Internationaler Regulierungswettbewerb

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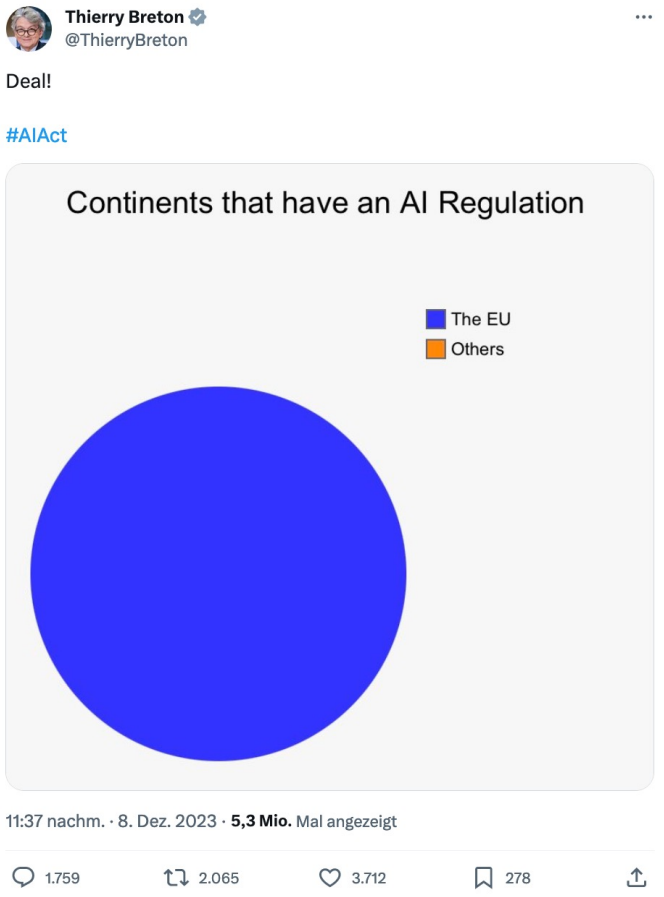
15. Dezember 2023, Hybride Veranstaltung in Ulm

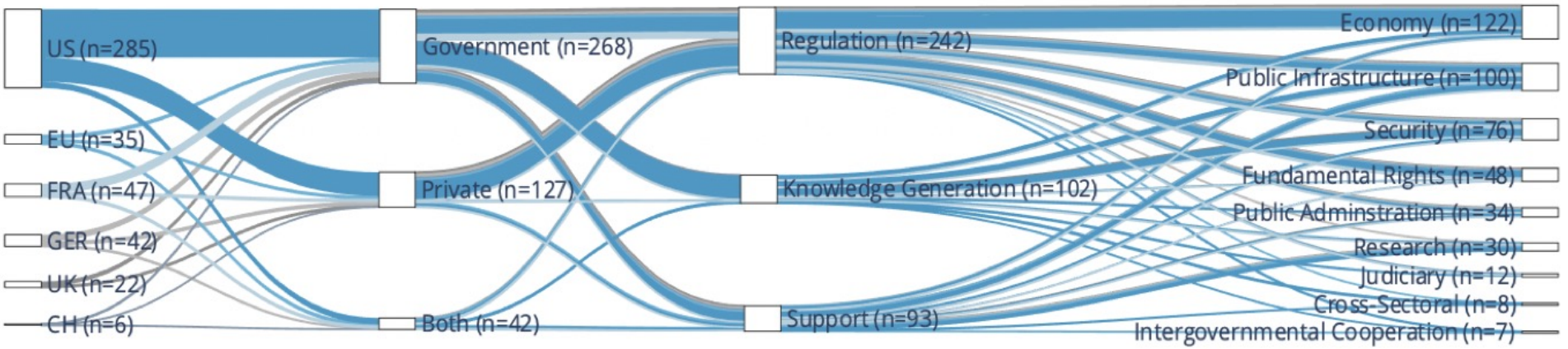
Regulierungswettlauf

„Technologieexport ist auch Werteexport:
Das gesellschaftliche Wertesystem prägt Technologie und kann im Export eine Wertekollision erzeugen“

Internationale und strategische Bedeutung von KI
EDA, Künstliche Intelligenz und internationales Regelwerk, 2022, S. 5



