Requirements Matrix of the Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence 10/31/2023 created by Patrick Stingley Pstingley@BLM.GOV This document and a spreadsheet version of these requirements are available at the following URL:

https://github.com/pstingley/AI-Executive-Order-Requirements-Matrix

Section	Requirement	Responsible Entity	Deadline
Section 1	Advance AI with responsible use for solving challenges while mitigating risks. Involve government, private sector, academia, and civil society.	Not specified	Not specified
Section 2 (a)	Ensure AI systems are safe, secure, and evaluated for risks. Develop labeling and content provenance mechanisms.	Executive departments and agencies	As specified in the order
Section 2 (b)	Promote responsible innovation, competition, and collaboration in Al. Support Al-related education and attract Al talent.	Executive departments and agencies	As specified in the order
Section 2 (c)	Support American workers in Al development. Adapt job training and education. Ensure AI deployment respects workers' rights.	Executive departments and agencies	As specified in the order
Section 2 (d)	Ensure AI policies align with equity and civil rights principles. Prevent discrimination and bias in AI systems.	Executive departments and agencies	As specified in the order
Section 2 (e)	Protect the interests of consumers using AI-enabled products. Enforce consumer protection laws and safeguards against fraud and discrimination	Executive departments and agencies	As specified in the order
Section 2 (f)	Protect privacy and civil liberties as AI advances. Ensure lawful and secure data collection and use	Executive departments and agencies	As specified in the order
Section 2 (g)	Manage risks from the federal government's use of AI. Attract AI professionals and ensure adequate training and governance.	Executive departments and agencies	As specified in the order
Section 2 (h)	Lead in global societal, economic, and technological progress with responsible AI development. Engage with international allies and partners.	Not Specified	Not Specified
Section 3	Definitions of key terms		
4.1(a)(i)	Establish guidelines and best practices for Al safety and security, including a companion resource to Al Risk Management Framework, Secure Software Development	Secretary of Commerce, in coordination with relevant agencies	Within 270 days of the order

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	Framework, and guidance for evaluating Al capabilities		
4.1(a)(ii)	Establish guidelines and procedures for Al red-teaming tests for dual-use foundation models	Secretary of Commerce, in coordination with Secretary of Energy and Director of NSF	Within 270 days of the order
4.1(b)	Develop Department of Energy's Al model evaluation tools and Al testbeds	Secretary of Energy, in coordination with relevant Sector Risk Management Agencies	Implement a plan within available appropriations
4.2(a)	Require companies developing dualuse foundation models to provide information to the Federal Government, and require reporting of large-scale computing clusters	Secretary of Commerce	Within 90 days of the order
4.2(b)	Define technical conditions for reporting requirements	Secretary of Commerce, in consultation with relevant agencies	Until defined, apply to models with specified computing power and clusters
4.2(c)	Propose regulations for United States IaaS Providers to report transactions involving AI models with malicious cyber-enabled capabilities	Secretary of Commerce	Within 90 days of the order
4.2(d)	Propose regulations for United States laaS Providers to verify the identity of foreign persons acquiring laaS accounts	Secretary of Commerce	Within 180 days of the order
4.3(a)(i)	Evaluate AI-related risks in critical infrastructure sectors	Heads of relevant agencies and SRMAs	Within 90 days of the order, and at least annually
4.3(a)(ii)	Issue a public report on AI-specific cybersecurity risks for financial institutions	Secretary of the Treasury	Within 150 days of the order
4.3(a)(iii)	Incorporate Al Risk Management Framework into safety and security guidelines for critical infrastructure	Secretary of Homeland Security, in coordination with other regulators	Within 180 days of the order
4.3(a)(iv)	Coordinate to mandate guidelines through regulatory action for critical infrastructure	Assistant to the President for National Security Affairs, Director of OMB, heads of agencies	Within 240 days of completion of guidelines

