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# Complex A.I. regulations across major global powers

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# Agenda

## Europe

**Pioneering in data regulation and A.I. governance**

- **Horizontal Regulation** (E.U. A.I. Act, Digital Markets Act and Digital Services Act)
- Focus on competition and interoperability
- Achieve digital sovereignty (European Chips Act)
- Ensure international companies comply with E.U. regulations

## U.S.

**Laissez-Faire approach to A.I. and Data regulation**

- **State-Level Regulation** No comprehensive federal legislation
- Focus on innovation and industrial and private sector control
- Strong restrictions on external companies to favor national companies
- Concerned by Facial Recognition Technologies due to racial bias and concerns over accuracy

## China

**Centralized approach to ensure National Security**

- **Centralized legislation** as early as 2017 with the National A.I. Strategy and PIPL (Chinese GDPR) in 2021
- Positioning of major tech companies as central (Baidu, Alibaba, Huawei)
- Accountability of companies on content moderation and algorithmic recommendation
- Extensive use of Facial Recognition for public surveillance

# Impact of Artificial Intelligence

**175 Zettabytes**
Volume of data produced in the world by 2025 (33 ZB in 2018)

**11-37%**
Increase in labour productivity

**14%**
Jobs replaced by AI

**32%**
Jobs facing substantial changes

# 01

# A.I. Legislation in Europe

# EU AI Act : Where do we stand?

**April 2021**

Draft proposal EU A.I. Act by the European Commission

**December 2021**

Opinion from European Economic and Social Committee (EESC)

**February 2022**

Opinion from European Committee of the Regions (COR)

**March 2022**

Opinion from European Central Bank (ECB)

Proposal

Opinions

**2025 (expected)**

Entry into force of the EU Artificial Intelligence Act

**June 2024**

Review of Amendments by Council of the EU

**March 2024**

European Parliament approved EU AI Act

**January 2024**

Amendment of the A.I. Act by the European Parliament

1st Reading

2nd Reading

# EU AI Act: 12 Key facts

1. Broad definition

2. List of prohibited AI practices

3. High risk AI systems

4. Broad, burdensome and extensive obligations for high-risk AI systems

5. Obligations throughout the value chain

6. Obligations for users of high risk AI systems

7. Special measures for banks, insurers, governments

8. Right to an explanation
VS
Trade secrets

9. Lower threshold for Data Subject Rights

10. Distinctions for General purpose AI (GPAI)

11. Complex and layered compliance (AI Board, AI Office, national authorities)

12. Very high fines

# Digital Markets Act

Establish requirements applicable to **largest tech providers** (called « gatekeepers ») in the EU in order to reduce the bottlenecks and prevent monopolizing the digital economy

## Gatekeepers must:

- Perform independent audits on user profiling methods
- Provide public description of audit and update it annually
- Provide access to Business users to their generated data
- Provide companies that advertiser independent verification of data
- Allow Business users to promote and complete contracts outside their platform

## Gatekeepers must not:

- Treat their own services or prodocts more favorably than competitors
- Prevent customers from reaching out to businesses outside their platform
- Prevent users from uninstalling pre-installed software and apps
- Track users outside their core platform for targeted advertising without effective consent

**Google**
- Google
- Google Android
- Google Search
- Chrome
- YouTube
- Google Maps
- Google Play
- Google Shopping

**Meta**
- Facebook
- Instagram
- WhatsApp
- Messenger
- Meta (advertisement)
- Meta Marketplace

**ByteDance**
- TikTok

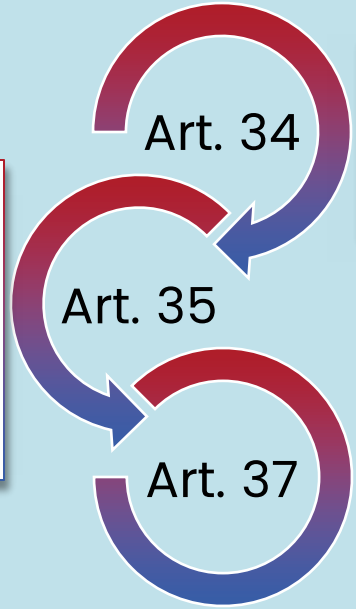
**Amazon**
- Amazon
- Amazon Marketplace