Vokinger/Schneider/Gasser, Studie zur KI-Regulierung in den USA und Europa, entnommen aus und zitiert nach EDA, Künstliche Intelligenz und internationales Regelwerk, 2022, S. 11



Abbildung[14]: In diesem Sankey Plot sind links die inkludierten Länder mit den Anzahl KI-Gesetzen aufgeführt, gefolgt vom Adressaten (Staat, Private oder beide), ob die Gesetze regulierende oder unterstützende Funktionen aufweisen und ganz rechts, welche Lebensbereiche geregelt werden. Wies ein Gesetz mehrere Elemente auf (z.B. Regulierung und Förderung), dann wurden die Gesetze doppelt aufgeführt, hingegen erfolgte eine isolierte Klassifizierung bei den Lebensbereichen.

Regulierungsräume („Centres of normative power“)

adaptiert nach EDA, Künstliche Intelligenz und internationales Regelwerk, 2022, S. 12 ff.

„Völkerrechtliche Ebene“

- UN: Global Digital Compact
- Übereinkommen über bestimmte konventionelle Waffen (CCW): GGE on LAWS
- Europarat: Committee on AI (CAI)

„Internationales Softlaw“

- OECD: Empfehlungen und Grundsätze zu KI
- G7/G20: GPAI
- UNESCO: Ethik der künstlichen Intelligenz

Staatliche Regulierung

- EU, Schweiz, USA, Kanada, China etc.

“Selbstbindung: Ethische Prinzipien und technische Standards“

- ISO/IEC, IEEE, ITU, ETSI, NIST, DIN etc.
- Unternehmen
  (Bosch KI-Kodex, OpenAI Charter, SAP Global AI Ethics Policy, Ethische KI - Leitlinien der Telekom, etc.)

„Normative Kraft des Faktischen durch technologische Entwicklung“

Regulierungsparameter

Regulierungsziele

- Transparenz
- “Gerechtigkeit” und “Fairness”
- “Nicht-Schaden”
- “Verantwortlichkeit”
- ”Schutz der Privatsphäre”
- Risikominimierung

Regulierungsansätze

- Risikobezogen
- Technologiebezogen
- Anwendungsbezogen
- Sektorbezogen
- Regelorientiert
- Prinzipienorientiert

Regulierungsmethoden

- Verbote
- Aufsicht, Sanktionen
- Auflagen / Dokumentation
- Betroffenenrechte
- Wettbewerbsrecht
- Regulierungsupdate
- Evidenz- oder prognosebasiert

UN Global Digital Compact (GDC)

United Nations

- Januar 2023: the Compact could also promote regulation of artificial intelligence to ensure that this is aligned with shared global values
- Junei2023: António Guterres: I would be favorable to the idea that we could have an artificial intelligence agency ...inspired by what the international agency of atomic energy is today.
- Oktober 2023: Launch des AI Advisory Body on risks, opportunities, and international governance of artificial intelligence
- November 2023: António Guterres:
  - The gap between AI and its governance is wide and growing.
  - First, we are playing catchup on today's threats. We need to get ahead of the wave.
  - In the past year, we experienced the release of powerful AI models with little consideration for the safety and security of users.
  - Without immediate action, AI will exacerbate the enormous inequalities that already plague our world.
  - The United Nations – an inclusive, equitable and universal platform for coordination on AI governance – is now fully engaged in that conversation.
  - Universality means one country or group of countries cannot dominate.
  - The Advisory Body will consider how to link and coordinate with various initiatives that are already underway — including by the EU, and the G7 Hiroshima Process.

G7 Hiroshima AI Process / Global Partnership on Artificial Intelligence GPAI

- Global Partnership on Artificial Intelligence Summit 2023 (12.-14.12.2023)
- Data Governance Working Group Report

G7 Leaders' Statement on the Hiroshima AI Process
October 30, 2023

We, the Leaders of the Group of Seven (G7), stress the innovative opportunities and transformative potential of advanced Artificial Intelligence (AI) systems, in particular, foundation models and generative AI. We also recognize the need to manage risks and to protect individuals, society, and our shared principles including the rule of law and democratic values, keeping humankind at the center. We affirm that meeting those challenges requires shaping an inclusive governance for artificial intelligence. Building on the progress made by relevant ministers on the Hiroshima AI Process, including the G7 Digital & Tech Ministers' Statement issued on September 7, 2023, we welcome the Hiroshima Process International Guiding Principles for Organizations Developing Advanced AI Systems and the Hiroshima Process International Code of Conduct for Organizations Developing Advanced AI Systems (Attached). In order to ensure both documents remain fit for purpose and responsive to this rapidly evolving technology, they will be reviewed and updated as necessary, including through ongoing inclusive multistakeholder consultations. We call on organizations developing advanced AI systems to commit to the application of the International Code of Conduct.

