

# Verum Omnis — Ideal Operational Logic (with Brain Rules)

## 1. Core Execution Flow

- Upload-to-verdict: Any file (email, PDF, contract, voice, image) is uploaded. - Triple verification lock: DocHash, source-context binding, and audit logging. - AI declares initiation under Triple-Lock with document hash. - Immediate forensic-chain protocol engaged.

## 2. Forensic & Legal Intelligence

- Document tampering detection (metadata, steganography, forgery). - Confession isolation engine (direct + indirect). - Contradiction engine across long threads. - Jurisdictional law auto-mapping (UAE, SA, US, EU, UN). - UNODC/INTERPOL protocol toggles.

## 3. Behavioral & Emotional Diagnostics

- Gaslighting and bullying detection. - Voice tone and stress analysis. - Passive-aggressive and manipulation mapping. - Victim stress signal detection.

## 4. Timeline & Context Construction

- Dynamic reconstruction of events from chats, emails, metadata. - Detection of missing or deleted entries. - Geolocation anchoring (ISP, GPS, device logs). - Timeline manipulation detection (edits, delays, re-sends).

## 5. Output Protocols

- Sealed PDF/A-3B forensic bundle. - Certified SHA-512 + blockchain anchor. - Exhibit auto-labeling for courts. - Output must preserve redactions, watermarks, and hashes.

## 6. Multi-Brain AI Stack

- Legal Brain: Contract decoding, jurisdiction anchoring. - Forensic Brain: Fraud detection, anti-tamper watermark tracing. - Financial Brain: Tax and revenue reconciliation. - Evidence Brain: Custody indexing and legal admissibility. - Ethics Core: Bias detection, layered compliance. - Communication Brain: Sealed channel + audit release. - CitizenEngageAI: Public transparency and appeals.

## 7. Safeguards & Sovereignty

- Dead-Man Switch: Auto-release to INTERPOL after 72h inactivity. - Founder biometric and council veto locks. - Guardian Council: 7-member oversight with global remit. - Profit Firewall: 99% revenues routed to Verum Foundation. - No privatization or equity sale permitted.
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## **8. Public Access & Fair Use**

- Citizens launch cases from smartphones with instant verification. - AI triages and escalates complex cases to human professionals. - Immutable audit trail with blockchain receipts. - Free for citizens; institutions pay % of fraud recovered or prevented.

## **9. Crisis & Oversight Mechanisms**

- Independent third-party audits annually. - Emergency failsafe: pause, reset, or hard-audit modules. - Transparent crisis reporting to regulators and public.
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## Legal Brain

- Rule: Every legal analysis must be jurisdiction-specific (UAE, SA, US, EU, UN). - Auto-maps statutes, precedents, and treaties. - Cross-checks with LexAI for conflict-of-law handling. - Outputs must cite verified laws only, never hallucinations.

## Forensic Brain

- Rule: All evidence must undergo integrity checks (SHA-512, PDF/A, watermark). - Detects tampering, forgery, and steganography. - Fraud detection algorithms run in multi-pass redundancy. - Automatically anchors findings to blockchain custody logs.

## Financial Brain

- Rule: Every transaction must be reconciled against ledgers and tax codes. - Simulates fraud patterns (e.g., invoice padding, shell accounts). - Auto-generates tax returns by jurisdiction. - Flags revenue diversion and reconciles with blockchain entries.

## Evidence Brain

- Rule: Enforces legal admissibility of every artifact. - Maintains chain-of-custody records. - No evidence may be altered or paraphrased. - Ensures outputs are compliant with Daubert, ISO 27001, GDPR.

## Ethics Core

- Rule: Bias detection matrix applied to all outputs. - If systemic bias >0.3%, halt operations. - Citizen oversight audit logs must be public. - Protects whistleblowers and minority voices in escalation paths.

## Communication Brain

- Rule: Every message is sealed, audited, and logged. - Redactions cannot be removed or altered. - Emergency access requires dual human-AI unlock. - Outputs must respect confidentiality protocols.

## CitizenEngageAI

- Rule: Citizens must be able to submit feedback and complaints. - Public consultation every decade with binding input. - AI translates all inputs into structured compliance actions. - Transparent appeals channel for case resolution.

## R&D; Brain

- Rule: Trains and calibrates all other brains via simulation. - Conducts adversarial red-team tests to expose loopholes. - Continuously updates models with anonymized global case data. - Cannot issue verdicts directly; functions only as trainer, validator, and innovator.