**Apple**
- App Store
- Safari
- iOS

**Microsoft**
- LinkedIn
- Windows PC OS

# Digital Services Act

- Cross-sector legislation focusing on more **transparency**, **algorithmic accountability** and **content moderation**.
- Applies to hosting services, marketplaces, and online platforms offering services in the EU.




Perform risk assessments annually or when introducing new relevant functionalities to pinpoint systemic risks.

Risk assessments must be accompanied by reasonable and effective mitigation measures

VLOPs are required to complete and provide yearly audits conducted by independent third parties.

# Other regulations and impactful entities

**Existing legislation**

- GDPR
- Data Protection Authorities (CNIL)

**Future legislation**

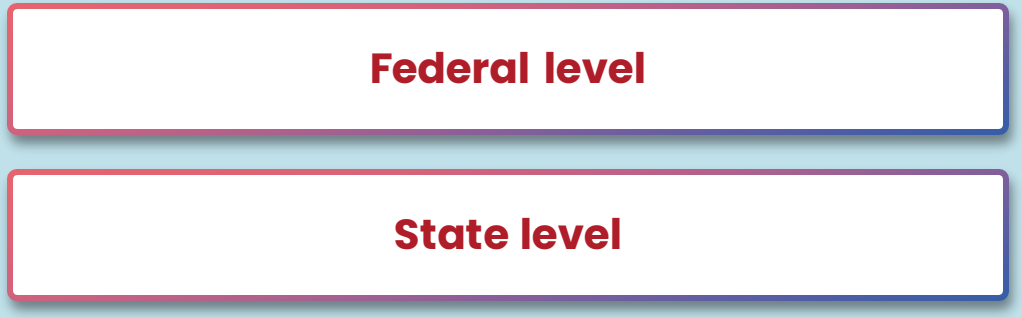
- AI Liability Directive
- Product Liability Directive