4.3(a)(v)	Establish an Al Safety and Security Board for critical infrastructure	Secretary of Homeland Security	To be established as an advisory committee
4.3(b)(i)	Carry out actions for national and non-national security systems to improve cyber defenses	Secretary of Defense for national security systems, Secretary of Homeland Security for non-national security systems	As needed
4.3(b)(ii)	Develop plans for operational pilot projects to identify, test, and deploy Al capabilities for vulnerability discovery and remediation	Secretary of Defense and Secretary of Homeland Security	Within 180 days of the order
4.3(b)(iii)	Provide a report on the results of Al capabilities deployment in cyber defense	Secretary of Defense and Secretary of Homeland Security	Within 270 days of the order
4.4(a)	Evaluate the risk of AI misuse for CBRN threats	Secretary of Homeland Security	Within 180 days
4.4(a)	Consult with AI and CBRN experts	Secretary of Homeland Security	Within 180 days
4.4(a)	Submit a report on AI models and recommendations	Secretary of Homeland Security	Within 180 days
4.4(b)(i)	Contract National Academies for a study	Secretary of Defense	Within 120 days
4.4(b)(i)	Assess Al's impact on biosecurity risks	Secretary of Defense	Within 120 days
4.4(b)(ii)	Consider national security implications of data use	Secretary of Defense	Within 120 days
4.4(b)(iii)	Assess Al applications in reducing biosecurity risks	Secretary of Defense	Within 120 days
4.4(b)(iv)	Address additional concerns at the intersection of AI and synthetic biology	Secretary of Defense	Within 120 days
4.4(b)(i)	Establish a framework for synthetic nucleic acid screening	Director of OSTP	Within 180 days
4.4(b)(i)	Criteria for identifying biological sequences	Director of OSTP	Within 180 days
4.4(b)(ii)	Engage with industry to develop best practices	Secretary of Commerce	Within 180 days
4.4(b)(iii)	Funding agencies require adherence to the framework	All funding agencies	Within 180 days
4.4(b)(iv)(A)	Develop a framework for evaluation and stress testing	Secretary of Homeland Security	Within 180 days
4.4(b)(iv)(B)	Submit annual report on framework results	Secretary of Homeland Security	Annually

4.5(a)	Identify standards, tools, methods,		Within 240 days
	and practices for synthetic content	Secretary of Commerce	
4.5(b)	Develop guidance for digital content authentication	Secretary of Commerce	Within 180 days
4.5(c)	Issue guidance to agencies for labeling and authenticating content	Director of OMB	Within 180 days
4.5(d)	Consider amending the Federal Acquisition Regulation	Federal Acquisition Regulatory Council	As appropriate
4.6(a)	Solicit input from stakeholders on dual-use foundation models	Secretary of Commerce	Within 270 days
4.6(b)	Submit a report to the President with recommendations	Secretary of Commerce	Within 270 days
4.7(a)	Develop guidelines for security reviews of Federal data	Chief Data Officer Council	Within 270 days
4.7(b)	Conduct security reviews and address security risks	Relevant agencies	Within 180 days
4.8	Develop a proposed National Security Memorandum on Al	Assistant to the President for National Security Affairs	Within 270 days
5.1 (a)	Streamline visa processing for Al talent	Secretary of State and Secretary of Homeland Security	90 days
5.1 (b)	Consider rulemaking on J-1 nonimmigrant criteria	Secretary of State	120 days
5.1 (c)	Expand the domestic visa renewal program	Secretary of State	180 days
5.1 (d)	Review and modernize immigration pathways	Secretary of Homeland Security	180 days
5.1 (e)	Publish request for information on AI-related occupations	Secretary of Labor	45 days
5.1 (f)	Use discretionary authorities to support Al talent	Secretary of State and Secretary of Homeland Security	Ongoing
5.1 (g)	Develop informational resources for attracting AI experts	Secretary of Homeland Security	120 days
5.2 (a)	Launch a pilot program for the National Al Research Resource	Director of NSF	90 days
5.2 (a)	Fund and launch an NSF Regional Innovation Engine	Director of NSF	150 days
5.2 (a)	Establish new National Al Research Institutes	Director of NSF	540 days
5.2 (b)	Establish a pilot program for Al talent training	Secretary of Energy	120 days
5.2 (c)	Publish guidance on Al and inventorship	USPTO Director	120 days

