIONAL |

## Service Inventory

| Service | Port | Status | Running Since |
|---|---|---|---|
| feed-api | 5080 | ACTIVE | Sun 2026-02-15 12:4 |
| macro-oracle | 5100 | ACTIVE | Sat 2026-02-14 11:0 |
| rwa-risk-oracle | 5210 | ACTIVE | Mon 2026-02-16 20:5 |
| verified-reports | 5300 | ACTIVE | Wed 2026-02-18 21:1 |
| payment-api | 5090 | ACTIVE | Wed 2026-02-18 12:5 |

## Cryptographic Controls

| Control | Implementation | Status |
|---|---|---|
| Data Signing | ECDSA secp256k1 (ES256K) | ACTIVE |
| Hash Algorithm | SHA-256 (content + PDF) | ACTIVE |
| Key Discovery | JWKS at /.well-known/jwks.json | ACTIVE |

| Control | Implementation | Status |
|---|---|---|
| Blockchain Anchor | XRPL Ledger (memo field) | ACTIVE |
| Polygon (Planned) | Smart contracts deployed; RPC reconnection pending | PLANNED |
| Signer Address | 0x90d8b4ED32FD4883... | ACTIVE |

## Third-Party Data Dependencies

Per DORA Art. 28–44: all external ICT service providers must be documented. Freshness reflects last successful data retrieval at report generation time.

| Provider | Data Type | Series | Failover | Freshness |
|---|---|---|---|---|
| Federal Reserve (FRED) | Macro-economic | 86 series | Cached fallback | Fresh |
| DeFiLlama | DeFi TVL/Yield | 61 protocols | Cached fallback | LIVE |
| DexScreener | DEX Liquidity | Token pairs | Graceful degrade | Delayed |
| Etherscan | Contract Verification | On-chain data | Graceful degrade | Delayed |

## Known Limitations & Gaps

• **Blockchain anchoring:** XRPL serves as the active immutability layer for all reports. Polygon smart contracts are deployed but RPC reconnection is pending.

• **Formal SLAs:** Third-party data sources (FRED, DeFiLlama) are public APIs without contractual SLAs. Mitigation: cached fallback and multi-source redundancy.

• **Penetration testing:** No formal pentest report available. Planned for Q2 2026.

This evidence pack documents operational controls, not regulatory compliance status. Final DORA compliance determination requires assessment by a qualified auditor.

## Provenance Block

| Field | Value |
|---|---|
| report_id | FO-DORA-20260218T201630 |
| generated_at | 2026-02-18T20:16:30.345917+00:00Z |
| content_hash | 3a7d4ebf43a64e5f89044278f012f3d14ffc7a8925394d69656afc0f0a3e093a |
| signature | 0x9504d882c50d871ca20ffdb3fd8bd98facee705e... |
| key_id | feedoracle-prod-2026 |
| jwks_url | https://feedoracle.io/.well-known/jwks.json |
| verify_url | https://feedoracle.io/reports/api/report/FO-DORA-20260218T201630/verify |
| anchor_chain | xrpl |
| anchor_tx | DB2F35F4799691979F0FC77A1F130AE0DFB5118DD1605C4B2EDFC51007BF0DC3 |
| ttl_seconds | 86400 |

Explorer: https://xrpscan.com/tx/DB2F35F4799691979F0FC77A1F130AE0DFB5118DD1605C4B2EDFC51007BF0DC3