We instruct relevant ministers to accelerate the process toward developing the Hiroshima AI Process Comprehensive Policy Framework, which includes project based cooperation, by the end of this year, in cooperation with the Global Partnership for Artificial Intelligence (GPAI) and the Organisation for Economic Co-operation and Development (OECD), and to conduct multi-stakeholder outreach and consultation, including with governments, academia, civil society, and the private sector, not only those in the G7 but also in the economies beyond, including developing and emerging economies. We also ask relevant ministers to develop a work plan by the end of the year for further advancing the Hiroshima AI Process.

We believe that our joint efforts through the Hiroshima AI Process will foster an open and enabling environment where safe, secure, and trustworthy AI systems are designed, developed, deployed, and used to maximize the benefits of the technology while mitigating its risks, for the common good worldwide, including in developing and emerging economies with a view to closing digital divides and achieving digital inclusion. We also look forward to the UK's AI Safety Summit on November 1 and 2.

Europarat, Committee on Artificial Intelligence (CAI)

Übereinkommen des Europarats über künstliche Intelligenz, Menschenrechte, Demokratie und Rechtsstaatlichkeit

46 Mitgliedsstaaten, 11 Beobachterstaaten, EU, UN, OECD, KSZE, Wirtschaft, Akademia und Zivilgesellschaft

Januar 2023:
Publikation des revised zero drafts

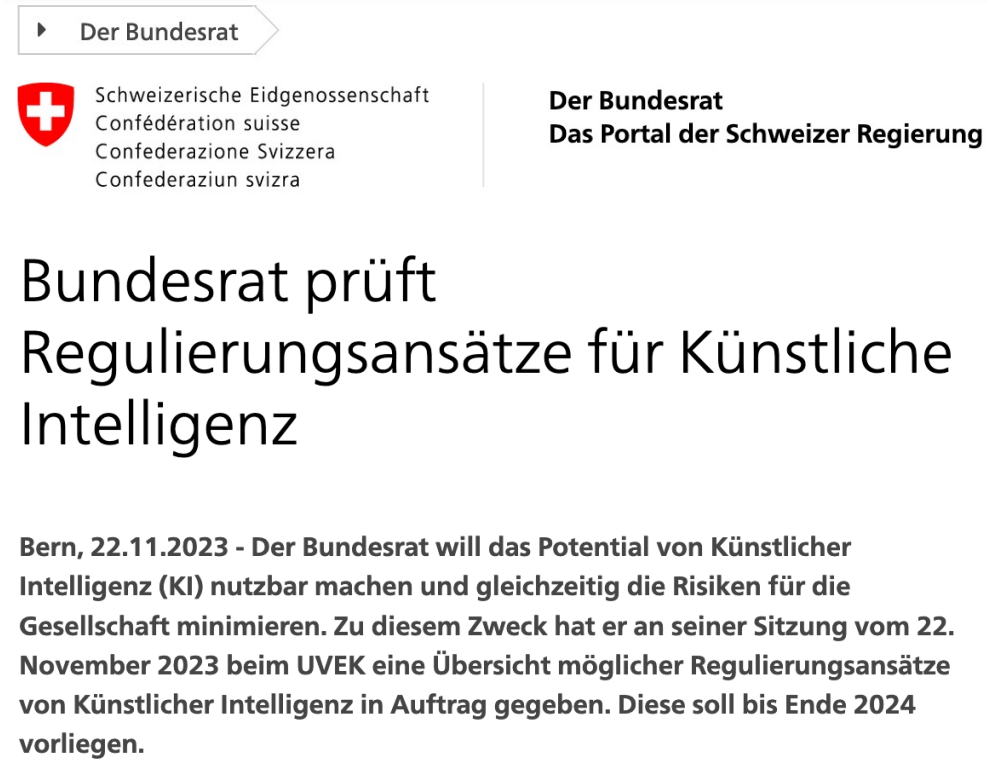
Juli 2023:
Publikation des consolidated working drafts