5.2 (c)	Issue additional guidance on AI and IP	USPTO Director	270 days
5.2 (c)	Consult and issue recommendations on copyright and Al	USPTO Director	270 days or 180 days after the Al study
5.2 (d)	Develop a program to mitigate Alrelated IP risks	Secretary of Homeland Security	180 days
5.2 (e)	Prioritize grantmaking for responsible AI development	Secretary of HHS	Ongoing
5.2 (f)	Host nationwide Al Tech Sprint competitions	Secretary of Veterans Affairs	365 days
5.2 (g)	Issue a public report on Al's role in electric grid infrastructure	Secretary of Energy	180 days
5.2 (h)	Submit a report on Al's role in research	President's Council of Advisors on Science and Technology	180 days
5.3 (a)	Promote competition in AI markets	Heads of relevant agencies	Ongoing
5.3 (b)	Promote competition in the semiconductor industry	Secretary of Commerce	Ongoing
5.3 (c)	Support small businesses innovating in Al	Administrator of the Small Business Administration	Ongoing
5.3 (d)	Conduct outreach for Al-related capital-access programs	Administrator of the Small Business Administration	Ongoing
6 (a)(i)	Prepare and submit a report on the labor-market effects of Al	Chairman of the Council of Economic Advisers	180 days from the date of this order
6 (a)(ii)	Submit a report analyzing the abilities of agencies to support workers displaced by the adoption of AI	Secretary of Labor	180 days from the date of this order
6 (a)(ii)(A)	Assess how current or formerly operational Federal programs can	Secretary of Labor	180 days from the date of this order

	be used to respond to possible future Al-related disruptions		
6 (a)(ii)(B)	Identify options, including potential legislative measures, to strengthen or develop additional Federal support for workers displaced by AI and strengthen and expand education and training opportunities	Secretary of Labor, in consultation with the Secretary of Commerce and the Secretary of Education	180 days from the date of this order
6 (b)(i)	Develop and publish principles and best practices for employers to mitigate Al's potential harms to employees' well-being and maximize its potential benefits	Secretary of Labor	180 days from the date of this order
6 (b)(i)(A)	Cover job-displacement risks and career opportunities related to Al	Secretary of Labor	180 days from the date of this order
6 (b)(i)(B)	Cover labor standards and job quality, including issues related to equity, protected-activity, compensation, health, and safety implications	Secretary of Labor	180 days from the date of this order
6 (b)(i)(C)	Cover implications for workers of employers' Al-related collection and use of data about them	Secretary of Labor	180 days from the date of this order

6 (b)(ii)	Encourage the adoption of developed principles and best practices by heads of agencies	Heads of agencies, in consultation with the Secretary of Labor	After the development of principles and best practices
6 (b)(iii)	Issue guidance to make clear that employers deploying AI to monitor or augment employees' work must continue to comply with protections that ensure workers are compensated for their hours worked	Secretary of Labor	180 days from the date of this order
6 (c)	Prioritize available resources to support Al-related education and workforce development through existing programs	Director of NSF, in consultation with agencies	Ongoing
7.1 (a)(i)	Coordinate with and support agencies in implementing and enforcing existing Federal laws to address civil rights and civil liberties violations and discrimination related to Al	Attorney General	Ongoing
7.1 (a)(ii)	Convene a meeting of the heads of Federal civil rights offices to discuss the use of their authorities to prevent and address discrimination in the use of automated systems, including algorithmic discrimination	Assistant Attorney General in charge of the Civil Rights Division, in consultation with the Attorney General	90 days from the date of this order

