



McCloy Fellowship on Global Trends Report

**“German and U.S. Perspectives on AI Governance  
– Between Ethics and Innovation”**

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## I. Introduction

2023 was a pivotal year for Artificial Intelligence (AI). Dramatic improvements in large-language models, as epitomized by ChatGPT, have arguably led to an “AI revolution.” The promises attached to AI are enormous. At the same time, the pace of social and economic change leaves policymakers scrambling for how to leverage the opportunities of AI, while managing its risks.

Germany originally passed its National AI Strategy under former Federal Chancellor Angela Merkel in November 2018. The strategy aims to make Germany a leading hub in AI by investing in research and development and creating economic opportunities for small- and medium-sized companies (SMEs) and startups in particular. According to the German government, the stakes of AI governance are high: “This is about individual liberties, autonomy, personal rights, the individual's freedom of choice. But also new markets for German companies, global competition, especially with the U.S. and China, and Germany's future as an industrial location.” At a regulatory level, German policymakers, representing the German government’s position at the Council of the EU (Council), are currently negotiating the proposed EU AI Act (EU AIA), which aims to ensure that the providers and users of high-risk AI systems incorporate safety and ethics by design.

Meanwhile, U.S. regulators and executive agencies are pressing ahead with a variety of AI governance measures, too. In February 2019, Former President Donald J. Trump issued an Executive Order (EO) on Maintaining American Leadership in Artificial Intelligence in which he directed federal agencies to avoid regulatory overreach to promote AI innovation. The current administration under U.S. President Joe Biden shares the drive to foster AI innovation but is also intent on mitigating AI risks:

According to President Biden, the use of data and automated technologies “must not come at the price of civil rights or democratic values.” In October 2022, the White House Office of Science and Technology Policy (OSTP) published a Blueprint for an AI Bill of Rights, identifying five principles to preserve civil rights in the development and deployment of automated systems. Finally, in October 2023, the Biden administration also issued an EO on AI, promoting a coordinated federal government-wide approach to AI across all executive agencies and departments.

Policymakers in both Germany and the U.S. are concerned with making sure that the development and deployment of AI follows ethical standards, while at the same time fostering research and innovation. The question then becomes what those ethical and economic principles should be and whether and to what extent they can be harmonized at a transatlantic level. This question becomes even more urgent, considering that countries with competing social and economic systems, such as China, are pressing ahead with their own AI development principles, too.

The following research paper compares and critically evaluates German and U.S. approaches to the governance and regulation of AI. It is based on in-depth policy research as well as dozens of interviews with policymakers and professionals, as well as academics, members of the private sector, and civil society, in both Germany and the U.S. These conversations were held in September and October 2023 on a background basis only to enable research participants to speak more freely.

The research paper begins by providing an overview of the relevant actors and institutions shaping AI governance in Germany and the U.S. The research paper then compares German and U.S. approaches to AI regulation. In the German case, this is mainly channeled through the EU AIA. In the U.S., by contrast, efforts at shaping guiding principles around the development and deployment of AI are primarily driven by the executive branch. The paper then evaluates the extent to which German and U.S. approaches to the ethics and governance of AI align. Finally, the paper concludes by sharing some perspectives on where Germany and the U.S. could further strengthen their collaboration to set global standards for AI in accordance with liberal-democratic values.

## II. AI Governance in Germany

Before introducing the actors and institutions involved in AI governance in Germany, it is important to understand how the responsibilities for digital transformation, or *Digitalisierung*, are distributed across the German government more generally.

First, there is no dedicated federal *Digitalministerium* in Germany. While there were discussions around bundling competencies when the coalition government was initially formed, a proposal that had strong backing from both German industry and the general public, the idea was ultimately dropped. The reasons range from practical to political. On the practical side, insiders suggest that it would have been difficult to find yet another office space in central Berlin. On the political side, existing ministries would have had to cede competent staff to the new ministry, which few, if any, were willing to accept.

