

The AEGIS Architecture Brief

A technical overview of the AI Engineering Control Plane — governance, orchestration, evidence generation, software factory, and physical integration for enterprises entering the AI software era.

Document

Architecture Brief · v0.5.0

Audience

CTO / CIO / Architecture

Classification

Public

Date

August 2026

AI adoption without a control plane is unmanaged risk.

Organizations are deploying AI agents faster than they can govern them. Every untracked model call, ungoverned automation, and unaudited decision compounds regulatory exposure under the EU AI Act and emerging national frameworks.

AEGIS answers a simple architectural question: **who controls the AI layer?** Not the models — they change quarterly. The control plane: a permanent governance, evidence, and orchestration layer that sits above your models, tools, and infrastructure.

Five functions. One layer.



AEGIS does not replace your AI tools. It makes them governable, observable, and provably compliant.

What changes with a control plane

Dimension	Without AEGIS	With AEGIS
AI actions	Scattered logs, no audit trail	Signed evidence per action (FIPR)
Compliance	Manual documentation after the fact	Evidence generated at runtime
Software delivery	Ad-hoc agent usage, unmanaged	Governed multi-agent factory pipeline
Infrastructure	Vendor-bound cloud only	Sovereign deployment of choice
Oversight	None between releases	Continuous runtime monitoring

Built as a system, not a feature set.

MMIMM — Orchestration Core

Multi-model intelligent mesh manager. Routes work across LLM providers and internal agents with policy enforcement at every hop. Vendor-independent by design: OpenAI, Anthropic, Google, Mistral, Ollama, or any compatible endpoint.

FIPR — Evidence Fabric

First-In-Proof Registry. Cryptographically signed records of every significant AI action: inputs, outputs, approvals, versions. The audit-ready substrate for regulators and customers.

H13R — Governance Kernel

Human-in-command ruleset engine. Risk-tiered decision gates, role-based authority, escalation paths, and emergency stop semantics for autonomous processes.

QA-DC — Quality Gate

Dual-channel quality assurance: automated verification pipelines plus independent testing lanes. Nothing ships without passing defined evidence checkpoints.

Extended capability modules

The core plane extends through deployable modules sharing the same governance and evidence fabric:

EDGE — field & IoT integration

SKAP — physical systems bridge (PLC/SCADA)

VELA — sovereign infrastructure

DIO — document intelligence

Software Factory pipeline

Call-center & voice

Finance & accounting

CRM360

Analytics warehouse

Your jurisdiction. Your hardware. Your terms.

AEGIS deploys where your constraints demand — public cloud, your private cloud, fully on-premise, air-gapped installations, or industrial edge nodes controlling physical equipment.

Cloud

Managed deployment in your tenant. Fastest path to production with full control-plane features.

On-premise

All components inside your network. No data leaves your infrastructure. Your keys, your logs.

Air-gapped / Edge

Offline operation with local model runtimes. Industrial protocols native: Modbus, OPC-UA, Profinet.

Measurable outcomes we commit to instrumenting

Metric	Instrumented via
Time-to-evidence for audits	FIPR query interface — minutes, not weeks
Governed AI action coverage	H13R gate telemetry — % of actions under policy
Delivery throughput	Software factory pipeline metrics per stage
Incident traceability	QA-DC dual-lane verification records

Start with an architecture assessment.

Every engagement begins the same way: we map your AI landscape, identify governance gaps, and produce a deployment plan with clear milestones and evidence checkpoints. Two to four weeks, fixed scope, executive-readable output.

Founding Program

A limited cohort of enterprises co-shaping the AEGIS roadmap: priority architecture assessment, direct roadmap influence, founding-partner terms for the first deployment, and named reference status (optional).

Cohort size is intentionally small. Requests are reviewed by our architecture team within two business days.

Request an assessment

Submit the form at amezay.com/#risk-assessment or reach us directly:

EMAIL

gov@amezay.com
aegis@amezay.com

CORPORATE

+90 356 252 1668

WHATSAPP

+90 551 379 9200

ADDRESS

Tokat Üniversitesi
Teknopark, Türkiye