7.1 (a)(iii)	Consider providing guidance, technical assistance, and training to State, local, Tribal, and territorial investigators and prosecutors on best practices for investigating and prosecuting civil rights violations and discrimination related to automated systems, including Al	Attorney General	Ongoing
7.1 (b)(i)	Submit a report addressing the use of AI in the criminal justice system	Attorney General, in consultation with the Secretary of Homeland Security and the Director of OSTP	365 days from the date of this order
7 (b)(i)(A)	Identify areas where AI can enhance law enforcement efficiency and accuracy	Attorney General	365 days from the date of this order
7 (b)(i)(B)	Recommend best practices for law enforcement agencies, including safeguards and appropriate use limits for Al	Attorney General	365 days from the date of this order
7.1 (b)(ii)	Consider those best practices and develop additional general recommendations for State, local, Tribal, and territorial law enforcement agencies and criminal justice agencies	Attorney General, in consultation with the Secretary of Homeland Security	Within 270 days from the date of this order

7.1 (b)(iii)	Review the existing capacity to investigate law enforcement deprivation of rights under color of law resulting from the use of Al	Attorney General	365 days from the date of this order
7.2 (a)	Agencies shall use their civil rights and civil liberties offices to prevent and address unlawful discrimination and other harms resulting from the use of AI in Federal Government programs and benefits administration	All relevant agencies	Ongoing
7.2 (b)(i)	Publish a plan addressing the use of automated or algorithmic systems in the implementation of public benefits and services to promote equitable outcomes	Secretary of HHS	180 days from the date of this order
7.2 (b)(ii)	Issue guidance to public-benefits administrators on the use of automated or algorithmic systems to ensure that programs maximize program access for eligible recipients and minimize bias	Secretary of Agriculture	180 days from the date of this order
7.2 (c)(i)	Issue additional guidance addressing the use of tenant screening systems in ways that may violate relevant Federal laws	Secretary of Housing and Urban Development	180 days from the date of this order

7.2 (c)(ii)	Address how the Fair Housing Act and the Equal Credit Opportunity Act apply to the advertising of housing, credit, and other real estate-related transactions through digital platforms	Secretary of Housing and Urban Development, Director of the Consumer Financial Protection Bureau	180 days from the date of this order
7.3 (a)	Publish guidance for Federal contractors regarding nondiscrimination in hiring involving AI and other technology-based hiring systems	Secretary of Labor	365 days from the date of this order
7.3 (b)(i)	Evaluate underwriting models for bias or disparities affecting protected groups	Director of the Federal Housing Finance Agency	Ongoing
7.3 (b)(ii)	Evaluate automated collateral- valuation and appraisal processes to minimize bias	Director of the Consumer Financial Protection Bureau	Ongoing
7.3 (c)	Issue additional guidance on the risks and benefits of AI in using biometric data as an input and provide people with disabilities access to information and communication technology and transportation services	Architectural and Transportation Barriers Compliance Board	Ongoing

8 (a)	Encourage independent regulatory agencies to consider using their authorities to protect consumers from Al-related risks, including fraud, discrimination, and privacy threats	Independent regulatory agencies	Ongoing
8 (b)(i)	Establish an HHS AI Task Force and develop a strategic plan for responsible AI deployment in the health and human services sector	Secretary of HHS, in consultation with the Secretary of Defense and the Secretary of Veterans Affairs	Within 365 days of the HHS Al Task Force's creation
8 (b)(ii)	Direct HHS components to develop a strategy to assess AI-enabled technologies' quality in the health and human services sector	Secretary of HHS, in consultation with relevant agencies	Within 180 days of the date of this order
8 (b)(iii)	Consider actions to advance understanding of Federal nondiscrimination laws by health and human services providers related to Al	Secretary of HHS, in consultation with relevant agencies	Within 180 days of the date of this order
8 (b)(iv)	Establish an Al safety program in partnership with voluntary federally listed Patient Safety Organizations	Secretary of HHS	Within 365 days of the date of this order

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8 (b)(v)	Develop a strategy for regulating the use of AI or AI-enabled tools in drug-development processes	Secretary of HHS	Within 365 days of the date of this order
8 (c)(i)	Assess the need for information, technical assistance, and guidance regarding the use of AI in transportation	Secretary of Transportation	Within 30 days of the date of this order
8 (c)(ii)	Direct appropriate Federal Advisory Committees to provide advice on the safe and responsible use of AI in transportation	Secretary of Transportation	Within 90 days of the date of this order
8 (c)(iii)	Task ARPA-I with exploring transportation-related opportunities and challenges of AI and prioritizing grants	Secretary of Transportation	Within 180 days of the date of this order
8 (d)	Develop resources, policies, and guidance regarding safe, responsible, and nondiscriminatory uses of AI in education	Secretary of Education	Within 365 days of the date of this order
8 (e)(i)	Examine the potential for AI to improve spectrum management and expand spectrum sharing opportunities	Federal Communications Commission	Ongoing

