

# AI Governance: Achieving EU AI Act Compliance in the Dynamo Project

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**Abstract:** The European Union (EU) Artificial Intelligence (AI) Act introduces stringent requirements for AI systems, posing challenges for organisations seeking compliance. This study explores whether the AI Governance and Assurance (AIGA) framework can provide a structured approach to aligning the DYNAMO platform with these regulations. The Horizon DYNAMO project, funded by the EU, aims to improve cyber resilience by collecting the organisation's skills data and creating custom and modified training programs. The DYNAMO project integrates AI solutions for threat intelligence and other purposes. The hypothesis is that the AIGA framework offers a robust governance structure that ensures compliance, supports ethical decision-making, and enhances transparency throughout the AI lifecycle. Using desk research, published literature by AIGA's research team and EU AI Acts regulatory guidelines were analysed to evaluate the AIGA framework. This study focuses on applying AIGA to the governance phase, specifically addressing workflows and structures that embed compliance checkpoints and risk management mechanisms. This approach directly tackles key aspects of the EU AI Act, including risk-based system classification, transparency obligations, and continuous monitoring. Findings indicate that during the AIGA framework development, AIGA's researchers paid particular attention to the emerging EU AI legislation, which caused it to align well with the regulatory requirements of the EU AI Act. To manage AI development and ensure compliance, the AIGA model offers root-level actions and a practical governance checklist. Implementing these governance tasks in a dynamic platform like DYNAMO requires further refinement and adaptation to each critical sector's specific environmental and stakeholder requirements to produce practical applicability. In conclusion, this study demonstrates that the AIGA framework can provide a strong foundation for regulatory compliance under the EU AI Act. By addressing governance challenges, this approach enables organisations to meet regulatory demands while maintaining ethical AI development and operational excellence and contributing to a future where AI is both innovative and responsible. Future work includes testing these implementations in real-world scenarios to confirm their effectiveness.

**Keywords:** AI governance, Horizon DYNAMO project, AIGA framework, EU AI Act, Compliance

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## 1. Introduction

This study provides practical knowledge on achieving European Union (EU) Artificial Intelligence (AI) Act compliance in a project. It is scalable to other projects as it builds upon existing research and integrates the established foundation into new initiatives. Additionally, it offers insights into whether the framework can provide the necessary solutions. This study can assist those struggling with achieving compliance by providing practical guidelines. The EU AI Act introduces new requirements for AI-based systems (European Commission, 2024). Failing to comply with these requirements can lead to negative consequences and may impact project timelines. Also, when creating new AI-based products it is beneficial to have a governance model in place to overcome possible problems. Governance also enables monitoring objectives to ensure the AI product does not become illegal or cause other negative impacts (Papagiannidis et al., 2023).

The Dynamic Resilience Assessment Method including combined Business Continuity Management and Cyber Threat Intelligence solution for Critical Sectors (DYNAMO) project, funded by the European Union's Horizon program, aims to enhance the resilience of critical sectors such as healthcare, energy production, and marine transport by providing AI-based solutions in Cyber Threat Intelligence and Business Continuity Management. It focuses on improving situational awareness and supporting decision-making across all stages of the resilience cycle (DYNAMO project, 2024).

This study's research question is: Can the AIGA framework effectively guide compliance with the EU AI Act while fostering ethical AI practices?

The primary purpose of this work-in-progress paper is to propose a governance model to address the requirements of the EU AI Act within the DYNAMO project. Following the introduction, section 2 examines the requirements of the EU AI Act from a legislative perspective and how they may potentially translate into requirements for the DYNAMO project. Section 3 discusses the benefits of using a governance model to ensure

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compliance and ethical operations. Section 4 explains how the AIGA model helps achieve these goals, and section 5, concludes the paper and provides recommendations for future actions.

## **2. Legal Implications of the EU AI Act**

The EU Artificial Intelligence Act is a European regulation aimed at ensuring the safe use of AI. It is the first-ever legal framework of this scale and is designed to clearly state the requirements and obligations for the safe use and implementation of AI. The legislation will be valid within the EU but will inevitably have global implications, as the EU is one of the major markets in the global economy. Global companies need to ensure their products comply with European legislation if they wish to do business in the EU. The primary purpose of the EU AI Act is to guarantee Europeans that AI technologies will respect their fundamental rights and that it is developed and implemented safely (European Commission, 2024). The EU Artificial Intelligence Act defines four levels of risk for AI systems. These categories are designed to help companies understand the obligations they must meet before launching AI technologies on the market:

**Minimal or no risk.** Most AI technologies currently used in the EU fall under this category. An example is email spam filters. There are no obligations for these applications, and they can be freely used under the EU AI Act.

**Limited risk.** This category addresses issues such as lack of transparency when using AI. Users must be informed if they are interacting with AI services, such as chatbots. A significant amount of content is created using AI, and it must now be clearly labelled as AI-generated content under the EU AI Act.

**High risk.** AI systems used in situations that pose safety risks to people fall under this category. These include AI systems in industries like public transport, healthcare, and education. Automated management of job applications and asylum applications also falls into this category. The EU AI Act imposes stricter scrutiny on these applications, requiring them to be well-secured, maintained, and disclosed to the end user.

**Unacceptable risk.** AI applications in this category are outright banned under the EU AI Act. Examples include social scoring systems, biometric categorisation, emotion recognition, and predictive policing. These applications are prohibited due to their potential to violate fundamental rights.