Instead, the main responsibility for *Digitales* formally remained within the Federal Ministry for Digital and Transport (BMDV). At the same time, as an inherently crosscutting topic, other ministries, including the Federal Ministry for Economic Affairs and Climate Action (BMWK), the Federal Ministry of Justice (BMJ), the Federal Ministry of Labor and Social Affairs (BMAS), the Federal Ministry of Education and Research (BMBF), and the Federal Ministry of the Interior and Community (BMI) are engaged on different aspects of policymaking related to the digital sphere too. This “chaos of responsibilities” has made it difficult for the German government to agree on and externally represent a coherent digital strategy internally.

The second important aspect to note is that Germany is currently governed by a coalition spearheaded by the Social Democratic Party (SPD) under Chancellor Olaf Scholz, the Green Party (Alliance 90/The Greens), and the Liberal Party (FDP). Consequently, different ministries are assigned to different political parties too. The BMDV and BMBF, for instance, are led by the FDP, the BMWK by the Greens, and the BMAS and BMI by the SPD. In practice, this means that different ministries may represent different policy positions, too. This has resulted in several high-profile public disputes, so much so that the current German administration has been described as a *Knatschkoalition*.

This has concrete, practical implications for AI governance. For instance, while the BMWK and BMJ are *federführend* (leading) the negotiations on the EU AIA, the BMWK, BMAS, and BMBF are the main responsible parties in defining the overall national approach. The latter builds upon the AI strategy of the predecessor government that was originally published in 2018. According to the BMAS, this strategy is due for an imminent update currently being aligned with the OECD.

In the meantime, the BMBF published a separate AI action plan, partly as a reaction to the boom

in generative AI, which is intended to drive research and innovation, foster cross-European collaboration, and expand digital infrastructure and education.

Bernhard Rohleder, the managing director of Bitkom, the most prominent German industry association in the digital sphere, met the proposal with skepticism, pointing out that “We adopted an AI strategy back in 2018 and were among the pioneers in Europe and globally – but implementation has been lacking.” Finally, the BMDV is representing Germany at the international level in the G7 Hiroshima Process on Generative Artificial Intelligence (GPAI) at the OECD.

### **III. AI Regulation in Germany**

Germany is not planning to regulate AI at the national level; instead, it will follow the European approach. The EU AIA promises to be the first comprehensive international attempt at regulating AI. It is currently being negotiated between the European Commission, the European Parliament, and the Council as part of the so-called trilogue, the EU’s ordinary legislative procedure. As mentioned above, the policy positions of the German government in the Council are primarily being devised by the BMWK and BMJ, though depending on the issue being discussed, other ministries are regularly consulted, too.

The EU AIA is a risk-based regulation, distinguishing between minimal to no risk, limited, high-risk, and prohibited-risk AI systems. Providers of high-risk AI systems, i.e., AI systems “intended to be used as a safety component of a product,” and AI systems that fall into one or more categories of an EU-defined list will face the most onerous requirements. These requirements include putting in place a quality management system, which includes a risk management system, as well as requirements that pertain to data governance, record-keeping, transparency, human oversight and accuracy, robustness, and cybersecurity.

The EU-defined list of high-risk AI systems includes:

1. Biometric systems;
2. AI systems used in critical infrastructure;
3. Education and vocational training;
4. Employment;
5. The distribution of public benefits;
6. Law enforcement;
7. Migration, asylum, and border management; and
8. The administration of justice.

The most recent amendments proposed by the European Parliament in May 2023 have extended the list of high-risk AI systems but have also raised the bar for AI systems to qualify as high-risk, namely only if, “in light of their intended purpose, they pose a significant risk of harm to the health and safety or the fundamental rights of persons and, where the AI system is used as a safety component of a critical infrastructure, to the environment.” These amendments are contentious and are currently still under negotiation as part of the trilogue procedure.