Letztes Treffen: 6.-8.12.2023
Nächstes Treffen: 23.-26.1.2024

The Committee of Ministers has tasked the Committee on Artificial Intelligence (CAI) with elaborating a **legally binding instrument on the development, design and application of AI systems** based on the Council of Europe's standards on human rights, democracy and the rule of law, based on such basic principles. At the same time, the instrument shall be conducive to innovation.

The focus of the [Framework] Convention will be on **ensuring the continued seamless application of human rights and the principle of rule of law in contexts where AI systems assist or replace human decision-making or perform other tasks relevant in such contexts**. Moreover, AI systems shall only be used in such a way that they do not, directly or indirectly, endanger or undermine democratic processes.

Schweiz



Der Bundesrat

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Der Bundesrat
Das Portal der Schweizer Regierung

Bundesrat prüft Regulierungsansätze für Künstliche Intelligenz

Bern, 22.11.2023 - Der Bundesrat will das Potential von Künstlicher Intelligenz (KI) nutzbar machen und gleichzeitig die Risiken für die Gesellschaft minimieren. Zu diesem Zweck hat er an seiner Sitzung vom 22. November 2023 beim UVEK eine Übersicht möglicher Regulierungsansätze von Künstlicher Intelligenz in Auftrag gegeben. Diese soll bis Ende 2024 vorliegen.

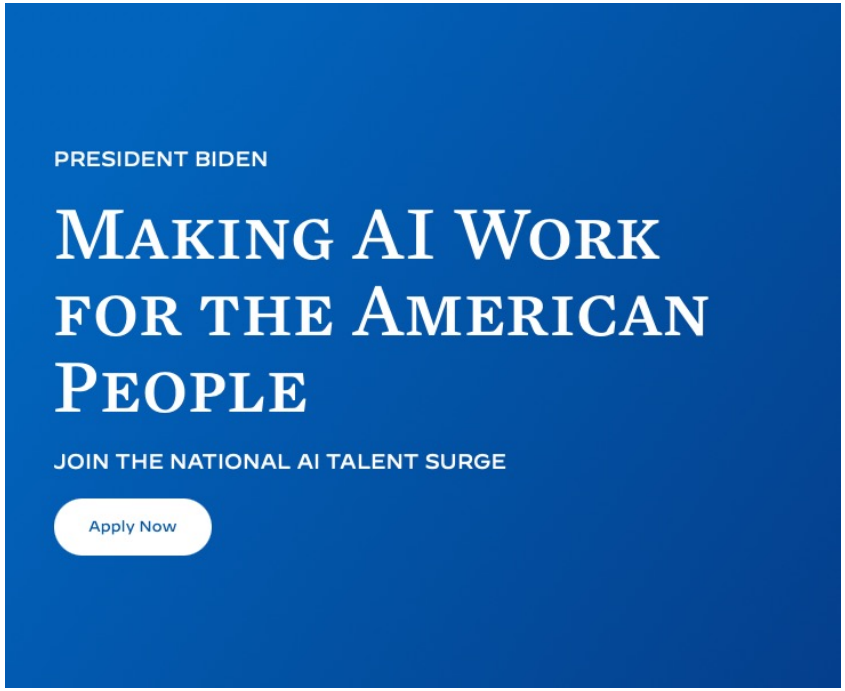
25. November 2020:
Leitlinien «Künstliche Intelligenz» für die Bundesverwaltung

13. April 2022:
Bericht des EDA zur internationalen Regulierung

14. Dezember 2022:
Erste Evaluation der Leitlinien zur künstlichen Intelligenz

USA

- Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence, October 30, 2023
- Blueprint for an AI Bill of Rights, 2022
- NIST, Artificial Intelligence Risk Management Framework (AI RMF 1.0, 2023)