8 (e)(ii)	Coordinate with the National Telecommunications and Information Administration to create opportunities for spectrum sharing	Federal Communications Commission	Ongoing
8 (e)(iii)	Provide support for efforts to improve network security, resiliency, and interoperability using Al	Federal Communications Commission	Ongoing
8 (e)(iv)	Encourage efforts to combat unwanted robocalls and robotexts facilitated or exacerbated by Al	Federal Communications Commission	Ongoing
9 (a)(i)	Evaluate and identify commercially available information (CAI) procured by agencies containing personally identifiable information for inventory and reporting processes	Director of OMB	Ongoing
9 (a)(ii)	Evaluate agency standards and procedures associated with CAI containing personally identifiable information	Director of OMB, in consultation with the Federal Privacy Council and the Interagency Council on Statistical Policy	Ongoing
9 (a)(iii)	Issue an RFI to inform potential revisions to guidance on implementing the privacy provisions of the E-Government Act of 2002	Director of OMB, in consultation with the Attorney General, the Assistant to the President for Economic	Within 180 days of the date of this order

		Policy, and the Director of OSTP	
9 (a)(iv)	Take steps to support and advance the near-term actions and long-term strategy identified through the RFI process	Director of OMB	Ongoing
9 (b)	Create guidelines for agencies to evaluate the efficacy of differential-privacy-guarantee protections, including for Al	Secretary of Commerce, acting through the Director of NIST	Within 365 days of the date of this order
9 (c)(i)	Fund the creation of a Research Coordination Network (RCN) dedicated to advancing privacy research and PET development	Director of NSF, in collaboration with the Secretary of Energy	Within 120 days of the date of this order
9 (c)(ii)	Engage with agencies to identify ongoing work and potential opportunities to incorporate PETs into their operations	Director of NSF	Within 240 days of the date of this order
9 (c)(iii)	Use the results of the United States- United Kingdom PETs Prize Challenge to inform PETs research and adoption approaches	Director of NSF	Ongoing
10.1 (a)	Convene and chair an interagency council to coordinate the	Director of OMB	Within 60 days of the date of this

	development and use of AI in agencies' programs and operations		order and ongoing
10.1 (b)	Issue guidance to agencies to strengthen the effective and appropriate use of AI	Director of OMB, in coordination with the Director of OSTP	Within 150 days of the date of this order and updated periodically
10.1 (c)	Develop a method for agencies to track and assess their ability to adopt Al	Director of OMB	Within 60 days of the issuance of the guidance and updated periodically
10.1 (d)	Develop guidelines, tools, and practices to support implementation of minimum risk-management practices	Secretary of Commerce, acting through the Director of NIST	Within 90 days of the issuance of the guidance
10.1 (d)	Develop an initial means to ensure agency contracts align with the guidance	Director of OMB	Within 180 days of the issuance of the guidance
10.1 (e)	Issue instructions to agencies for the collection, reporting, and publication of agency AI use cases	Director of OMB	Annually

10.1 (f)	Provide guidance to agencies for the responsible and secure use of generative AI	Various agencies as specified	Various deadlines within 90 days of the date of this order
10.1 (g)	Consider prioritizing funding for Al projects for the Technology Modernization Fund	Technology Modernization Board	As deemed appropriate and consistent with applicable law
10.1 (h)	Facilitate access to Federal Government-wide acquisition solutions for specified types of Al services and products	Administrator of General Services, in coordination with others	Within 180 days of the date of this order
10.1 (i)	Address AI used as a component of a national security system through a proposed National Security Memorandum	Not specified	Not specified
10.2 (a)	Identify priority mission areas for increased Federal Government Al talent	Director of OSTP and Director of OMB, in consultation with others	Within 45 days of the date of this order
10.2 (b)	Convene an Al and Technology Talent Task Force to accelerate and track the hiring of Al talent	Assistant to the President and Deputy Chief of Staff for Policy, in coordination with others	Within 45 days of the date of this order