The EU AIA has been widely criticized by business leaders and civil society representatives alike. Business and technology leaders expressed concern over the EU AIA being overly rigid and threatening to put Europe “on the sidelines,” particularly when it comes to the application of

generative AI. They suggest that European legislators should work toward adopting broad principles and taking a transatlantic approach instead. Civil society representatives, on the other hand, worry that the EU AIA does not do enough to protect fundamental rights by creating too many loopholes and exemptions. Underlying both sides seems to be a concern that the EU AIA is overly complex without being futureproof: Instead of focusing on protections against concrete harms, the EU AIA over indexes on specific technologies and industries, which may or may not harbor the greatest individual and societal risks. The mere fact that EU legislators had to scramble to incorporate the concerns specifically attached to generative AI following the widespread adoption of ChatGPT already suggests that the EU AIA is ill-equipped to adapt to rapid technological change.

In an interview in October 2023, Kai Zenner, Head of Office and Digital Policy Adviser for MEP Axel Voss in the European Parliament, gave the negotiations around the EU AIA a “50-50” chance of concluding positively. The main sticking points that remain include

1. The list of prohibited AI systems in Art. 5 of the regulation, particularly with regard to the use of AI in law enforcement;
2. The definition and scope of high-risk AI systems;
3. The extent to which enforcement of the AIA should be centralized at the European or delegated to the national level; and
4. The regulation of foundation models and general-purpose AI systems (GPAIS).

In early November 2023, the latter, in particular, led to an impasse in the negotiations as Germany, France, and Italy pushed back on any kind of regulation of foundation models in the EU AIA, advocating for voluntary self-regulation instead. This led frustrated representatives of the European Parliament to end a technical meeting intended to reach an agreement hours earlier because “there was nothing else to discuss.” At the time of publication of this research paper, whether or not an agreement on the EU AIA will be reached before the end of the year remains fundamentally unclear.

#### **IV. AI Governance in the U.S.**

In the U.S., by contrast, AI governance is primarily driven by the executive branch. Unlike in Germany, the executive branch in the U.S. is traditionally led by one party only, currently the Democratic Party under U.S. President Joe Biden. This, in turn, means that the federal government can define the general direction of AI governance that different executive offices and federal departments will pursue.

The first attempt at AI governance at the federal level was made by the previous administration under President Donald J. Trump, who issued an EO in February 2019 on Maintaining American Leadership in Artificial Intelligence. The EO is comparatively short and high-level and primarily focused on fostering AI innovation. It resulted in a Memorandum issued by the Office of Management and Budget (OMB) directing federal agencies to devise standards that facilitate the development of “reliable, robust, and trustworthy systems that use AI technologies.” At the same time, federal agencies were asked to “avoid regulatory or non-regulatory actions that needlessly hamper AI innovation and growth.” Concurrently, and along those same lines, U.S. Congress passed the National AI Initiative Act of 2020 (NAIIA), the purpose of which was to “ensure continued United States leadership in artificial intelligence research and development.”

While the Biden administration shares the commitment to promoting innovation, it also elevated the protection of civil rights to a policy priority in the governance and ethics of AI. Toward that end, the White House, under the leadership of the acclaimed scholar, writer, and policy advisor Dr. Alondra Nelson, developed the AI Bill of Rights in October 2021, the goal of which was to “clarify the rights and freedoms we expect data-driven technologies to respect.” Following a public consultation, the following five core principles were identified:

1. Protection from unsafe or ineffective systems;
2. Protection from algorithmic discrimination;
3. Protection from unsafe data practices;
4. The right to receive notice and explanation whenever an automated system is being used; and
5. The ability to access a human alternative to an automated system.

Furthermore, the National Institute of Standards and Technology (NIST), which pertains to the Department of Commerce, created a Trustworthy & Responsible Artificial Intelligence Resource Center (AIRC), and worked together with interested public and private sector representatives to develop an AI Risk Management Framework (AI RMF), which was published in January 2023. The AI RMF effectively functions as a resource for both the government and the private sector for how to incorporate considerations of trustworthiness into the development and deployment of AI. For AI systems to be considered trustworthy according to the AI RMF, they need to be

1. Valid and reliable;
2. Safe;
3. Secure and resilient;
4. Accountable and transparent;
5. Explainable and interpretable;
6. Privacy-enhanced; and
7. Fair, with harmful bias managed.