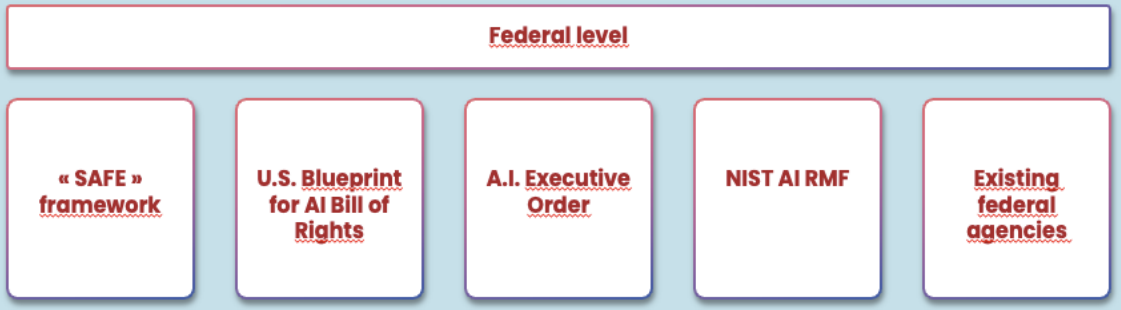
**Political agendas**

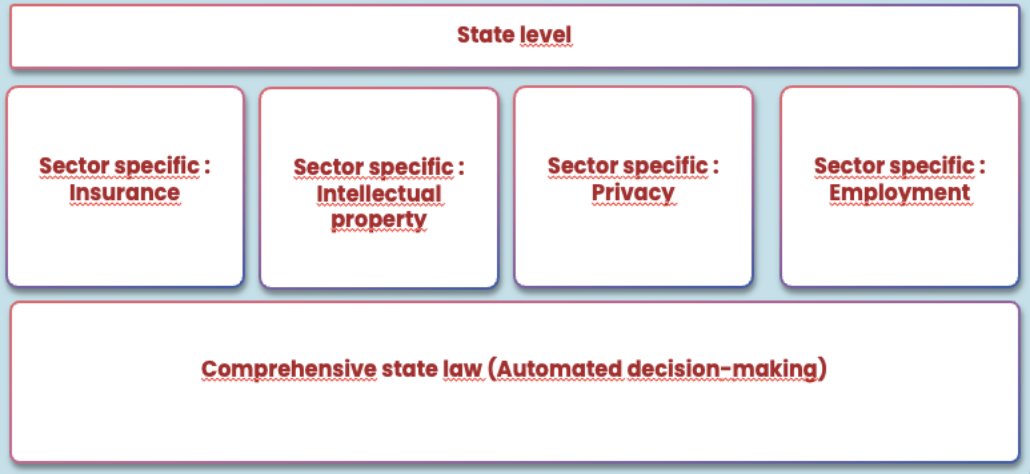
- National strategies (France, Germany, Italy, Netherlands)

# 02 A.I. Regulations in the U.S.

# AI regulation in the US



# AI regulation in the US

**Federal level**

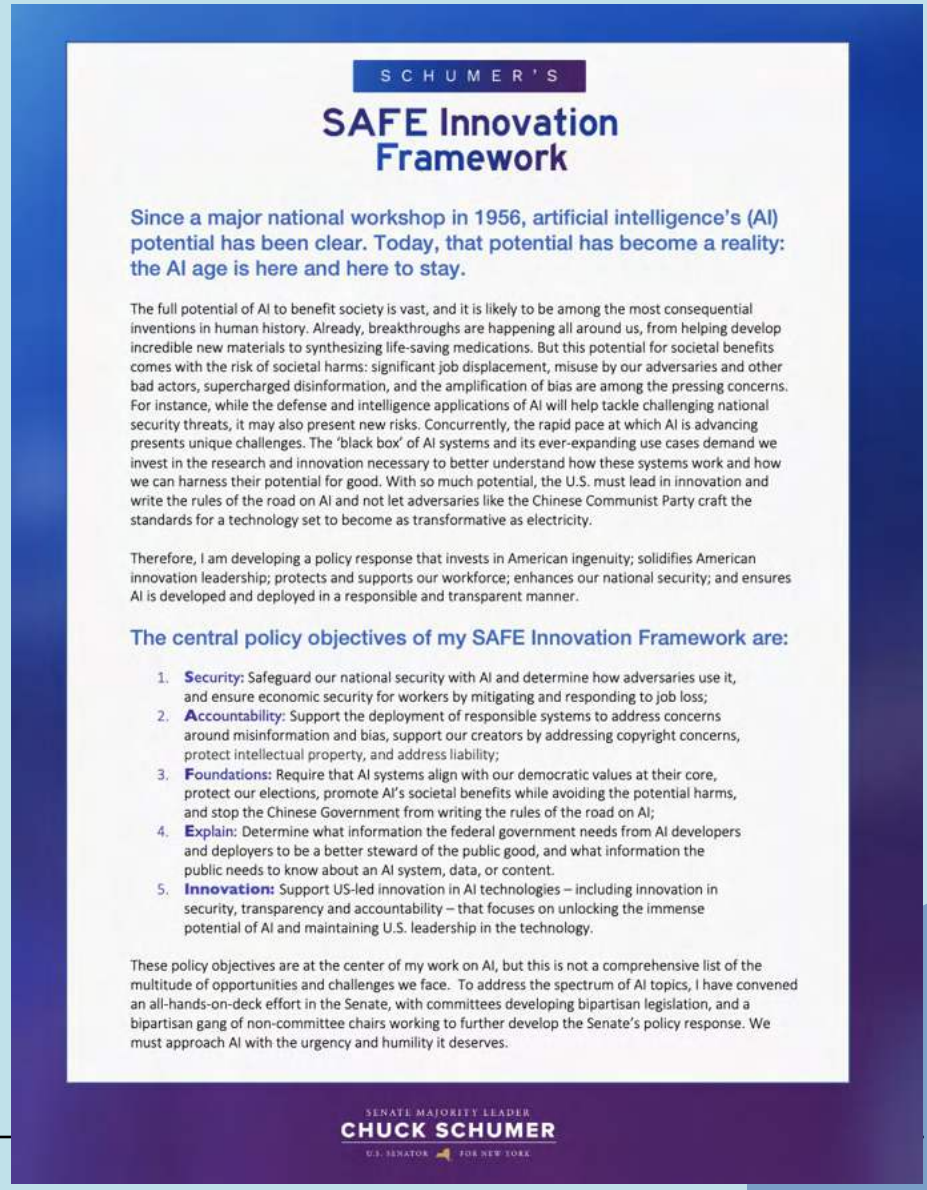
- « SAFE » framework
- U.S. Blueprint for AI Bill of Rights
- A.I. Executive Order
- NIST AI RMF
- Existing federal agencies