10.2 (c)	Develop and implement plans to support the rapid recruitment of individuals for a Federal Government-wide AI talent surge	Various agencies as specified	Within 45 days of the date of this order
10.2 (c)	Review, consider, and establish various authorities and policies for hiring and retaining Al talent	Director of OPM, in consultation with Director of OMB	Various deadlines within 180 days of the date of this order
10.2 (e)	Expand the use of special authorities for AI hiring and retention	Agencies	As applicable and appropriate
10.2 (f)	Develop a position-description library for data scientists and a hiring guide	Chief Data Officer Council	Not specified
10.2 (g)	Implement AI training and familiarization programs for the Federal workforce	Heads of each agency	Ongoing
10.2 (h)	Submit a report addressing Al talent gaps for national defense	Secretary of Defense	Within 180 days of the date of this order
11 (a)(i)	Expand engagements with international allies and partners to advance understanding of existing	Secretary of State, in coordination with others	Ongoing

	Al-related guidance and policies of the United States		
11 (a)(ii)	Establish a strong international framework for managing AI risks and benefits	Secretary of State, in coordination with others	Ongoing
11 (b)(i)	Establish a plan for global engagement on promoting and developing AI standards	Secretary of Commerce	Within 270 days of the date of this order
11 (b)(i)(A)	Develop AI nomenclature and terminology standards	Secretary of Commerce	Within the plan
11 (b)(i)(B)	Develop standards for data capture, processing, protection, privacy, and confidentiality	Secretary of Commerce	Within the plan
11 (b)(i)(C)	Develop standards for trustworthiness, verification, and assurance of AI systems	Secretary of Commerce	Within the plan
11 (b)(i)(D)	Develop AI risk management standards	Secretary of Commerce	Within the plan

11 (b)(ii)	Submit a report on priority actions taken pursuant to the plan	Secretary of Commerce	Within 180 days of the plan's establishment
11 (b)(iii)	Ensure efforts are guided by principles set out in the NIST AI Risk Management Framework and National Standards Strategy	Secretary of Commerce	Ongoing
11 (c)(i)	Publish an AI in Global Development Playbook	Secretary of State and Administrator of the United States Agency for International Development, in coordination with others	Within 365 days of the date of this order
11 (c)(ii)	Develop a Global AI Research Agenda	Secretary of State and Administrator of the United States Agency for International Development, in collaboration with others	Within 365 days of the date of this order
11 (d)(i)	Develop a plan for multilateral engagements to encourage the adoption of AI safety and security guidelines for critical infrastructure	Secretary of Homeland Security, in coordination with others	Within 270 days of the date of this order

11 (d)(ii)	Submit a report on priority actions to mitigate cross-border risks to critical United States infrastructure	Secretary of Homeland Security	Within 180 days of establishing the plan
12 (a)	Establish the White House Artificial Intelligence Council (White House Al Council)	Assistant to the President and Deputy Chief of Staff for Policy	Effective immediately
12 (b)	Appoint the Chair of the White House Al Council	Assistant to the President and Deputy Chief of Staff for Policy	Effective immediately
12 (c)	Compose the White House Al Council with specified members or their designees	Assistant to the President and Deputy Chief of Staff for Policy	Effective immediately
12 (d)	Chair may create and coordinate subgroups consisting of White House Al Council members or their designees	Chair of the White House AI Council	As needed
13 (a)	Clarify that the order doesn't impair existing authority granted by law to executive departments or agencies	N/A	N/A
13 (b)	Ensure the order is implemented consistent with applicable law and	N/A	N/A

	subject to the availability of appropriations		
13 (c)	Specify that the order does not create enforceable rights or benefits against the United States	N/A	N/A