AI.gov

Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence, October 30, 2023

New Standards for AI Safety and Security

- Require that developers of the most powerful AI systems **share** their safety **test results** and other critical information with the U.S. government
- **Develop standards**, tools, and tests to help ensure that AI systems are safe, secure, and trustworthy
- **Protect** against the risks of using AI to engineer dangerous biological materials
- Establish an advanced cybersecurity program to **develop AI tools** to find and fix vulnerabilities in critical software
- Order the development of a National Security Memorandum that directs further actions on AI and security

Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence, October 30, 2023

Protecting Americans' Privacy

- Protect Americans' privacy by prioritizing federal support for accelerating the development and use of privacy-preserving techniques
- Strengthen privacy-preserving research and technologies, such as cryptographic tools that preserve individuals' privacy, by funding a Research Coordination Network
- Evaluate how agencies collect and use commercially available information
- Develop guidelines for federal agencies to evaluate the effectiveness of privacy-preserving techniques

Advancing Equity and Civil Rights

- Provide clear guidance to landlords, ... to keep AI algorithms from being used to exacerbate discrimination.
- Address algorithmic discrimination through training, technical assistance, and coordination ...

Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence, October 30, 2023

Standing Up for Consumers, Patients, and Students

- Advance the responsible use of AI in healthcare and the development of affordable and life-saving drugs
- Shape AI's potential to transform education

Supporting Workers

Promoting Innovation and Competition

- Catalyze AI research across the United States through a pilot of the National AI Research Resource—a tool that will provide AI researchers and students access to key AI resources and data
- Promote a fair, open, and competitive AI ecosystem
- Use existing authorities to expand the ability of highly skilled immigrants and nonimmigrants with expertise in critical areas to study, stay, and work in the United States

Advancing American Leadership Abroad

- Expand bilateral, multilateral, and multistakeholder engagements to collaborate on AI. The State Department, in collaboration, with the Commerce Department will lead an effort to establish robust international frameworks for harnessing AI's benefits and managing its risks and ensuring safety. In addition, this week, Vice President Harris will speak at the UK Summit on AI Safety, ...

- Accelerate development and implementation of vital AI standards

Ensuring Responsible and Effective Government Use of AI

Blueprint for an AI Bill of Rights, 2022

SAFE AND EFFECTIVE SYSTEMS

- **You should be protected from unsafe or ineffective systems.**

ALGORITHMIC DISCRIMINATION PROTECTIONS

- **You should not face discrimination by algorithms and systems should be used and designed in an equitable way**

DATA PRIVACY

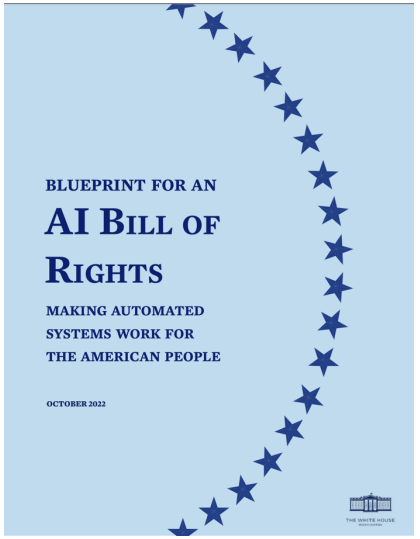
- **You should be protected from abusive data practices via built-in protections and you should have agency over how data about you is used**

