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INSIGHT

The AI Executive Order and Its Potential Implications for DOD

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On October 20, 2023, President Biden issued an *Executive Order (E.O.) on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence* (E.O. 14110). The order provides guidance on standards for artificial intelligence (AI) safety and security. It supplements a number of related U.S. government policy documents, including the Department of State *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy* and the National Institute of Standards and Technology *AI Risk Management Framework*. This Insight discusses the potential implications of the order for national security, and specifically the Department of Defense (DOD). A broader overview of the order is provided in CRS Report R47843, *Highlights of the 2023 Executive Order on Artificial Intelligence for Congress*, by Laurie A. Harris and Chris Jaikaran.

Potential Implications for the Department of Defense

DOD senior leaders have expressed commitment to the safe and secure development of AI for military and national defense purposes. In February 2020, DOD adopted five Ethical AI Principles to guide the department's development of AI. DOD's June 2022 *Responsible Artificial Intelligence Strategy and Implementation Pathway* affirmed these principles. E.O. 14110 directs DOD to undertake a number of additional activities intended to enhance national security while managing potential risk. For example:

- Section 4.2 directs the Secretary of Commerce—in consultation with the Director of National Intelligence and the Secretaries of Defense, State, and Energy—to "define, and thereafter update as needed on a regular basis, the technical conditions for models and computing clusters" subject to the reporting requirements for potential dual-use foundation models. (The E.O. defines a dual-use foundation model as "an AI model that is trained on broad data" and "could be easily modified to exhibit high levels of performance at tasks that pose a serious risk to security, national economic security, national public health or safety, or any combination of those matters," among other attributes.)
- Section 4.3 directs the Secretary of Defense—in consultation with the heads of other relevant agencies—to execute and report on "an operational pilot project to identify, develop, test, evaluate, and deploy AI capabilities … to aid in the discovery and

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remediation of vulnerabilities in critical United States Government [national security] software, systems, and networks."

- Section 4.4 directs the Secretary of the Defense—in consultation with the Assistant to the President for National Security Affairs and the Director of the Office of Science and Technology Policy—to contract the National Academies of Sciences, Engineering, and Medicine to conduct a study on the intersection of AI and biosecurity risks.
- Section 4.5 directs the Secretary of Defense and heads of other relevant agencies to consult with the Director of the Office of Management and Budget (OMB) on OMB-developed guidance for labeling and authenticating synthetic content (defined by the E.O. as "information, such as images, videos, audio clips, and text, that has been significantly modified or generated by algorithms, including by AI") used by the federal government.
- Section 4.8 directs the Assistant to the President for National Security Affairs and the Assistant to the President and Deputy Chief of Staff to oversee the interagency development of a National Security Memorandum on AI that is to "outline actions for the Department of Defense, the Department of State, other relevant agencies, and the Intelligence Community to address the national security risks and potential benefits posed by AI."
- Section 10.2 directs the Secretary of Defense to submit a report to the President that offers recommendations for "[addressing] gaps in AI talent for national defense," including recommendations for the hiring of certain noncitizens with expertise in AI and other critical and emerging technologies.

AI Acquisition and Invocation of the Defense Production Act

The *2022 National Defense Strategy* states that DOD "will be a fast-follower where market forces are driving commercialization of militarily-relevant capabilities in trusted artificial intelligence and autonomy." DOD efforts to better acquire and adopt AI capabilities include its establishment of the Office of the Chief Digital and Artificial Intelligence Officer in December 2021. A June 2023 GAO study found that "although numerous entities across DOD are acquiring, developing, or already using AI, DOD has not issued department-wide guidance for how its components should approach acquiring AI." The study also found that "DOD is missing an opportunity to ensure that it is consistently acquiring AI capabilities in a manner that accounts for the unique challenges associated with AI."

In addition to the aforementioned provisions, E.O. 14110 invokes the Defense Production Act (DPA), which gives the President sweeping authorities to compel or incentivize industry in the interest of national security. (For more information on the DPA, see CRS Report R43767, *The Defense Production Act of 1950: History, Authorities, and Considerations for Congress*, by Alexandra G. Neenan and Luke A. Nicastro.) Section 4.2 of the E.O. most likely invokes the DPA's Title VII authorities, which allows the government to compel companies to provide information to the government. It delegates authorities to the Secretary of Commerce to require "companies developing or demonstrating an intent to develop potential dual-use foundation models" to submit certain information to the government, including information from red-teaming. (The E.O. defines red-teaming as "a structured testing effort to find flaws and vulnerabilities in an AI system, often in a controlled environment and in collaboration with developers of AI.") Analyst Michael T. Klare has argued that, while the E.O. does not explicitly prohibit federal acquisition of dual-use foundation models, the order "might deter major institutional clients, including the U.S. Defense Department" from purchasing from a company if their respective red-team test results are unsatisfactory.

One commentator described the E.O.'s invocation of the DPA as a "surprising move," noting that the DPA is "typically used during times of national emergency." The Biden Administration has previously invoked the DPA in support of national defense.

Considerations for Congress

While executive orders are intended to have the force and effect of law, they are not codified in statute. For this reason, a President may amend, rescind, or revoke a prior executive order issued by the President's own Administration or by an earlier Administration. (For additional information, see CRS Report R46738, *Executive Orders: An Introduction*, coordinated by Abigail A. Graber.) Congress may consider whether or not to pass legislation to codify—or revoke—certain elements of E.O. 14110. Congress may also conduct oversight of DOD and other federal agencies as they execute the E.O.'s directives, or appropriate additional funds for required activities.

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