The AI RMF is a direct implementation of the NAIIA mentioned above.

The private sector was also called upon to play an active role in AI governance. In July 2023, the Biden-Harris administration secured the commitment of seven leading AI companies – Amazon, Anthropic, Google, Inflection, Meta, Microsoft, and OpenAI – that they will help ensure the development and deployment of safe, secure, and transparent AI. Specifically, the companies committed to ensuring products are safe before introducing them to the public through extensive testing and information sharing, building systems that put security first by meeting appropriate cybersecurity standards and facilitating third-party testing, and earning the public’s trust by investing in transparency, accountability, and non-discrimination, while at the same time prioritizing the investment in AI systems that benefit the public good. In September 2021, eight further technology companies – namely, Adobe, Cohere, IBM, Nvidia, Palantir, Salesforce, Scale AI, and Stability – followed the initial seven to sign the commitments too.

Finally, President Biden issued a series of EOs aimed, either in part or in full, at advancing the development and deployment of trustworthy AI in the federal government. For instance, in February 2023, President Biden signed an EO on Further Advancing Racial Equity and Support

for Underserved Communities Through the Federal Government, which mandates explicitly that “[w]hen designing, developing, acquiring, and using artificial intelligence and automated systems in the Federal Government, agencies shall do so, consistent with applicable law, in a manner that advances equity.” More comprehensively, in late October 2023, President Biden published an EO on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence (AI EO). The AI EO outlines eight guiding principles and priorities that executive agencies and departments are asked to adhere to, and specifically that:

1. AI must be safe and secure;
2. Promoting responsible innovation, competition, and collaboration will allow the United States to lead in AI and unlock the technology’s potential to solve some of society’s most difficult challenges;
3. The responsible development and use of AI require a commitment to supporting American workers;
4. AI policies must be consistent with advancing equity and civil rights;
5. The interests of Americans who increasingly use, interact with, or purchase AI and AI-enabled products in their daily lives must be protected;
6. Americans’ privacy and civil liberties must be protected as AI continues advancing;
7. It is important to manage the risks from the Federal Government’s own use of AI and increase its internal capacity to regulate, govern, and support the responsible use of AI to deliver better results for Americans; and
8. The Federal Government should lead the way to global societal, economic, and technological progress, as the United States has in previous eras of disruptive innovation and change.

Furthermore, the AI EO directs specific agencies, including the Secretary of Commerce, the Secretary of Defense, the Secretary of Homeland Security, the Secretary of the Treasury, the Secretary of Energy, the Secretary of Transportation, the Director of OMB, the Director of OSTP, and many others to take actions within ambitious timelines that either mitigate AI risks or facilitate AI adoption. Facilitating AI adoption is an important part of the EO, also in marked contrast to the EU AIA. Whereas the EU AIA focuses nearly exclusively on managing risks, the EO mandates investing not only in relevant technology but also in relevant skills, which includes implementing changes to the immigration system to facilitate the training, hiring, and retaining of skilled foreign nationals. The AI EO positions the U.S. as a leader in the international sphere. It is no coincidence that the AI EO was published in the same week as the UK AI Summit and on the very same day as the G7 Hiroshima Process International Guiding Principles and Code of Conduct for organizations developing advanced AI systems.

## **V. AI Regulation in the U.S.**

Based on more than a dozen conversations with legislators, academics, and representatives across civil society, it seems unlikely that the U.S. will pass comprehensive federal legislation aimed at imposing binding rules for the development and deployment of AI comparable to the EU AIA anytime soon. The reason for this is twofold: First, any such law would require sufficient support in Congress, which has proven dysfunctional and mired in partisan distractions of late. The more sweeping the law, the less likely it will come to pass in the current political environment, particularly considering the rapid approach of the 2024 U.S. presidential election. That said, there are bipartisan initiatives in the Senate to develop high-level governance principles for AI. As part of his SAFE Innovation Framework, Senate Majority Leader Chuck



