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Everything Is Not *Terminator*

What Does the Executive Order Calling for Artificial Intelligence Standards Mean for AI Regulation?

John Frank Weaver*

President Trump has issued an executive order on “Maintaining American Leadership in Artificial Intelligence” (the “Order”).¹ Noting that artificial intelligence (“AI”) “promises to drive the growth of the United States economy, enhance our economic and national security, and improve our quality of life,” the Order seeks to help coordinate federal resources to support the development of AI in the United States.² In doing so, the Order charges other groups—principally the National Science and Technology Council’s Select Committee on Artificial Intelligence (the “Select Committee”), the Office of Management and Budget (“OMB”), the National Institute of Standards and Technology (“NIST”), and the National Security Advisor—with pursuing the Order’s principles, objectives, and directives.

The Order also directly impacts the regulation of AI, as OMB and NIST are ordered to establish standards to enable the regulation of AI. Below, I briefly explain the major directives of the Order before discussing how those agencies will prepare regulations with public input. In the final section, I consider what the Order and the activities by NIST and OMB will mean for the regulation of AI.

Summary of Order

The Order seeks to establish “a coordinated Federal Government strategy,” which it refers to as the “American AI Initiative,” based on five principles:

1. The United States must drive technological breakthroughs in AI across the Federal Government, industry, and

- academia in order to promote scientific discovery, economic competitiveness, and national security.
2. The United States must drive development of appropriate technical standards and reduce barriers to the safe testing and deployment of AI technologies in order to enable the creation of new AI-related industries and the adoption of AI by today's industries.
 3. The United States must train current and future generations of American workers with the skills to develop and apply AI technologies to prepare them for today's economy and jobs of the future.
 4. The United States must foster public trust and confidence in AI technologies and protect civil liberties, privacy, and American values in their application in order to fully realize the potential of AI technologies for the American people.
 5. The United States must promote an international environment that supports American AI research and innovation and opens markets for American AI industries, while protecting our technological advantage in AI and protecting our critical AI technologies from acquisition by strategic competitors and adversarial nations.³

With these principles in mind, the Order then goes on to identify five objectives:

1. Promote sustained investment in AI research and development;
2. Enhance access to Federal data sets and other resources, while also maintaining the safety, security, privacy, and confidentiality of that data and resources;
3. Reduce the barriers limiting the use of AI, "while protecting American technology, economic and national security, civil liberties, privacy, and values;"⁴
4. Ensure the development of technical standards that minimizes attacks from malicious actors;
5. Train more American experts.

The Select Committee is then charged with coordinating federal government resources and efforts to pursue the directives established in Sections 4-8 of the Order:

- i. *Federal investment*: Federal agencies should establish AI research and development as an agency priority and develop budgets accordingly. The agencies should also explore opportunities to collaborate with academia and the private sector.
- ii. *Federal resources*: Agencies should identify ways to enable the greater AI research community to use federal resources in the form of data, models, and computing resources, while preserving security and confidentiality.
- iii. *Guidelines for regulation*: The OMB and NIST should establish guidelines and standards to enable the regulation of AI technologies, with the aim of enabling innovation while protecting privacy and national security interests.
- iv. *Preparing the workforce*: Agencies that provide educational grants and fellowships to students and researchers should consider AI as a priority area, giving preference to American citizens when possible.
- v. *Protecting American AI*: The National Security Advisor should develop an action plan to protect AI technology critical to American economic and national security against strategic competitors and adversarial nations.⁵

Although there are a number of concerns related to what is in and not in the Order—What is the attorney general’s role?⁶ How will the country address the immigrant research scientists who provide needed skills for American AI efforts?⁷ Where is the money coming from?⁸—the Order pushes agencies of the federal government to proactively support and regulate AI. The Order represents a logical evolution from the Charter of the Subcommittee on Machine Learning and Artificial Intelligence, Committee on Technology, National Science and Technology Council.⁹ As a creation of the Federal Advisory Committee Act, that Subcommittee was not a regulatory or governing body, but could monitor the AI industry and make recommendations to the President.¹⁰ The Order does not create a governing body, but it does order agencies within the federal government to take actions beyond monitoring and advising that advance AI development and regulation, which are described above, *e.g.*, prioritizing AI research and development in preparing budgets, prioritizing AI in educational grants, developing action plans to protect AI assets, etc.

NIST Request for Information

One of the actions coming out of the Order was the Request for Information (“RFP”) published by NIST on May 1, 2019. This RFP was in response to Section 6(d) of the Order, which ordered the Secretary of Commerce, through the Director of NIST, to issue a plan (the “Plan”) for Federal engagement in “the development of technical standards and tools in support of reliable, robust, and trustworthy systems that use AI technologies.”¹¹ In the RFP, NIST requests input on:

- The current status and plans regarding the availability, use, and development of AI technical standards and tools in support of reliable, robust, and trustworthy systems that use AI technologies;
- The needs and challenges regarding the existence, availability, use, and development of AI standards and tools; and
- The current and potential future role of Federal agencies regarding the existence, availability, use, and development of AI technical standards and tools in order to meet the nation’s needs.¹²

The RFP calls out three specific topics in which NIST is looking for information: (1) AI Technical Standards and Related Tools Development: Status and Plans; (2) Defining and Achieving U.S. AI Technical Standards Leadership; and (3) Prioritizing Federal Government Engagement in AI Standardization.¹³ That last topic is of particular importance to the development of appropriate and effective AI regulations, as it asks for input on the “type and degree of Federal agencies’ current and needed involvement in AI technical standards to address the needs of the Federal government,” the “adequacy of the Federal government’s current approach for government engagement in standards development, which emphasizes private sector leadership, and, more specifically, the appropriate role and activities for the Federal government to ensure the desired and timely development of AI standards for Federal and non-governmental uses,” and the “actions, if any, the Federal government should take to help ensure that desired AI technical standards are useful and incorporated into practice.”¹⁴