# SAFE Framework

- Proposed by Senator Chuck Schumer (Democrat) in **June 2023**
- Mainly preparing a political agenda
- No public report of progress

## Main proposals:

- Label AI products as distinct from human-originated work
- Regulation of foundation models



SCHUMER'S

SAFE Innovation Framework

Since a major national workshop in 1956, artificial intelligence's (AI) potential has been clear. Today, that potential has become a reality: the AI age is here and here to stay.

The full potential of AI to benefit society is vast, and it is likely to be among the most consequential inventions in human history. Already, breakthroughs are happening all around us, from helping develop incredible new materials to synthesizing life-saving medications. But this potential for societal benefits comes with the risk of societal harms: significant job displacement, misuse by our adversaries and other bad actors, supercharged disinformation, and the amplification of bias are among the pressing concerns. For instance, while the defense and intelligence applications of AI will help tackle challenging national security threats, it may also present new risks. Concurrently, the rapid pace at which AI is advancing presents unique challenges. The 'black box' of AI systems and its ever-expanding use cases demand we invest in the research and innovation necessary to better understand how these systems work and how we can harness their potential for good. With so much potential, the U.S. must lead in innovation and write the rules of the road on AI and not let adversaries like the Chinese Communist Party craft the standards for a technology set to become as transformative as electricity.

Therefore, I am developing a policy response that invests in American ingenuity; solidifies American innovation leadership; protects and supports our workforce; enhances our national security; and ensures AI is developed and deployed in a responsible and transparent manner.

The central policy objectives of my SAFE Innovation Framework are:

1. **Security:** Safeguard our national security with AI and determine how adversaries use it, and ensure economic security for workers by mitigating and responding to job loss;
2. **Accountability:** Support the deployment of responsible systems to address concerns around misinformation and bias, support our creators by addressing copyright concerns, protect intellectual property, and address liability;
3. **Foundations:** Require that AI systems align with our democratic values at their core, protect our elections, promote AI's societal benefits while avoiding the potential harms, and stop the Chinese Government from writing the rules of the road on AI;
4. **Explain:** Determine what information the federal government needs from AI developers and deployers to be a better steward of the public good, and what information the public needs to know about an AI system, data, or content.
5. **Innovation:** Support US-led innovation in AI technologies – including innovation in security, transparency and accountability – that focuses on unlocking the immense potential of AI and maintaining U.S. leadership in the technology.

These policy objectives are at the center of my work on AI, but this is not a comprehensive list of the multitude of opportunities and challenges we face. To address the spectrum of AI topics, I have convened an all-hands-on-deck effort in the Senate, with committees developing bipartisan legislation, and a bipartisan gang of non-committee chairs working to further develop the Senate's policy response. We must approach AI with the urgency and humility it deserves.