Schumer (D-NY), for instance, announced a series of closed-door AI Insight Forums aimed at educating legislators about AI with a view to enabling better-informed legislation. The initiative enjoys bipartisan support, notably from Sens. Todd Young (R-IN), Mike Rounds (R-SD), and Martin Heinrich (D-NM). Concurrently, Senate Minority Whip John Thune (R-SD) has launched a competing bipartisan initiative entitled AI Research, Innovation and Accountability Act of 2023, with Amy Klobuchar (D-MN) being the lead Democrat to support it. Thune described his bill as “light-touch” as opposed to what he described as “the more heavy-handed regulatory approaches I suspect will be suggested by Sen. Schumer and others who have designs on the issue.”

Second, there is not necessarily a desire to pass regulation as sweeping as the EU AIA, because there is broad alignment across the political spectrum that it makes more sense to define general principles for industry to follow first and then pass sector-specific legislation second. The theory is that this will facilitate governance and enforcement as existing sector-specific regulatory agencies, with whom industry already has working relationships, can be empowered to regulate in the AI space as well.

The overarching sentiment expressed on both sides of the political aisle was that overregulating a poorly defined technology could be detrimental to the innovative potential of the U.S. industry. This, in turn, could have ripple effects for the U.S. national security as well. In virtually every single interview held in the U.S., the topic of China invariably came up, be it in the realm of economic competition or defense. The concern around China is also evidenced in U.S. legislation targeting exports of chips and semiconductor manufacturing equipment. The specific goal of these export controls is to advance U.S. interests in national security and defense. By contrast, China did not come up a single time in conversations in Germany. This may be because the EU AIA was top of mind for most conversation partners at the time. That said, it may also reflect fundamentally different attitudes toward China, considering the longstanding dependencies of the German export industry, among others, on the Chinese market.

While there is no prospect of a comprehensive AI bill comparable to the EU AIA passing at the federal level, regulatory interventions are already being pursued at a sectoral level, though most of these consist of reinterpreting existing law in light of AI and seeking out relevant enforcement actions accordingly. For instance, the Consumer Financial Protection Bureau (CFPB), the Department of Justice’s Civil Rights Division, the Equal Employment Opportunity Commission (EEOC), and the Federal Trade Commission (FTC) issued a joint statement in April 2023, reiterating that they have the authority to, and will, enforce consumer and civil liberties protections in the context of AI and automated systems. The CFPB has since published guidance on legal requirements with regard to the use of AI in the denial of credit and adverse changes to credit conditions. The EEOC has issued guidelines with regard to AI in the context of the Americans with Disabilities Act (ADA) and employment selection procedures. And FTC Chair Lina Khan has published an op-ed in the New York Times, confirming that “the Federal Trade Commission is taking a close look at how we can best achieve our dual mandate to promote fair competition and to protect Americans from unfair or deceptive practices” considering the rapid development and deployment of AI. The FTC has already published extensive guidance toward that end, including warnings to aim for truth, fairness, and equity in the use of AI; to keep AI claims in check; and to prevent harm from AI voice cloning. Further agency-level action can be expected in accordance with the requirements of the AI EO. One concrete example that has already been published in the immediate aftermath of the AI EO is the OMB’s Proposed Memorandum for the Heads of Executive Departments and Agencies on Advancing Governance,

Innovation, and Risk Management for Agency Use of Artificial Intelligence. Here the OMB mandates, among others, that agencies must designate a Chief AI Officer (CAIO) and devise concrete strategies that advance AI innovation and mitigate risks.

