

Deciphering the Maze: A Guide to Identifying High-Risk AI Systems in the EU

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Introduction

In the rapidly evolving digital landscape, artificial intelligence ("AI") has become a cornerstone of innovation across various sectors, from healthcare to finance, driving efficiencies and new capabilities. Amidst this technological proliferation, the European Union has taken a pioneering step with the introduction of the European Union ("EU") AI Act (the "EU AI Act"), setting a global precedent for the regulation of AI technologies. This legislative framework is designed to ensure that AI systems are developed and deployed in a manner that upholds safety, transparency, and respect for fundamental rights, thereby fostering trust and security in AI applications.







A critical component of the EU AI Act is the classification of high-risk AI systems, which is essential for providers and deployers to understand their obligations under the law. High-risk AI systems are those that pose significant threats to health, safety, or fundamental rights, necessitating stringent compliance and risk management measures. Identifying these systems is not just a regulatory requirement but a crucial step in mitigating potential harms and ensuring that AI contributes positively to society. As AI continues to integrate into our daily lives, understanding which systems fall under this high-risk category becomes paramount for all stakeholders involved in AI development and deployment within the EU.

The EU Al Act: A Primer

The EU AI Act represents a landmark legislative effort aimed at governing the development, deployment, and use of AI technologies within its member states, and impacting the use of AI in other nations, such as the United States of America. At its core, the EU AI Act seeks to balance the promotion of AI innovation with the imperative of safeguarding fundamental human rights and ensuring the safety of AI systems. This is achieved through a set of harmonized rules that apply to AI systems placed on the market or used within the EU, focusing particularly on high-risk AI systems which have significant implications for health, safety, and fundamental rights as enshrined in the Charter of Fundamental Rights of the European Union.

The Act's global significance cannot be overstated. It is poised to serve as a benchmark for AI regulation worldwide, promoting a human-centric approach to AI that aligns with European values and ethical principles. By establishing clear and robust protections for fundamental rights, while also supporting innovation and the digital transformation of the economy, the EU AI Act aims to position Europe as a global leader in the development of secure, trustworthy, and ethical AI. This pioneering regulation underscores the EU's commitment to setting high standards for AI that could influence regulatory frameworks beyond its borders.

Criteria for Classification

In the evolving landscape of artificial intelligence (AI) regulation, the European Union's AI Act sets forth specific criteria to classify AI systems as high-risk, ensuring their safe and ethical deployment. An AI system is deemed high-risk if both of two primary conditions are met: firstly, if it is intended to be used as a safety component of a product, or if the AI system itself is a product that falls under the Union harmonisation legislation listed in Annex III; and secondly, if the product, which includes the AI system as a safety component, or the AI system as a standalone product, must undergo a third-party conformity assessment, with a view to the placing on the market or the putting into service of that product pursuant to the same harmonisation legislation.

Beyond these conditions, the AI Act extends the classification of high-risk to AI systems specified in Annex III. This additional classification underscores the importance of the system's intended purpose and its potential risk to health, safety, or fundamental rights. The Act meticulously outlines that any AI system, regardless of its application, that could significantly impact these areas, warrants careful scrutiny and adherence to stringent regulatory requirements.

This dual-layered approach to classification underlines the EU's commitment to balancing technological advancement with fundamental human rights and safety, setting a precedent for AI regulation globally.







Exemptions and Special Conditions

In navigating the complexities of the EU AI Act, it's crucial to understand the nuances of exemptions for AI systems deemed not to pose a significant risk of harm. The Act outlines specific conditions under which AI systems are exempt from being classified as high-risk. These include systems designed for narrow procedural tasks, those aimed at enhancing the outcomes of previously completed human activities, and systems that identify decision-making patterns or deviations from these patterns without intending to replace or influence human judgment, provided there is proper human review.

Additionally, AI systems performing preparatory tasks relevant to the use cases listed in Annex III fall under this exemption. However, a critical stipulation exists within this framework: any AI system engaged in profiling natural persons is invariably classified as high-risk, regardless of its intended application or the perceived level of harm it may pose. This provision underscores the EU's stringent approach to protecting individual rights and privacy in the digital age, ensuring that AI systems which could potentially infringe on personal freedoms are subject to rigorous scrutiny¹ and compliance requirements. This balanced approach aims to foster innovation while safeguarding fundamental rights, delineating a clear boundary for AI developers and deployers operating within the EU.

Obligations of Providers

Providers of high-risk AI systems within the EU face a comprehensive set of obligations designed to ensure the safety, transparency, and accountability of these technologies. Central to these responsibilities is the mandate to ensure that all high-risk AI systems comply with the stringent requirements set out in the EU AI Act. This includes, but is not limited to, ensuring that these systems undergo the necessary conformity assessment procedures before being placed on the market or put into service, drawing up an EU declaration of conformity, and affixing the CE marking to indicate compliance with the regulation.

Moreover, a pivotal aspect of these obligations is the establishment and maintenance of a risk management system. This system is not a one-time effort but a continuous, iterative process that spans the entire lifecycle of the AI system. It involves regular, systematic reviews and updates to identify, analyse, estimate, and evaluate the risks associated with the use of the AI system, ensuring that any potential harm to health, safety, or fundamental rights is mitigated or eliminated. This rigorous approach underscores the EU's commitment to fostering an environment where AI technologies can thrive while ensuring the highest standards of safety and respect for human rights.

