PUBLIC SUBMISSION

As of: March 21, 2025 Received: March 14, 2025 Status: Tracking No. m88-zw0k-6kl0 Comments Due: March 15, 2025 Submission Type: API

Docket: NSF_FRDOC_0001 Recently Posted NSF Rules and Notices.

Comment On: NSF_FRDOC_0001-3479 Request for Information: Development of an Artificial Intelligence Action Plan

Document: NSF_FRDOC_0001-DRAFT-1371 Comment on FR Doc # 2025-02305

Submitter Information

Email: Organization: AI Alliance

General Comment

Please find the AI Alliance's comments in the attached document.

Attachments

AI Alliance Comment to NSF_OSTP AI Action Plan

AI Alliance Comment in Response to the RFI on the Development of an AI Action Plan

Submitted by the AI Alliance March 14th, 2025 90 FR 9088; 2025-02305

About the AI Alliance: The <u>AI Alliance</u> is a community of organizations, large and small companies, academic and non-profit institutions, representing developers, researchers, and business leaders who are focused on accelerating and disseminating open innovation across the AI technology landscape. They aim to improve foundational capabilities, safety, security, and trust in AI, and to responsibly maximize benefits to people and society everywhere. The AI Alliance brings together a critical mass of compute, data, tools, and talent to accelerate open innovation in AI. The Alliance has already played a pivotal role in advancing community driven projects in specific technology areas such as AI Evaluation Taxonomy, Domain-specific Risk Assessments, the launch of Safety BAT (an interactive benchmark leaderboard on Hugging Face), etc. to support Testing and Evaluation of general purpose and specialized AI applications. These initiatives not only bolster trust in AI but also reinforce the U.S. commitment to open, innovation-driven leadership in the global AI landscape.

We value the opportunity to provide input to the National Science Foundation's (NSF) and Office of Science and Technology Policy's (OSTP) request for information regarding the "Development of an Artificial Intelligence Action Plan."¹

The open-source community broadly agrees that traditional software-focused definitions of "open-source" licensing need modification to be effectively applied to AI models or systems. Since there is a lively ongoing discussion in the technical community about defining "open-source AI", we believe it is premature to adopt a formal definition of "open-source AI" here. In lieu of a formal definition, we use the words "open" and "openness" below to refer to conditions in which foundation model weights are publicly available under a permissive license that allows for research and commercial use.

1. An open source AI ecosystem is good for the US economy

There are a number of compelling reasons why the Administration should prioritize the development of an open AI ecosystem. First, the economic benefits of AI will accrue most when open foundation models are made widely available. Foundation models will increase worker productivity and grow economies. According to Goldman Sachs Research, the widespread adoption of foundation models could increase U.S. productivity by 1.5% on an annual basis.²

¹ The content in this response is provided by the AI Alliance and is not intended to reflect the views of any particular member organization. This document is approved for public dissemination. The document contains no business-proprietary or confidential information. Document contents may be reused by the government in developing the AI Action Plan and associated documents without attribution.

² Goldman Sachs, Research, AI may start to boost US GDP in 2027, Nov. 7, 2023,

https://www.goldmansachs.com/intelligence/pages/ai-may-start-to-boost-us-gdp-in-2027.html. ("Generative artificial intelligence has the potential to automate many work tasks and eventually boost global economic growth ... In the baseline scenario, the Goldman Sachs Research economists estimate

Another report, from the International Monetary Fund, *The Macroeconomics of Artificial Intelligence* forecasts that "AI might be applied to a substantial share of the tasks done by most workers ... and massively boost productivity in those tasks."³ That is no small outcome. As the IMF notes, productivity is the single largest determinant of "the wealth of nations and the living standards of their people."⁴ Overall, according to an estimate by the consulting firm McKinsey, foundation models may generate between \$2.6 trillion to \$4.4 trillion in economic growth across the global economy.⁵

Second, openness creates increased competition in the foundation model marketplace by enabling downstream developers to build innovative, custom products.⁶ Growing the number of foundation model-based products reduces overall market concentration and increases options for enterprise customers and end users.⁷ The availability of open foundation models is also likely applying market pressure on closed developers to lower prices and "compete against free."⁸ This has wide benefits; in general, as the White House has noted, "when firms have to compete for customers, it leads to lower prices, higher quality goods and services, greater variety, and more innovation."⁹

