

ACTLAS – Regulatory Intelligence & Continuous AI Compliance

1. BASIC PROJECT INFORMATION

Official Project Title	ACTLAS – Regulatory Intelligence & Continuous AI Compliance
Acronym / Short Name	ACTLAS
Programme / Funding Source	Adopt Intelligence – internal R&D and product development (no external grant source specified)
Duration	September 2025 – ongoing
Coordinator	Adopt Intelligence, Skopje – Founder and Technical Lead: Assistant Professor Dr Miodrag Cekikj
Partner Institutions	Adopt Intelligence; the project is developed as an in-house R&D/product initiative without a formally specified project consortium

2. PARTICIPATION OF UNIVERSITY SKOPJE ACADEMIC STAFF

Name and Surname: Assistant Professor Dr Miodrag Cekikj

Academic Title: Assistant Professor

Role / Function in the Project: Founder, Lead AI/Knowledge Graph Architect and Principal R&D Lead

Specific Contribution to the Project

Conceptualisation and technical leadership of the platform, including modelling regulations as typed knowledge graphs, development of an ontology for actors, obligations and regulatory relationships, GraphRAG and semantic retrieval mechanisms, agentic reasoning, and tracing of sources and reasoning paths. In addition, development of a continuous assurance approach by linking regulatory requirements with AI system specifications and runtime evidence. A key design principle is that the platform does not automatically declare “compliance”, but provides explainable, verifiable and evidence-backed findings on applicable obligations, risks and missing evidence.

3. CONTENT AND ACHIEVED RESULTS

Brief Project Description

ACTLAS is an AI-supported platform for regulatory intelligence and continuous AI compliance that transforms complex regulatory frameworks, such as the EU AI Act and GDPR, into structured and typed knowledge graphs over which AI agents can search and reason. The system combines knowledge graphs, GraphRAG, semantic retrieval and agentic reasoning to classify AI systems, identify applicable obligations, trace relationships between articles, annexes, definitions and technical facts, and generate answers with a clear evidence trail. The platform is designed around explainability, provenance and continuous assurance: the regulatory layer is connected to the specifications of a specific system and to operational/runtime evidence, enabling continuous monitoring instead of a one-time compliance assessment.

Key Results / Outputs

Functional regulatory-intelligence platform; typed knowledge graph for regulatory sources; ontological modelling of actors, obligations and relationships; GraphRAG and semantic retrieval pipeline; agentic Q&A with traceable reasoning; classification of AI systems and mapping of applicable obligations; runtime

evidence/continuous assurance layer; architecture suitable for on-premises and controlled governance environments.

Publications / DOI / Other Relevant Scientific Results

ACTLAS – Regulatory Intelligence & Continuous AI Compliance, software platform / R&D product.

<https://actlas.adoptintelligence.com/>

4. SIGNIFICANCE FOR THE FACULTY

Benefits for Students, Teaching and/or Research

ACTLAS provides a contemporary practical basis for teaching and research in knowledge graphs, ontologies, RAG/GraphRAG, AI agents, explainable AI and AI governance. The architecture can be used as a case study of how legal and regulatory texts are transformed into machine-processable structures and how AI systems can reason with verifiable sources. The project opens topics for student and scientific research in semantic technologies, regulatory AI, provenance, continuous assurance and trustworthy AI systems, as well as potential for interdisciplinary cooperation with legal and business fields.

5. LINKS AND MULTIMEDIA MATERIALS

Official Website / Project Link: <https://actlas.adoptintelligence.com/>