



# Understanding the Future of Artificial Intelligence Governance: Comparing the EU AI Act and U.S. Executive Order on Safe AI

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## EXECUTIVE SUMMARY

In December 2023, the European Union (EU) passed the [European Union Artificial Intelligence Act](#),<sup>1</sup> marking a significant milestone in global regulation of artificial intelligence (AI). This brief provides insights into the key aspects of the EU AI Act, its approach to AI regulation, enforcement mechanisms, and its potential impact on the United States. Additionally, it examines existing AI regulations, compares them with the EU's approach, and evaluates them against the recent U.S. Executive Order on Safe AI (EO 14110). This brief also provides engagement opportunities for the public, students, and academics, including options to submit public comments on AI to the U.S. Government.

### What is the European Union Artificial Intelligence Act?

The European Union Artificial Intelligence Act, commonly referred to as simply the AI Act, is the EU's landmark bill which defines legal regulations for AI development and use. The AI Act is the first comprehensive AI regulation passed by a major governing body. The EU was also a pioneer in data protection with the [General Data Protection Regulation \(GDPR\)](#),<sup>2</sup> implemented in 2018. The AI Act's goals are to ensure the safety of AI systems, provide a legal framework for AI development, and protect citizens from the potential risks of AI. The AI Act provides resources for companies to develop compliant AI systems and defines a legal structure to enforce fines for unsafe AI systems. The European Commission first proposed the bill in April 2021, and it was officially passed in December 2023 after two years of workshops; hearings; and debates involving [thousands of stakeholders](#)<sup>3</sup> from academia, industry, non-government organizations, and citizens. The final text has not yet been released, although [previous drafts were released in 2021](#).<sup>4</sup> The final bill includes updates such as additional regulations for generative AI models like

ChatGPT which have been released since drafting began. Given these complexities, the enforcement of the AI Act is [not expected to start until 2026](#).<sup>5</sup>

### How does the AI Act Regulate AI?

The AI Act takes a [risk-based approach](#) to regulating AI. All AI systems are categorized in one of four risk categories which determines the degree of compliance needed. Categories include minimal risk, limited risk, high risk, and unacceptable risk. Technologies deemed as unacceptable risk are banned outright. Table 1 below shows the types of applications in each risk category.

The AI Act also emphasizes the need for transparency of AI systems. It mandates disclosure when AI is involved with content generation and requires documentation of the data used in training AI systems. The AI Act also requires the use of high-quality training data and management tools to mitigate AI bias and requires human oversight for high-risk AI systems. While the Act bans several applications deemed to have unacceptable risk, certain banned AI systems, such as real-time biometric surveillance, are still allowed in instances of [threats of terrorism and border control](#).<sup>7</sup>



**Table 1**

Risk Tier	Example AI Systems	Compliance Requirement
Unacceptable Risk	<ul style="list-style-type: none"> <li>Real-time biometric surveillance in public spaces</li> <li>Social scoring by governments</li> <li>Subliminal AI manipulation</li> </ul>	<ul style="list-style-type: none"> <li>Banned</li> </ul>
High Risk	<ul style="list-style-type: none"> <li>Healthcare</li> <li>Education</li> <li>Transportation</li> <li>Employment</li> <li>Law Enforcement</li> <li>Biometric Identification</li> </ul>	<ul style="list-style-type: none"> <li>Premarket Risk Assessment</li> <li>High-Quality Training Data</li> <li>Activity Logging for Traceability</li> <li>Design Documentation</li> <li>Transparency to User</li> <li>Appropriate Human Oversight</li> </ul>
Limited Risk	<ul style="list-style-type: none"> <li>Chatbots</li> <li>Image Generation</li> <li>Audio Generation</li> </ul>	<ul style="list-style-type: none"> <li>Transparency to User</li> </ul>
Minimal Risk	<ul style="list-style-type: none"> <li>Spam Filters</li> <li>Inventory Management</li> </ul>	<ul style="list-style-type: none"> <li>No Requirements</li> </ul>

### How will the AI Act be enforced?

The European Commission leads oversight of the AI Act. It has announced the creation of a new [EU AI Office](#)<sup>8</sup> to coordinate enforcement across the 27 EU member states. The enforcement offices will have a large amount of responsibility to determine the risk new AI systems pose in practice and to determine appropriate legal actions for violations. A large number of staff and experts will [need to be hired](#)<sup>9</sup> to meet this new demand.

The EU has been [criticized](#)<sup>10</sup> for its lack of enforcement of previous technology legislation. The enforcement of the [GDPR](#)<sup>11</sup> has been slow due to understaffing and budget constraints. For the GDPR, each member state is responsible for enforcement within its borders, which has led to a [patchwork](#)<sup>12</sup> of different regulatory agencies with limited budgets dependent on local governments. While the exact structure of the enforcement of the AI Act is yet to be seen, it is clear that enforcement is a non-trivial challenge that the EU Commission faces and will determine the long-term effectiveness of the bill.

### How does The AI Act affect the United States?

While the AI Act officially applies only to the 27 member states of the EU, companies will likely adjust their AI compliance across their entire organizations rather than just for one region. This has been coined the [“Brussels](#)

[Effect,”](#)<sup>13</sup> meaning companies end up complying with EU laws even outside of the EU to ease global production. With the passage of the GDPR in 2018, most companies have adjusted their entire operations to comply, in part because the GDPR has become [the blueprint](#)<sup>14</sup> for most new data privacy legislation that is passed globally. Similarly, the AI Act is expected to serve as a starting point for other countries to pass [similar legislation](#).<sup>15</sup> The new regulations set forth by the AI Act will likely affect not only U.S. companies developing AI systems but any U.S. businesses that utilize AI in diverse sectors such as education, healthcare, law enforcement, and financial services. However, without local AI laws, some experts predict some [localized high-risk AI systems](#)<sup>16</sup> will not be significantly affected.