Soon, we should also see a similar request for information from OMB. Section 6(a) of the Order calls on the OMB director to issue

a memorandum (the “Memorandum”) to the heads of all federal agencies that will inform how they develop regulatory approaches to AI technologies, and Section 6(b) states that in order to “ensure public trust in the development and implementation of AI applications, OMB shall issue a draft version of the memorandum for public comment before it is finalized.”¹⁵

AI Regulation Coming from NIST and OMB

The NIST RFP and the pending draft OMB Memorandum suggest that there could be a wave of regulatory activity in AI. As I have been vocal in my support for AI regulation as soon as possible,¹⁶ I welcome this development. There are also reasons to be optimistic about the regulation that comes out of the Plan and the Memorandum.

The RFP affirmatively asks whether the federal government’s current approach to regulating AI is adequate and requests specific suggestions for how the federal government should be involved in establishing standards for AI. That is very good. The lack of any concrete federal efforts to implement laws and a regulatory framework governing AI has been a serious problem for several years now. Immature industries are much easier to regulate than mature industries. Even if the initial regulations are a poor fit for the AI industry, it is easier to tweak existing regulations than to create new ones. If we want AI to develop in a manner that benefits the largest number of people, we have to introduce regulatory rules into the sector to guide it in that direction.

The Order essentially tells the OMB to do that, as the Memorandum instructs the organization to “consider ways to reduce barriers to the use of AI technologies in order to promote their innovative application while protecting civil liberties, privacy, American values, and United States economic and national security.”¹⁷ I would have preferred a specific reference to ensuring a wide distribution of the benefits of AI, but this language is not bad. It suggests that regulations must balance the growth of the AI industry against the interests of individuals in the United States and the national interests of the United States. How that instruction is implemented may leave a lot to be desired, but the broad mission statement is solid.

AI regulation will be among the most important of the next several decades. The technology has the potential to affect every

facet of our lives, from how our homes are operated to how our civil liberties are protected to how we interact with each other to how our country is run. Ensuring that AI regulation is done correctly is incredibly important, and the first step toward doing regulation right is doing regulation at all. The Order suggests that long overdue governance will begin shortly.

Notes

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1. Exec. Order No. 13,859, 84 Fed. Reg. 3967 (February 14, 2019), Sec. 1; *available at* <https://www.whitehouse.gov/presidential-actions/executive-order-maintaining-american-leadership-artificial-intelligence/>.

2. *Id.*

3. *Id.*

4. *Id.*

5. Winston Luo, "President Trump Issues Executive Order to Maintain American Leadership in Artificial Intelligence," *Harvard Journal of Law and Technology* (March 6, 2019), <https://jolt.law.harvard.edu/digest/president-trump-issues-executive-order-to-maintain-american-leadership-in-artificial-intelligence>. Luo's summary and analysis are excellent, and this explanation of the Order's directives comes nearly word-for-word from his article.

6. Jim Baker, "President Trump's Executive Order on Artificial Intelligence," *Lawfare* (February 28, 2019), <https://www.lawfareblog.com/president-trumps-executive-order-artificial-intelligence>.

7. Oren Etzioni, "What Trump's Executive Order on AI is Missing," *Wired* (February 13, 2019), <https://www.wired.com/story/what-trumps-executive-order-on-ai-is-missing/>.

8. Baker, *supra* note 6.

9. Charter of the Subcommittee on Machine Learning and Artificial Intelligence, Committee on Technology, National Science and Technology Council, May 5, 2016, *available at* https://www.whitehouse.gov/sites/whitehouse.gov/files/ostp/MLAI_Charter.pdf.

10. Federal Advisory Committee Act, Pub. L. 92-463, October 6, 1972. That Subcommittee terminated by the terms of its charter, but a similarly named subcommittee was created by the Select Committee in June 2018. It largely performs the same tasks as the original Subcommittee, "advis-

ing the White House on governmentwide AI research and development priorities.” Aaron Boyd, “White House Announces Select Committee of Federal AI Experts,” *Nextgov* (May 10, 2018), <https://www.nextgov.com/emerging-tech/2018/05/white-house-announces-select-committee-federal-ai-experts/148123/>. For the purposes of this article, there is no need to distinguish between the two subcommittees.

11. Order, *supra* note 1.

12. Artificial Intelligence Standards, 84 FR 18490 (May 1, 2019), available at <https://www.federalregister.gov/documents/2019/05/01/2019-08818/artificial-intelligence-standards>.

13. *Id.*

14. *Id.*

15. Order, *supra* note 1.

16. John Frank Weaver, *Robots Are People Too* (Praeger Publishing, 2013), 13-15; 175-186; John Frank Weaver, “Regulation of Artificial Intelligence in the United States,” in W. Barfield & U. Pagallo, eds. *Research Handbook of Artificial Intelligence and Law* (Edward Elgar, 2018), 162-178; John Frank Weaver, “Everything Is Not *Terminator*: The Importance of Regulating AI As Soon As Possible,” *The Journal of Robotics, Artificial Intelligence & Law* (Vol. 1, No. 2; March-April 2018), 131-136.

17. Order, *supra* note 1, at Sec. 6(a)(ii).