As the Horizon-DYNAMO project plans to use AI in critical sectors like energy, healthcare, and transport, it falls under the high-risk category of the EU AI Act. This designation imposes significant implications and obligations on the DYNAMO project. Transparency, data handling, security, maintenance, and continuous monitoring must all meet the highest standards to ensure compliance with the EU AI Act. However, achieving these obligations will make the DYNAMO project more respected and provide substantial benefits to its stakeholders (DYNAMO project, 2024; European Commission, 2024).

## **3. The use of the Governance Model**

A governance model provides a structured framework to oversee the lifecycle of AI systems, ensuring they are developed, deployed, and monitored responsibly. It incorporates processes, policies, and accountability mechanisms that align with organisational, ethical, and operational goals. Using a governance model, projects like DYNAMO can systematically address potential risks, foster transparency, and maintain stakeholder trust. Benefits include:

**Integrating governance systems:** Corporate governance integrates AI oversight into broader organisational practices, ensuring balance in stakeholder relationships, compliance with legal standards, and adherence to ethical and societal expectations. It provides the foundation for organisations to regulate management practices while addressing environmental and social responsibilities. (Mäntymäki et al., 2022). By integrating AI governance within this broader framework, DYNAMO can ensure its AI systems align with internal management goals and external societal expectations.

**Balancing value and risk optimisation:** AI governance is fundamentally about creating optimal value from AI by maintaining a balance between realising benefits, optimising risk levels, and ensuring efficient resource use. The primary goal is to enable effective risk management, value delivery, strategic alignment, and performance monitoring to create value for all stakeholders. (Birkstedt et al., 2023). By incorporating these principles, DYNAMO ensures that its AI systems are innovative and responsibly managed to maximise stakeholder trust and organisational impact.

**Trust and responsibility:** Acknowledging human involvement in AI development and deployment, AI governance emphasises the roles of stakeholders such as AI developers and designers. Effective governance ensures that

oversight roles guide these operational AI practitioners to adhere to ethical standards and regulatory requirements. (Batool et al., 2023). By addressing the question “Who is governing whom?”, DYNAMO establishes mechanisms to ensure that AI systems are ethically designed and responsibly deployed, fostering trust among stakeholders, and reinforcing accountability.

By leveraging this integration, DYNAMO can align AI governance with overarching organisational strategies, ensuring systems meet operational, ethical, and strategic expectations. Governance provides a clear framework for mitigating risks, fostering trust, and ensuring adaptability to changing requirements.

#### **4. AIGA**

The initial thought was to build a governance structure easily adaptable by DYNAMO to ensure compliance with regulatory requirements. However, after extensive research on potential competition, we encountered the AIGA AI Governance Framework, which turned our attention to researching their framework and adapting it to DYNAMO's use cases. Artificial Intelligence Governance and Auditing (AIGA) is an AI governance framework that guides organisations in implementing responsible AI practices. The project was funded by Business Finland, the project began in 2020 and concluded in 2022. (University of Turku, 2025a, 2025b)

The AIGA framework tasks are divided into eight categories: A. AI System, B. Algorithms, C. Data operations, D. Risk and impacts, E. Transparency, explainability, contestability (TEC), F. Accountability and ownership, G. Development and operations, H. Compliance (University of Turku, 2025c).

The first category, AI Systems, focuses on defining the use case of AI and its role while tracking, documenting, validating, and monitoring the AI systems. Category B focuses on proper algorithm repository management. Achieved by defining their use cases and assigning roles to take responsibility in the design, maintenance, and performance monitoring phases. Documenting, managing, and ensuring data consistency reduces risks of AI bias and promotes transparency for data usage, which is why it's such an important step into becoming compliant with regulatory requirements. Category D, risk and impacts cover important tasks such as evaluating potential harms and impacts before deployment. Tasks under Transparency, Explainability, and Contestability ensure safe usage by users with instructions and user-friendly explanations while also increasing trust with relevant stakeholders and their expectations.

The Accountability and Ownership category is designed to define and assign roles, such as Head of AI and AI System owner, which establish accountability and responsibility for liabilities, failures, and successes. The final categories, development, operations, and compliance, consider regulatory requirements by mapping the environment and understanding possible regulatory changes during the AI systems lifecycle. As AI systems advance, laws and regulations follow behind, which requires constant adaptability to ensure safe and ethical AI usage. (University of Turku, 2025a)

#### **5. Conclusions**

In search of a solution for EU AI Act Compliance for the DYNAMO Project, we chose to see if the AIGA Framework could work as the solution. After our desk research, the main finding was that the AIGA Framework includes a List of AI Governance Tasks. We found that the list provides excellent guidance for compliance with the EU AI Act requirements for development and workflows within the lifecycles of AI algorithms.

The advantages are that while the List of AI Governance Tasks is written in a format that makes it more natural to start checking the tasks from the ground up, the DYNAMO Project is still at a stage where the suggested procedures from the AI Governance Tasks could be implemented in the ongoing AI algorithm development.

The disadvantage is that the DYNAMO Project being at this stage the AI governance can be guided on a general level. Each AI algorithm needs to be individually assessed, and each critical sector needs specific AI algorithms. The difficulty arises when some AI algorithms haven't been developed yet and almost all are situationally dependent, which means most of the governance must be done on the fly.

The next steps are implementing the AI Governance guided by the AIGA Framework in practice and planning a concrete roadmap for developing AI algorithms in the DYNAMO Project platform.

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