Third, open foundation models are often the most affordable, cost-effective option for entrepreneurs and small- and medium-businesses. Building a new, enterprise-specific foundation model often requires prohibitively expensive investments in model training. Access to open foundation models, which are typically free to procure and more affordable to customize than starting from scratch, substantially lowers the barrier to entry. These models also enable a thriving ecosystem of foundation model development support and cloud service providers serving open foundation models to enterprise customers. This makes it possible for more businesses to build foundation models at lower cost, ensuring that corporate resources are not the sole determinant of whether a company can realize the benefits of a bespoke foundation model. This spreads the productivity benefits of foundation models to more sectors of the economy.

Al could increase US productivity growth by 1.5 percentage points annually assuming widespread adoption over a 10-year period.")

³ Erik Brynjolfsson and Gabriel Unger, The Macroeconomics of Artificial Intelligence, International Monetary Fund, Dec. 2023, https://www.imf.org/-

[/]media/Files/Publications/Fandd/Article/2023/December/20-25-Brynjolfsson-final.ashx. ⁴ *Id*.

⁵ See McKinsey & Company, *The Economic Potential of Generative AI: The Next Productivity Frontier*, Jun. 2023, https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next productivity-frontier.

⁶ See Will Douglas Heaven, The open-source AI boom is built on Big Tech's handouts. How long will it last?, MIT Technology Review, May 12, 2023,

https://www.technologyreview.com/2023/05/12/1072950/open-source-ai-google-openai-eleuthermeta/ ("if the trend toward closing down access continues, then not only will the open-source crowd be cut adrift—but the next generation of AI breakthroughs will be entirely back in the hands of the biggest, richest AI labs in the world.").

⁷ See https://arxiv.org/abs/2403.07918 (access to model weights promotes innovation in downstream markets by "helping to reduce market concentration at the foundation model level from vertical cascading").
⁸ See Tyler Cowen, Open-Source Software Is Worth a Lot More Than You Pay for It, Bloomberg, Feb. 26, 2024, https://www.bloomberg.com/opinion/articles/2024-02-26/open-source-software-is-worth-a-lot-more-than-you-pay-for-it.

⁹ See Heather Boushey and Helen Knudsen, The Importance of Competition for the American Economy, U.S White House Blog, Jul. 9, 2021, https://www.whitehouse.gov/cea/written-materials/2021/07/09/the-importance-of-competition-for-the-american economy/.

2. The Administration should prioritize government use of open source models

To maintain global leadership in AI, the U.S. government must lead by example in adopting AI to enhance public sector efficiency, service delivery, and national security. Recognizing that specific national security and sensitive use cases might require additional diligence and considerations, federal agencies should accelerate AI adoption by leveraging machine learning models for tasks such as document processing, anomaly detection, and predictive analytics. This can drive operational efficiencies while setting a precedent for responsible AI deployment.

Additionally, the Administration should direct agencies not to prefer proprietary models over open source, updating AI procurement guidelines to prioritize open models and interoperable AI solutions whenever feasible, in order to ensure flexibility, transparency, and long-term sustainability. The Office of Management and Budget (OMB), the General Services Administration (GSA), and the National Institute for Standards and Technology (NIST) should work collaboratively to establish a government-wide AI strategy that standardizes best practices, facilitates interagency cooperation, and supports workforce upskilling initiatives to maximize AI's benefits across public administration.

Expanding AI's role in government operations will also provide a testing ground for regulatory approaches, allowing policymakers to better understand AI risks and opportunities. A structured approach to AI deployment across federal agencies, with clear performance metrics and ethical safeguards, will enhance the U.S. government's ability to harness AI while setting a model for industry and international partners. USG should also invest in infrastructure and testbeds that can facilitate public-private testing for national security. For example, if the government continues to have concerns about national security-related deployments of AI, it needs to unify AI expertise from the private sector with national security expertise from the government. It is critical that the US continue to advance the state of the art around evaluations and threat modelling. To that end, it is important for the Government to retain the expertise and resources necessary to collaborate with industry on national security-related risks, as well as for research and development.