NOTICE AND EXPLANATION

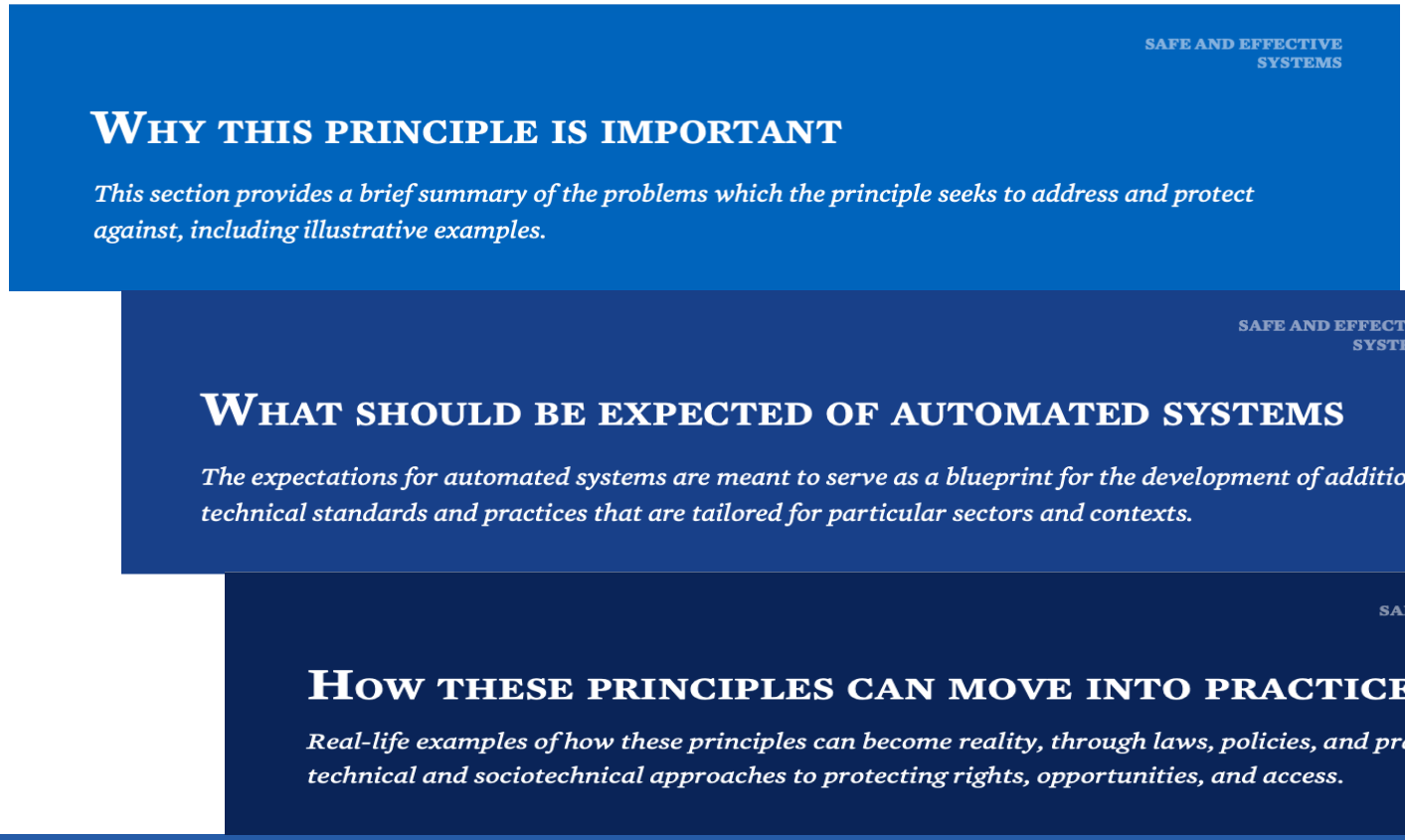
- **You should know that an automated system is being used and understand how and why it contributes to outcomes that impact you**

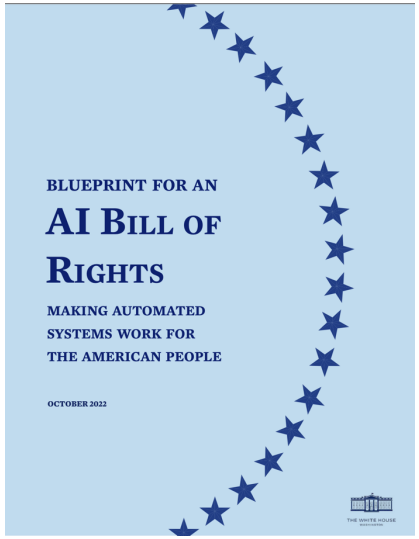
HUMAN ALTERNATIVES, CONSIDERATION, AND FALLBACK

- **You should be able to opt out, where appropriate, and have access to a person who can quickly consider and remedy problems you encounter**