### What laws exist in the United States for AI regulation?

In the U.S., 12 states have implemented data privacy laws similar to the GDPR, led by [California](#)<sup>17</sup> in 2018. Local governments have also passed regulations targeting narrow AI applications, such as [NYC’s Local Law 144](#)<sup>18</sup> which banned AI employment decision tools. However, at the federal level, the U.S. has been slow to define AI regulation until recently. In October 2023, the Biden administration released an [Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial](#)

[Intelligence \(EO 14110\)](#)<sup>19</sup> alongside a [draft memorandum](#)<sup>20</sup> from the Office of Management and Budget (OMB), which are the U.S. federal government’s first entries into the AI regulation debate. While not widely enforceable without the addition of regulatory powers from Congress, the Executive Order (EO) and the accompanying OMB draft represent the most detailed look at what U.S. and global AI regulation might look like in the future.

**How does the U.S. Executive Order on AI compare to the EU AI Act?**

The EO differs significantly from the AI Act in terms of scope and approach, as an executive order cannot create new agencies or grant new regulatory power over private companies. The EO instead is focused on [guidance to U.S. federal agencies](#)<sup>21</sup> for procuring or developing their own AI systems. In this way, the federal agencies act as models for accountable AI use and provide the guidelines for which AI systems can be procured by the federal government, indirectly influencing the private sector. This contrasts with the AI Act which [directly implements](#)<sup>22</sup> a legal regulatory structure for the private sector. The




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**To maintain their high level of production, a majority of screening companies rely solely on automated background checks to fulfill orders, often resulting in dangerously inaccurate reports.**

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EO also calls on federal agencies with enforcement power to develop regulations to protect civil rights and civil liberties, including protecting consumers from

fraud, discrimination, financial risk, and privacy issues potentially impacted by AI. This includes the creation of a [new Chief AI Officer \(CAIO\)](#)<sup>23</sup> which every agency is required to designate within 60 days to coordinate the use of AI, promote AI innovation, and manage AI risks within their agency. [The National Institute of Standards and Technology \(NIST\)](#)<sup>24</sup> is tasked with developing standards for the testing requirements for evaluating federal AI systems.

However, the EO and the AI Act are similar in their goal to protect civil and human rights while promoting innovation. Principles for increased algorithmic transparency, human oversight, mitigating AI bias, and extensive external stress testing or [“red-teaming”](#)<sup>25</sup> before deployment are articulated in both the EO and the AI Act. The EO and AI Act both make exceptions for high-risk AI use in cases of national security, a compromise that has [drawn scrutiny](#)<sup>26</sup> from watchdog organizations.

Another difference is the EO applies only to large AI models trained over a certain number of computing operations ([10 to the power of 26 operations](#)<sup>27</sup>), while the AI Act applies to all AI models based on risk categories only. This specific computing value was chosen to target next-generation technology without affecting current AI models, as none currently meet this computing threshold. Some other differences include the acknowledgment of the [environmental impact](#)<sup>28</sup> of AI systems in the AI Act and the desire to increase the immigration of [skilled AI labor](#)<sup>29</sup> in the EO. Table 2, comparing AI risks outlined in the EO and the AI Act, is shown below.

**Engagement Opportunities**

The EO and the AI Act both reflect a deep knowledge of AI, informed by experts, and also thoughtful policy. However, the passing of the AI Act is only the beginning of a wave of future AI regulation. Significant gaps in AI governance still need to be addressed, including the use of AI in law enforcement, the technical limitations of enforcement methods, the environmental impacts of AI, and the future-proofing of regulations, to name a few. There are many ways to engage with AI topics regardless of your background. Here are a few suggestions:

- **For everyone:** The U.S. Government has issued several requests for public input on AI. [Public comments can be submitted by anyone](#).<sup>30</sup> In addition, there are many [local](#)<sup>31</sup> and [national](#)<sup>32</sup> non-profit organizations focused on impactful AI topics that are accessible to the public.
- **For academics:** Several [academic institutes](#)<sup>33</sup> are researching AI ethics topics from a variety of angles providing funding grants and collaboration opportunities. Keep up to date on calls for AI

**Table 2**

	European Union Artificial Intelligence Act	U.S. Executive Order 14110
AI Classification	Application Risk Tiers	Training Model Size and National Security Risk
Private Sector Regulations	Yes	No
Bans on AI Facial Recognition for Law Enforcement	No	No
Considerations of the Environmental Impact of AI	Yes	No
Streamlining Skilled Immigration	No	Yes
Transparency Requirements	Yes	Yes
Safety and Bias Testing	Yes	Yes

expertise from the government and the [AI academic community](#).<sup>34</sup> It is not uncommon for academics to be invited to [testify in Congress on AI topics](#).<sup>35</sup>

- **For students:** Many [technology policy fellowships](#)<sup>36</sup> exist catered for STEM and social science students to enter the policy space, including work on AI topics. The U.S. Government has also rapidly increased its [hiring](#)<sup>37</sup> for AI Talent and Fellowship opportunities.
- **For UM students:** Consider joining the [Science, Technology, and Public Policy \(STPP\)](#)<sup>38</sup> program at the Ford School of Public Policy, which is open to all graduate students through the STPP graduate certificate program.

**ENDNOTES**

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