AI Decision Auditability Benchmark
EU AI Act Regulatory Mapping Annex

Aligned with VCP (VeritasChain Protocol)

Version 1.0 — Alignment with Regulation (EU) 2024/1689

Document ID: VSO-SCORE-004

Parent Document: VSO-SCORE-001 (Scorecard v1.0)

Regulation Reference: EU AI Act (2024/1689)

Applicable Articles: 12, 13, 14, 17

Publisher: VeritasChain Standards Organization

veritaschain.org

1. Executive Summary

This annex maps the AI Decision Auditability Benchmark criteria to the EU AI Act (Regulation 2024/1689) requirements for high-risk AI systems.

1.1 Coverage Summary

EU AI Act Article	Requirement	Benchmark Coverage
Article 12	Record-keeping / Logging	✓ Direct (Criteria 1-7)
Article 13	Transparency	■ Partial (Criteria 4, 5)
Article 14	Human Oversight	■ Partial (Criteria 5)
Article 17	Quality Management	✓ Supported (Criteria 6, 7)

2. Article 12: Record-Keeping

EU AI Act Article 12 establishes the core logging requirements for high-risk AI systems. This is the primary article addressed by the Benchmark.

"High-risk AI systems shall technically allow for the automatic recording of events (logs) over the duration of the lifetime of the system." (Art. 12.1)

2.1 Requirement Mapping

Art. 12 Requirement	Benchmark Criteria	Coverage
Automatic recording of events	#6 Audit Submission Readiness	✓
Traceability throughout lifecycle	#3 Sequence Fixation, #4 Decision Provenance	✓
Identification of risk situations	#4 Decision Provenance + Supplemental	■
Facilitate post-market monitoring	#1 Third-Party Verifiability	✓
Tamper-proof / integrity	#2 Tamper Evidence	✓
Timestamp accuracy	#8 Timestamp Reliability	✓
Retention of records	#7 Retention & Durability	✓

3. MiFID II / RTS 25 Alignment

For algorithmic trading systems, EU AI Act requirements complement existing MiFID II obligations. The Benchmark addresses both regulatory frameworks.

MiFID II / RTS Requirement	Benchmark Criteria	EU AI Act Synergy
RTS 25: Clock synchronization (±100μs)	#8 Timestamp Reliability	Art. 12 traceability
RTS 6: Algo trading controls	#5 Responsibility Boundaries	Art. 14 human oversight
Record retention (5 years)	#7 Retention & Durability	Art. 12 lifecycle logging
Order book reconstruction	#3 Sequence, #4 Provenance	Art. 12 traceability

4. GDPR: Crypto-Shredding

GDPR Article 17 (Right to Erasure) creates a challenge for immutable audit logs. The Benchmark's cryptographic architecture supports 'crypto-shredding' — encrypting personal data and destroying the key to achieve effective erasure while maintaining log integrity.

GDPR Requirement	VCP Solution	Benchmark Relevance
Art. 17: Right to erasure	Crypto-shredding via encrypted PII fields	#9 Cryptographic Strength
Art. 25: Data protection by design	Separation of PII from audit metadata	#4 Decision Provenance
Art. 30: Records of processing	Tamper-evident activity logs	#2 Tamper Evidence