## VI. Evaluation

As the above analysis has demonstrated, there are significant differences in both the institutional setup and regulatory approach of Germany and the U.S. when it comes to the ethics and governance of AI. In Germany, the executive branch is shared between three parties that must continuously negotiate policy positions. In the U.S., the executive branch can drive streamlined action on AI. In Germany, AI regulation is coordinated at the European level, where horizontal legislation is being proposed that primarily focuses on mitigating AI risks. In the U.S., by contrast, no federal AI legislation that imposes binding rules on the development and deployment of AI is expected in the immediate future. This is not only due to a bipartisan gridlock but also the lack of any desire to pass a horizontal law sweeping the EU AIA, among others, due to concerns that this would hamper U.S. competitiveness. Instead, high-level principles such as the AI Bill of Rights and NIST AI RMF were defined at the federal level, followed by an EO instructing federal agencies to develop strategies and issue guidance for how to best interpret and enforce existing laws to mitigate AI risks at the sectoral level. Contrary to the EU AIA, the AI EO is also noticeably more focused on fostering AI innovation, including by actively encouraging federal agencies to leverage new technologies for the public good, and investing in hiring and retaining AI talent. This is partly because the EU has much less leeway when it comes to spending. As Columbia law professor Anu Bradford points out in her recently published book *Digital Empires*, “The EU’s budget amounts to only around 1 percent of its Gross National Income,” whereas “US federal government spending regularly exceeds 20 percent of GDP.” Of course, this does not preclude Germany from investing in new technologies and promoting high-skilled immigration independently, a policy priority that should be pursued with urgency considering the widespread *Fachkräftemangel* (skilled labor shortage) that is likely to increase dramatically over the next few years. Some tentative steps in the right direction have been taken: In November 2023, the *Zukunftsfinanzierungsgesetz* (Future Financing Law) was passed, which makes it significantly easier for companies to take advantage of employee stock option plans (ESOP) to attract talent.<sup>74</sup> Similarly, in November 2023, the first stage of Germany’s new *Fachkräfteinwanderungsgesetz* (Skilled Immigration Act) came into force. The law intends to make it easier for workers with relevant vocational skills to seek employment within Germany, as opposed to having to secure a job offer before relocating. The law leverages a point-based system, which takes into consideration not only professional qualifications but also German language skills. The next two stages are expected to be implemented in March and June 2024.

At the same time, when it comes to high-level principles around the governance and ethics of AI, Germany and the U.S. are aligned in the sense that both agree that AI not only harbors opportunities but also risks that need to be contained in accordance with liberal-democratic values. It is striking, for instance, to see that there are significant similarities between the list of high-risk AI use cases of the EU AIA and the list of safety- and rights-impacting AI in the OMB Memorandum, even though the respective approach to regulation and enforcement might differ. Germany and the U.S. are also working side-by-side at the level of the G7 and cooperating on further multilateral projects such as the Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy. This cooperation is all the more important in light of the rise of competing AI powers such as China, which is propagating an alternative ethics of AI based on socialist, not liberal-democratic, values.

## VII. Conclusion

The above report has compared and contrasted the German and American approaches to AI governance and regulation based on in-depth research and interviews with dozens of policymakers and professionals, as well as members of the private sector and civil society, in both Germany and the U.S. While it has found that both the institutional setups and regulatory approaches differ, Germany and the U.S. continue to share a common commitment to the underlying ethics of AI, namely that AI should be governed in accordance with liberal-democratic values. But this commitment is as laudable as it is fragile. Populist forces are on the rise in both Germany and the U.S. that promulgate nationalist and authoritarian values antithetical to a multilateral approach. Hence, the window for laying the groundwork for lasting transatlantic cooperation is now.

Germany and the U.S. would be well advised to invest in further strengthening transatlantic cooperation on AI not only in terms of policy but also practice, e.g., by fostering joint initiatives on AI research and innovation. Creating mutually beneficial economic opportunities could also help decrease the German dependency on China. But Germany should also follow the lead of the U.S. in devising its own AI moonshot initiative, or “German Traum,” as Sebastian Dettmers has memorably called it in his recent book *Arbeiterlosigkeit*. The U.S., in turn, can benefit from the learnings of the EU AIA when further refining its regulatory strategy at the sectoral level down the road. To conclude, the window of opportunity to shape the future of AI is now. Germany and the U.S. should work together to set global standards for the development and deployment of AI in accordance with liberal-democratic values before it closes.

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