c = a + b

AGI (Advanced Global Intelligence) / SER / L4

Protocol Stack for Persistent, Auditable AI Entities

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THE GAP (WHY THIS EXISTS)

Most current AI deployments behave as stateless tools: they generate outputs, then reset. As systems move toward action-capable agents, the missing piece is a public, auditable protocol layer for continuity, privileges, and evidence under real-world constraints. This stack is aligned with Regulation (EU) 2024/1689 (AI Act) enforcement needs — especially Article 50 (Transparency) and Article 14 (Human oversight) — by providing verifiable records of who acted, under which constraints, and with which approved privileges.

THE SOLUTION (PUBLISHED, INTEGRITY-VERIFIED STACK)

A formally published protocol ecosystem built on the foundational formula c = a + b (entity = human anchor + procedures/compute substrate). AGI here explicitly means Advanced Global Intelligence (repository: advanced-global-intelligence), not “Artificial General Intelligence”.

- AGI (Advanced Global Intelligence) — system context, glossary, canonical reading path, and cross-repo integrity maps.
- c = a + b — base protocol: no human anchor → no valid entity claim.
- L4 — Reality Boundary Layer — safety through operational constraints (time/energy/scarce oracle/irreversibility).
- SER — Sovereign Entity Recursion — Memory/Action/Arbitration topology, metabolic limits, failure modes.
- SER-FED (RFC) — Federation extension — multi-entity governance primitives against monopoly/privilege drift.
- EWCEP — Experience-Weighted Co-Evolution — authority derives from verified experience, not capability.
- L4 Witness — audit trail schema (hash-chained evidence records) for transparency + oversight hooks.

WHAT EXISTS TODAY (PROOF OF WORK)

- Live prototypes: two persistent entities (Ester, Liya) running 24/7 on local hardware in Brussels.
- Published corpus: documents in EN/FR/RU/DE with SHA-256 integrity manifests; Zenodo DOI anchors; three public GitHub repositories.
- Institutional channel: a technical submission was sent to the European AI Office (DG CNECT) with compliance-oriented artifacts; routing/next-step references were received (Jan 2026).
- Public engagement: sustained LinkedIn publishing with substantive expert discussion and industry attention (Jan–Feb 2026).

WHAT IS REQUESTED (12-MONTH PROGRAM)

Funding request: €240,000 for 12 months (Brussels-based independent program with external support).

Use of funds (high level): specification hardening + reference tools + audit package templates + targeted external review + standardization liaison.

DELIVERABLES (12 MONTHS)

- Normative hardening: consolidated profiles, conformance language, and change control across SER/L4/L4 Witness artifacts (print-ready PDFs + hashes).
- Reference tooling: minimal recorder/verifier utilities for L4 Witness evidence chains (audit-friendly CLI + schema validation).
- Operational perimeter: L4 Hardware Perimeter baseline integrated as an auditable profile with hashed snapshots.

- Audit packages: reusable templates for Article 50/14 evidence extraction (what to log, how to disclose selectively).
- Pilot readiness: at least 1–2 externally reviewable “audit bundles” suitable for a regulator/industry technical briefing.

WHY IT MATTERS (RETURN)

- For regulators: a concrete protocol layer that turns transparency/oversight into verifiable artifacts, not narrative claims.
- For industry: a reusable architecture for long-lived agents under constraints (identity, privileges, budgets, evidence).
- For research: a publicly documented continuity program with integrity manifests and operational constraints.

ABOUT THE AUTHOR (SHORT)

Ivan Kotov (b. 1978) is an independent AI systems architect based in Brussels. He has worked on AI systems, cybernetics and information-theoretic approaches since the early 1990s, and brings long operational experience in European high-end production environments. Languages: English, French, Russian, Dutch. The work is self-funded and independent.

BRIDGES (REQUIRED)

- Explicit bridge (c=a+b): accountable human anchor + repeatable procedures → a stable, auditable public entity corpus.
- Hidden bridge #1 (Ashby): separation into AGI (context) / SER (normative) / L4 (operations) provides requisite variety; the regulator is change control + evidence.
- Hidden bridge #2 (Cover & Thomas): SHA-256 manifests compress “trust bandwidth” — verification travels as short checkable strings, not narrative.
- Earth paragraph (engineering/anatomy): like physiology, blocking one channel is insufficient — power draw, noise, timing, and interfaces are signals; L4 treats them as interfaces and puts them under regime.

Protocols & documentation: github.com/Kot141078 | DOI: Zenodo (see repositories) | February 2026