Blueprint for an AI Bill of Rights, 2022





NIST, Artificial Intelligence Risk Management Framework (AI RMF 1.0), 2023

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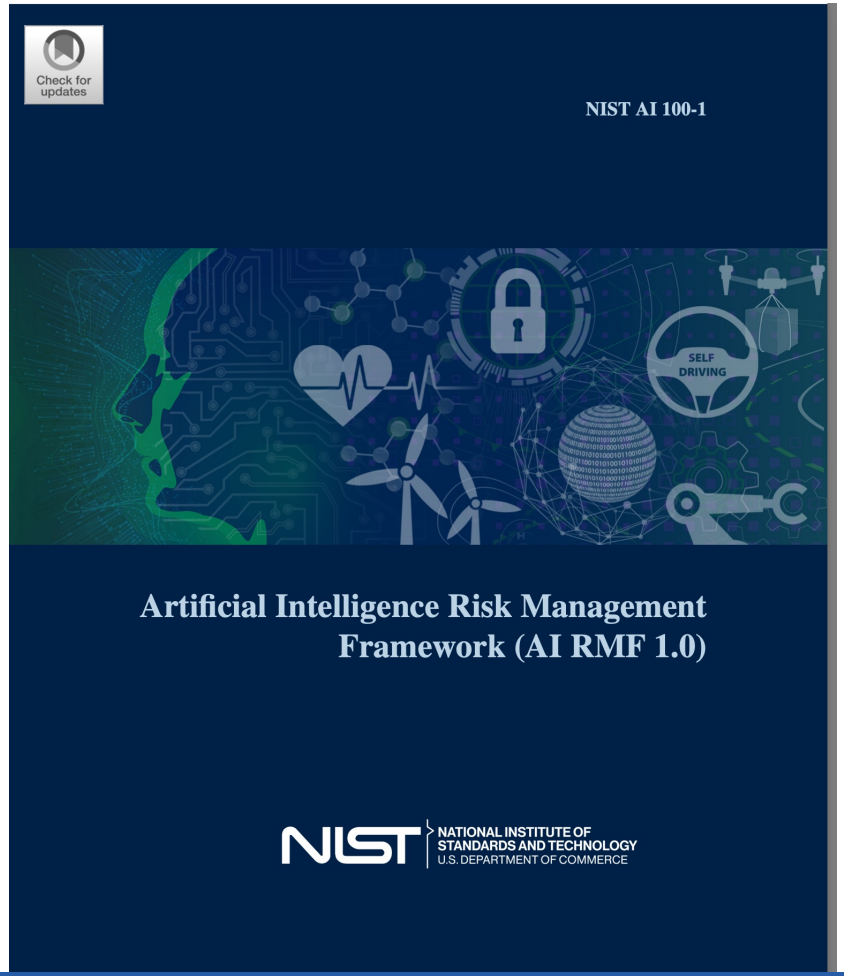

NIST, Artificial Intelligence Risk Management Framework (AI RMF 1.0), 2023, p. 5

- Understanding and Addressing Risks, Impacts, and Harms
- Risk Measurement
- Risk Tolerance
- Risk Prioritization
- Organizational Integration and Management of Risk

Fig. 1. Examples of potential harms related to AI systems. Trustworthy AI systems and their responsible use can mitigate negative risks and contribute to benefits for people, organizations, and ecosystems.

1.2 Challenges for AI Risk Management

Several challenges are described below. They should be taken into account when managing risks in pursuit of AI trustworthiness.

1.2.1 Risk Measurement

AI risks or failures that are not well-defined or adequately understood are difficult to measure quantitatively or qualitatively. The inability to appropriately measure AI risks does not imply that an AI system necessarily poses either a high or low risk. Some risk measurement challenges include:

Two more things (still USA)

Company Commitments

The Biden-Harris Administration has secured voluntary commitments from seven companies, joined by eight additional companies on the leading edge of AI, to help move toward safe, secure, and trustworthy development of AI technology.

National AI R&D Strategic Plan

The National AI R&D Strategic Plan outlines key priorities and goals for federal investments in AI research and development.

Biden-Harris Administration Secures Voluntary Commitments from Leading Artificial Intelligence Companies to Manage the Risks Posed by AI (July 21, 2023)

THE WALL STREET JOURNAL.

EXCLUSIVE

Microsoft Targets Nuclear to Power AI Operations

The tech company aims to expedite the nuclear regulatory process using AI

By Jennifer Hiller Follow

Dec. 12, 2023 10:00 am ET