Transparency and Human Oversight

In the realm of high-risk AI systems, the EU AI Act mandates a dual emphasis on transparency and human oversight to mitigate potential risks. Transparency is foundational, requiring that high-risk AI systems be designed and developed to ensure their operations are sufficiently clear. This clarity enables deployers to accurately interpret the system's outputs and utilize them appropriately. To facilitate this, the Act stipulates that these systems must come with instructions that are concise, complete, correct, and clear, providing essential information about the system's capabilities, limitations, and intended use.

¹ In US constitutional law, there's a similar concept that protects fundamental rights called "strict scrutiny." This means a government act will be struck down where it impairs a fundamental right, and the law is not "narrowly tailored to achieve a compelling government interest." As Al law continues to develop, it may be beneficial to keep this doctrine in mind.







Human oversight plays a pivotal role in this framework, acting as a safeguard against the risks associated with the deployment of high-risk AI systems. The Act outlines specific measures that must be implemented by both providers and deployers to ensure effective oversight. These measures include enabling deployers to monitor the system's operation actively, understand its outputs, and intervene or halt the system if necessary.

This oversight is designed to be proportionate to the system's level of autonomy and the context of its use, ensuring that any potential harm to health, safety, or fundamental rights is minimized. Together, these provisions underscore the EU's commitment to fostering an AI ecosystem that is both innovative and safe, prioritizing the well-being of individuals and society at large.

Data and Record-Keeping

In the regulatory landscape shaped by the EU AI Act, the emphasis on data integrity emerges as a cornerstone to artificial intelligence, for the emphasis on data integrity and meticulous record-keeping stands as a key part of the deployment of high-risk AI systems. The EU AI Act underscores the necessity for high-quality training, validation, and testing of AI systems. The testing is pivotal to ensuring that AI systems perform as intended, safely, and without perpetuating biases. This includes ensuring that the data are relevant, complete, representative, and free of errors. This ultimately helps mitigate risks to fundamental rights. The governance practices related to health, safety, and fundamental rights surrounding these data sets are meticulously outlined in the Act.

Furthermore, the Act mandates rigorous record-keeping practices to facilitate traceability and accountability of high-risk AI systems throughout their lifecycle. Such documentation is vital for assessing compliance with regulatory requirements and facilitating post-market monitoring. The Act ensures high-risk AI automatically records events (logs). This is essential for identifying potential risks, facilitating post-market monitoring, and ensuring the system's compliance with regulatory requirements. These provisions require the systems remain aligned with the Act's safety and rights protection objectives.

The EU's commitment to fostering an AI ecosystem is not only innovative but also responsible and transparent. The measures discussed herein underscore the EU's commitment to fostering a transparent, accountable AI ecosystem where innovation thrives and is respectful of both fundamental rights and safety standards.

Conformity Assessment and Notified Bodies

In the evolving landscape of AI regulation within the European Union, the concept of conformity assessment stands as a critical mechanism designed to ensure that high-risk AI systems meet stringent safety, transparency, and accountability standards. Notified bodies play a pivotal role in this process, tasked with the verification of compliance for these AI systems against the established criteria.

The operational obligations of these notified bodies are meticulously outlined to balance rigor with efficiency. They are mandated to verify the conformity of high-risk AI systems through a structured assessment procedure. This involves a careful examination that considers the size of the provider, the complexity of the AI system, and the sector in which it operates, all aimed at minimizing administrative burdens especially for micro and small enterprises.







Despite this, the primary objective remains uncompromised: ensuring that the high-risk AI system adheres to the required level of protection and rigor as per the EU's regulations.

This framework not only underscores the EU's commitment to fostering innovation within a safe and regulated environment but also highlights the critical role of notified bodies in maintaining the integrity of the digital ecosystem. Their work ensures that providers of high-risk AI systems can navigate the regulatory landscape effectively, thereby promoting trust and safety in AI technologies across the EU.

Conclusion

In the realm of the European Union's regulatory landscape, the identification of high-risk AI systems emerges as a cornerstone under the EU AI Act. This critical process ensures that AI systems, which could potentially impact the health, safety, or fundamental rights of individuals, are subject to stringent oversight and compliance requirements. In the intricate framework of the EU, the AI Act delineates clear criteria for identifying the class of AI systems labelled as "high-risk." Providers of AI systems must understand these criteria for compliance with their legal obligations under the Act. They must diligently assess their systems to ensure compliance, while policymakers, regulators, and the broader community must remain informed on these developments to foster an environment where AI can be used safely, ethically, and in conformance with fundamental rights.







Glossary

Act or EU Al Act: European Union Artificial Intelligence Act

AI: Artificial Intelligence

Board: European Union Artificial Intelligence Board

EU: European Union

SME: Small and Medium-Sized Enterprise

How can we help?



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Your trusted advisor for EU AI Act Compliance. Unlock the full potential of artificial intelligence while ensuring compliance with the EU AI Act by partnering with AI & Partners, a leading professional services firm. We specialize in providing comprehensive and tailored solutions for companies subject to the EU AI Act, guiding them through the intricacies of regulatory requirements and enabling responsible and accountable AI practices. At AI & Partners, we understand the challenges and opportunities that the EU AI Act presents for organizations leveraging AI technologies. Our team of seasoned experts combines in-depth knowledge of AI systems, regulatory frameworks, and industry specific requirements to deliver strategic guidance and practical solutions that align with your business objectives.

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