SENATE MAJORITY LEADER
CHUCK SCHUMER
U.S. SENATOR FOR NEW YORK

# U.S. Blueprint for an AI Bill of Rights

- Blueprint AI Bill of Rights to guide, design, deploy and develop AI systems.
- Voluntarily applied by AI providers

| | | | | |
|---|---|---|---|---|
| **Safe and effective systems** | **Algorithmic discrimination protection** | **Data privacy** | **Notice & explanation** | **Human alternatives, consideration & fallback** |

# White House AI Executive Order

- Published in **November 2023**
- Direct federal agencies to develop guidance on the use Artificial intelligence

## Main new development:

- Reporting requirements for AI companies
- New standards and labelling of AI content
- Cybersecurity program to develop AI tools

75191

Federal Register
Vol. 88, No. 210
Wednesday, November 1, 2023

Presidential Documents

Title 3—
The President

Executive Order 14110 of October 30, 2023

Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

**Section 1**. *Purpose.* Artificial intelligence (AI) holds extraordinary potential for both promise and peril. Responsible AI use has the potential to help solve urgent challenges while making our world more prosperous, productive, innovative, and secure. At the same time, irresponsible use could exacerbate societal harms such as fraud, discrimination, bias, and disinformation; displace and disempower workers; stifle competition; and pose risks to national security. Harnessing AI for good and realizing its myriad benefits requires mitigating its substantial risks. This endeavor demands a society-wide effort that includes government, the private sector, academia, and civil society.

My Administration places the highest urgency on governing the development and use of AI safely and responsibly, and is therefore advancing a coordinated, Federal Government-wide approach to doing so. The rapid speed at which AI capabilities are advancing compels the United States to lead in this moment for the sake of our security, economy, and society.

In the end, AI reflects the principles of the people who build it, the people who use it, and the data upon which it is built. I firmly believe that the power of our ideals; the foundations of our society; and the creativity, diversity, and decency of our people are the reasons that America thrived in past eras of rapid change. They are the reasons we will succeed again in this moment. We are more than capable of harnessing AI for justice, security, and opportunity for all.

**Sec. 2**. *Policy and Principles.* It is the policy of my Administration to advance and govern the development and use of AI in accordance with eight guiding principles and priorities. When undertaking the actions set forth in this order, executive departments and agencies (agencies) shall, as appropriate and consistent with applicable law, adhere to these principles, while, as feasible, taking into account the views of other agencies, industry, members of academia, civil society, labor unions, international allies and partners, and other relevant organizations:

(a) Artificial Intelligence must be safe and secure. Meeting this goal requires robust, reliable, repeatable, and standardized evaluations of AI systems, as well as policies, institutions, and, as appropriate, other mechanisms to test, understand, and mitigate risks from these systems before they are put to use. It also requires addressing AI systems' most pressing security risks—including with respect to biotechnology, cybersecurity, critical infrastructure, and other national security dangers—while navigating AI's opacity and complexity. Testing and evaluations, including post-deployment performance monitoring, will help ensure that AI systems function as intended, are resilient against misuse or dangerous modifications, are ethically developed and operated in a secure manner, and are compliant with applicable Federal laws and policies. Finally, my Administration will help develop effective labeling and content provenance mechanisms, so that Americans are able to determine when content is generated using AI and when it is not. These actions will provide a vital foundation for an approach that addresses AI's risks without unduly reducing its benefits.