The Administration should also encourage governmental adoption of open source AI to facilitate scientific research. According to OSTP nominee Michael Kratsios: "The shape of future global order will be defined by whomever leads across AI, quantum, nuclear, robotics, and other critical and emerging technologies. Chinese progress in nuclear fusion, quantum technologies, and autonomous systems all press home the urgency of the work ahead."¹⁰ Governmental adoption may enable training open source AI on expert, scientific data with limited availability for particular research problems (i.e. such as robotics, aircraft telemetry, and material science).

To accelerate new technological breakthroughs, the U.S. government should actively foster collaborative partnerships with academia, industry, and civil society. Joint research initiatives and public–private partnerships can serve as catalysts for innovation by leveraging the diverse expertise and resources of these stakeholders. For example, establishing innovation hubs and consortiums that bring together leading research universities, industry pioneers, and non-profit organizations can help translate cutting-edge research into practical applications across sectors. By supporting these partnerships, the government can stimulate the development of advanced AI models and solutions that drive both economic growth and innovation.

¹⁰ Trump science policy nominee calls China most formidable technology, science competitor, https://www.reuters.com/world/us/trump-science-policy-nominee-calls-china-most-formidable-technologyscience-2025-02-24.

There are also other, sector-specific actions the government should consider to facilitate the adoption of critical open source AI technologies. For instance, government action with ecosystem stakeholders to facilitate interoperability and sharing of healthcare data with proper safety, privacy and security controls, as well as establishing a framework and process for assessing and approving AI use in clinical applications, could help radically accelerate the use of AI in the healthcare sector.

3. The Administration should formalize the National Artificial Intelligence Research Resource (NAIRR)

Formalizing the NAIRR would accelerate research in fields ranging from healthcare and drug discovery to environmental science and advanced manufacturing. This access can serve as a catalyst for breakthroughs in critical areas, ultimately positioning the United States as a global leader in both the technological and ethical aspects of AI development.

The White House could work with Congress to pass the Bipartisan Creating Resources for Every American To Experiment with Artificial Intelligence Act (CREATE AI Act) that would make NAIRR a permanent, publicly accessible resource, opening doors to advanced computational power and data previously limited to well-funded institutions.

Central to the AI Alliance's mission of open innovation of AI, the NAIRR would support the expansion of resources to democratize AI research, fostering an ecosystem that enables scientific advancements, economic growth, and American AI leadership.

4. The Administration should support global competitiveness of American companies by avoiding export controls on open models

Overly restrictive policies on AI-related exports would hinder American companies' competitiveness while failing to prevent adversarial nations from developing their own AI capabilities. Policymakers should not adopt export controls on open models to ensure that AI innovations remain accessible to global markets.

Strategic engagement with allies on coordinated AI export policies will also help prevent regulatory fragmentation and maintain the U.S.'s position as the leader in AI research and commercialization. By promoting open source models, the Administration can set standards for interoperability and security that will become the gold standard internationally. This approach democratizes access to AI technologies and empowers global partners to build upon U.S. innovations, ensuring that the foundation for AI remains open, accountable, and conducive to rapid advancement.¹¹

AI transcends national boundaries, making it crucial for frameworks to be aligned across jurisdictions to promote interoperability. The US Government should leverage a proactive diplomatic approach¹² to ensure global AI policies align with US best practices, and to ensure US influence over key standard-setting bodies. The Government should spearhead efforts to shape international AI governance by advocating for risk-based, interoperable frameworks that promote innovation while safeguarding national security.

¹¹ Eric Schmidt and Dhaval Adjodah, "Will China's open-source AI end U.S. supremacy in the field?" <u>https://www.washingtonpost.com/opinions/2025/01/28/china-deekseek-ai-us-supremacy/</u>

¹² Ben Brooks & Michelle Fang, "US leadership in AI requires open-source diplomacy", https://thehill.com/opinion/technology/5079721-china-ai-open-source-threat/