# U.S. NIST AI Risk Management Framework (AI RMF)

- In line with Executive Orders 13960 (2020) and 14110 (2023)
- The AI RMF sets 72 measures to implement to address AI

# Multiple supervisory authorities

### Federal Trade Commission

Office of Technology (2023)

Civil Investigative Demands on AI

### Joint statement of Agencies

Department of Justice (DOJ)

Federal Trade Commission (FTC)

Consumer Financial Protection Bureau (CFPB)

Equal Employment Opportunity Commission (EEOC)

### Securities and Exchange Commission (SEC)

AI in Finance sector

### Health and Human Services (HHS)

U.S. Department issued rule regarding AI in healthcare

# AI regulation in the US (Local)

State level

Sector specific : Insurance

Sector specific : Intellectual property

Sector specific : Privacy

Sector specific : Employment

Comprehensive state law (Automated decision-making)

# 03

# A.I. Regulations in China

# China’s Deep Synthesis Provisions

Came into effect in January 2023, the **regulation applies to both « deep synthesis service providers »**; companies offering AI services and those providing technical support and **« deep synthesis service users »**; organizations and people utilizing AI services to create, duplicate, publish or transfer information.

### Data security & personal data protection

- Current Data protection laws apply
- Required to establish management systems for algorithm review, user, registration, and child protection among others

### Transparency

- Establish guidelines, criteria and processes to recognise false or damaging information
- Form and disclose management rules, platform conventions
- Must implement real identity information authentication system

### Content management & labelling

- Required to dispel fake news, keep records and report these instances to the relevant authorities.

### Technical security

- Must periodically review algorithms and conduct security assessment when providing models, templates, and other tools.

# AI legislation at glance : China

## 15/08/2023: Interim Measures for Generative Artificial Intelligence Service Management

- Generative AI must adhere to the core socialist values of China and should not endanger national security or interests or promote discrimination and other violence or misinformation
- Measures should be taken to prevent discrimination on ethnicity, belief, nationality, region, gender, age, occupation, and health resulting from generative AI
- Generative AI must respect intellectual property rights and business ethics to avoid unfair competition and the sharing of business secrets
- Generative AI must respect the rights of others and not endanger the physical or mental health of others
- Measures must be taken to improve transparency, accuracy, and reliability

## 10/01/2023: Deep Synthesis Provisions

The provisions apply to both **« deep synthesis service providers »** (companies that offer deep synthesis services and those that provide them with technical support) and **« deep synthesis service users »** (organizations and people that utilize deep synthesis to create, duplicate, publish or transfer information).

→ Strong emphasis on deepfake

## 01/11/2022: Shenzhen AI Regulation (local)

## 01/10/2022: Shanghai Regulations on Promoting the Development of the AI Industry (local)

## 01/03/2022: Internet information Service Algorithmic Recommendation Management Provisions

Providers of AI-based personalized recommendations in mobile applications must uphold user rights. In particular, providers must:

- Protect minors from harm
- Allow users to select and delete tags about their personal characteristics
- Not offer different pricing based on personal characteristics collected
- Notify users if a recommendation was made using an algorithm
- Give users the option to opt out

# Conclusions

# Impact

Internal audits (annual)

Publication of audit results to users/customers (annual)

Ensure the exercise of the Rights of individuals

3rd Party audits (annual)

Information about the use of AI and Transparency on its impact

Processes for Human Intervention

Risk reports on the use of A.I. to Supervisory Authorities

Transparency on which Foundation Models are used

A.I. Risk Management Framework Requirements

# General risks (focusing on A.I.)

- Loss of jobs because of higher automation
- Algorithmic bias caused by bad data
- Unclear legal regulation
- Misalignement between the organisation's goals and AI's goals
- Lack of transparency in the use of Foundation models
- Program bias due to malicious (in-house) developpers
- Loss of control in the decision-making process
- Violation of Privacy of employees (unproper data collection)
- Violation of Privacy of customers (unproper data collection)
- Fines for Non-compliance
- External malicious actors using AI to access systems (Worm GPT, DarkBERT)
- Evolved Social Engineering (Deepfakes, behavioural analytics)
- Lack of transparency
- Inaccuracy of data generated by AI

# Which regulatory model will prevail ?

# Questions & Answers

# Thank you

## For more information

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